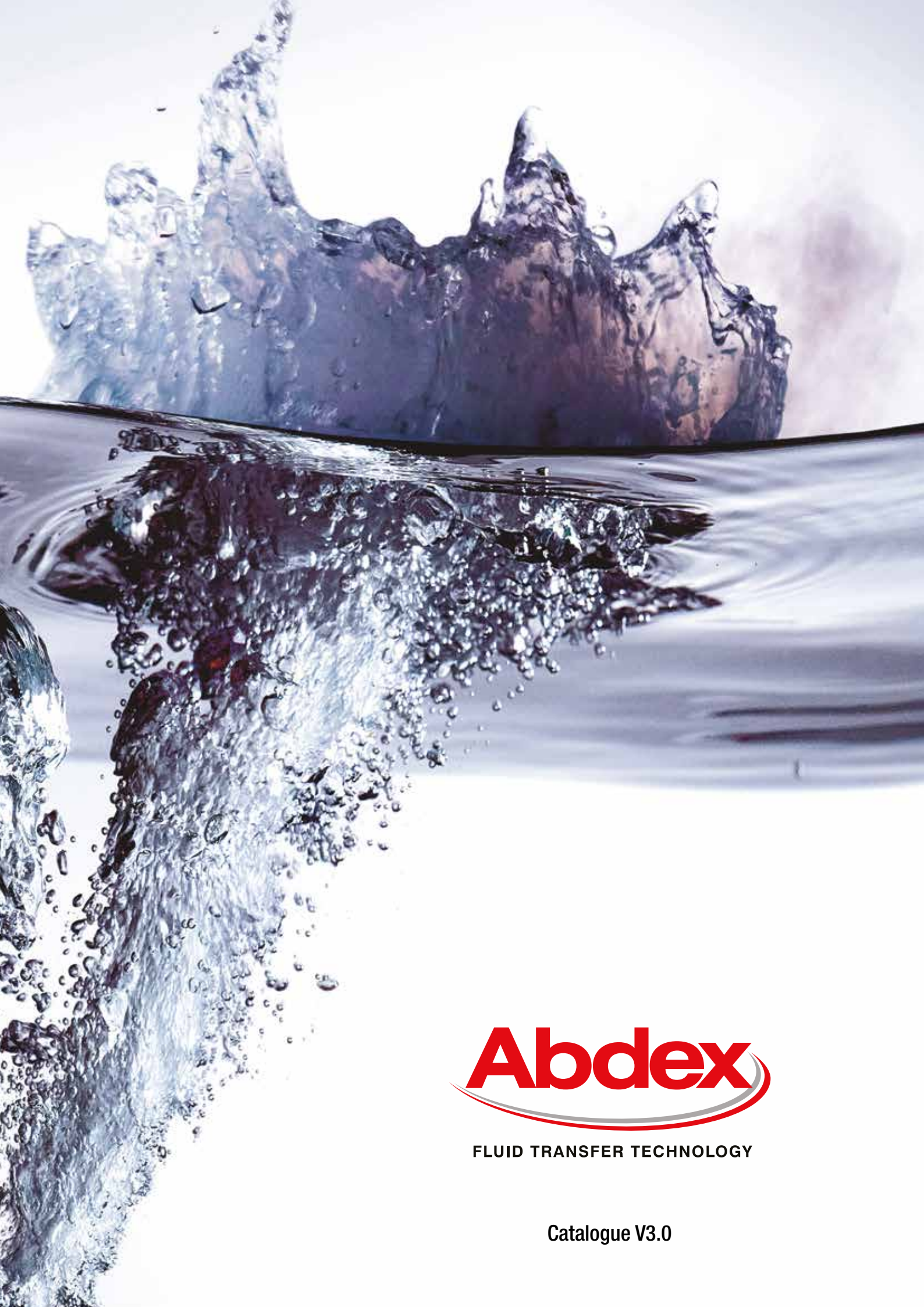
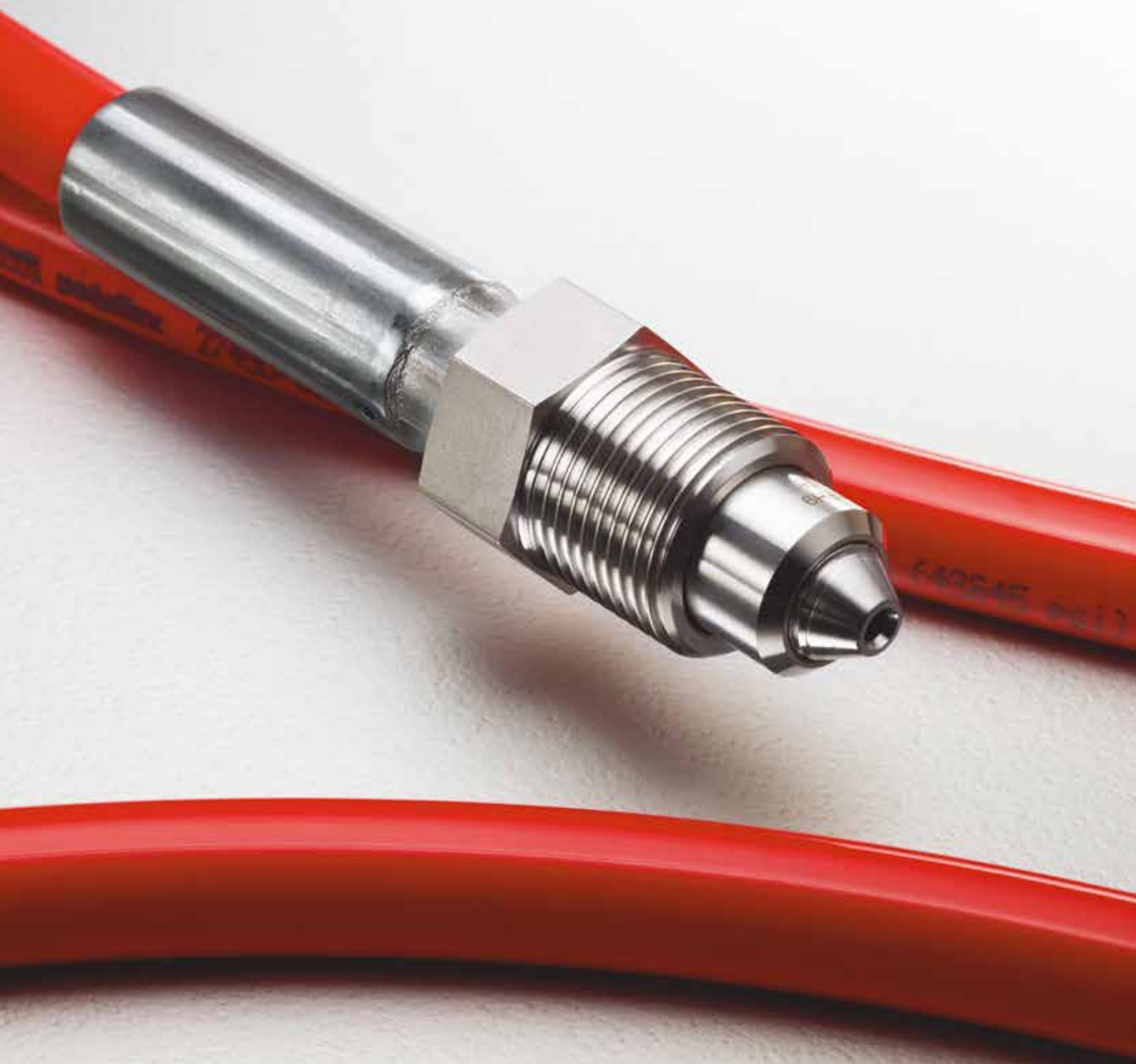




Abdex

FLUID TRANSFER TECHNOLOGY

Catalogue V3.0





FLUID TRANSFER TECHNOLOGY

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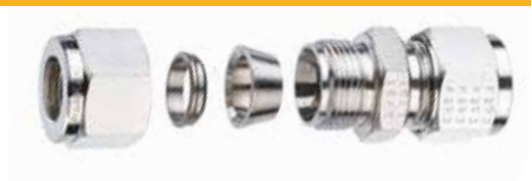
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ABOUT ABDEX

WHAT WE DO

WHEN THE PRESSURE IS ON...

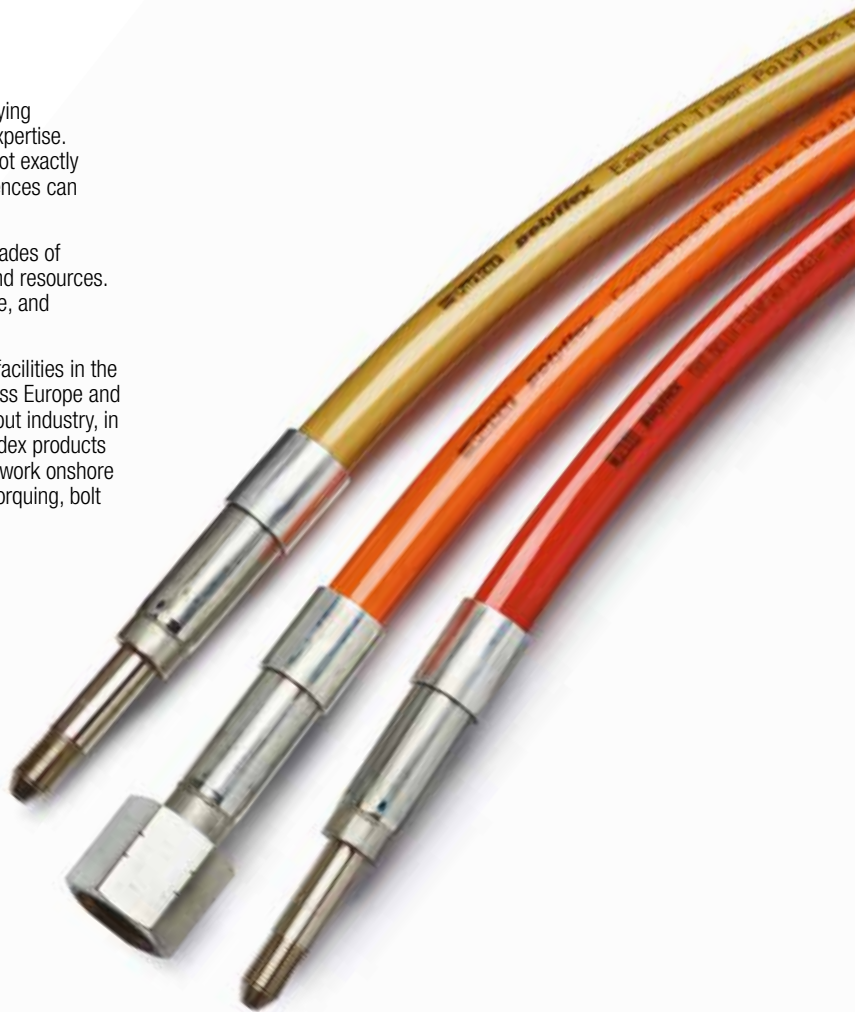
High pressure fluid transfer and control is challenging work. Specifying hoses, fittings and assemblies requires technical knowledge and expertise. Get it right, and everything goes to plan. On the other hand, if it's not exactly the right material, or precisely the right component – the consequences can be costly.

That's why so many people turn to Abdex. With more than four decades of dedicated specialised experience, we offer unrivalled knowledge and resources. Compared to ordinary hose suppliers, we've done more, know more, and deliver more.

Abdex is a family-owned business with offices and manufacturing facilities in the UK and Australia, serving a constantly growing customer base across Europe and Asia Pacific. Abdex products and services are widely used throughout industry, in automotive, beverage, chemical and industrial gas applications. Abdex products work in hydraulic jacking, water jetting, in power generation. They work onshore and offshore in the oil and gas industry, in pulp and paper, and in torquing, bolt tensioning and more.

OFF THE SHELF

Every year, Abdex supplies hundreds of thousands of hose assemblies to customers all over the world. We supply everything from high pressure pipe fittings and adaptors, through instrumentation tubing, pressure test systems, flushing machines, hose crimping machines and hose manufacturing equipment. We also supply loose components, tubing, fittings, couplings, pumps, cylinders, valve assemblies, analysers, environmental equipment, complete control panels and systems. Our huge inventory means rapid response and delivery. At each Abdex branch we have the facilities to test and certify products to working pressures of 4,000 bar (58,000 psi).



CUSTOM-DESIGNED, PURPOSE-BUILT

Abdex custom engineered solutions cover the whole spectrum of fluid control products. We've designed and delivered 3000m long hose assemblies for a complex synchronised lifting system. We've built complete mission-critical hydraulic jacking systems used for launching lifeboats. For crucial offshore oil blow-out preventers, we've designed and delivered 100m 3inch hose assemblies that work at 690 bar (10,000 psi). Typical pressures range from 10 bar (145 psi) – 4,000bar (58,000 psi). Working closely with world-leading manufacturers means we can offer bespoke solutions using a variety of exotic materials.

ASSEMBLY & TESTING

Pressure testing and certification is a key element of what we do. Whether it's a graphed data-logged test certificate from our NATA accredited high pressure test rig or a DNV witnessed test, we can perform to the most demanding testing requirements. Abdex has the only certified workshop in Asia Pacific to assemble and test the renowned Black Eagle hose family of products from stock. We use machines capable of crimping up to 10in bore flexible industrial hoses and 2in 10,000psi well intervention hoses. Facilities for hose bundling (umbilicals), flushing to NAS 6, pinpricking and high pressure gas testing are all available.



HOSE MANAGEMENT

Keeping track of your high-pressure assets is constant and often difficult work. You need to know what you've got and where it is. You also need to keep a full track of key dates for inspection, retests and replacements. More than often the chances are that your internal asset register is not as dynamic as you would like it to be.

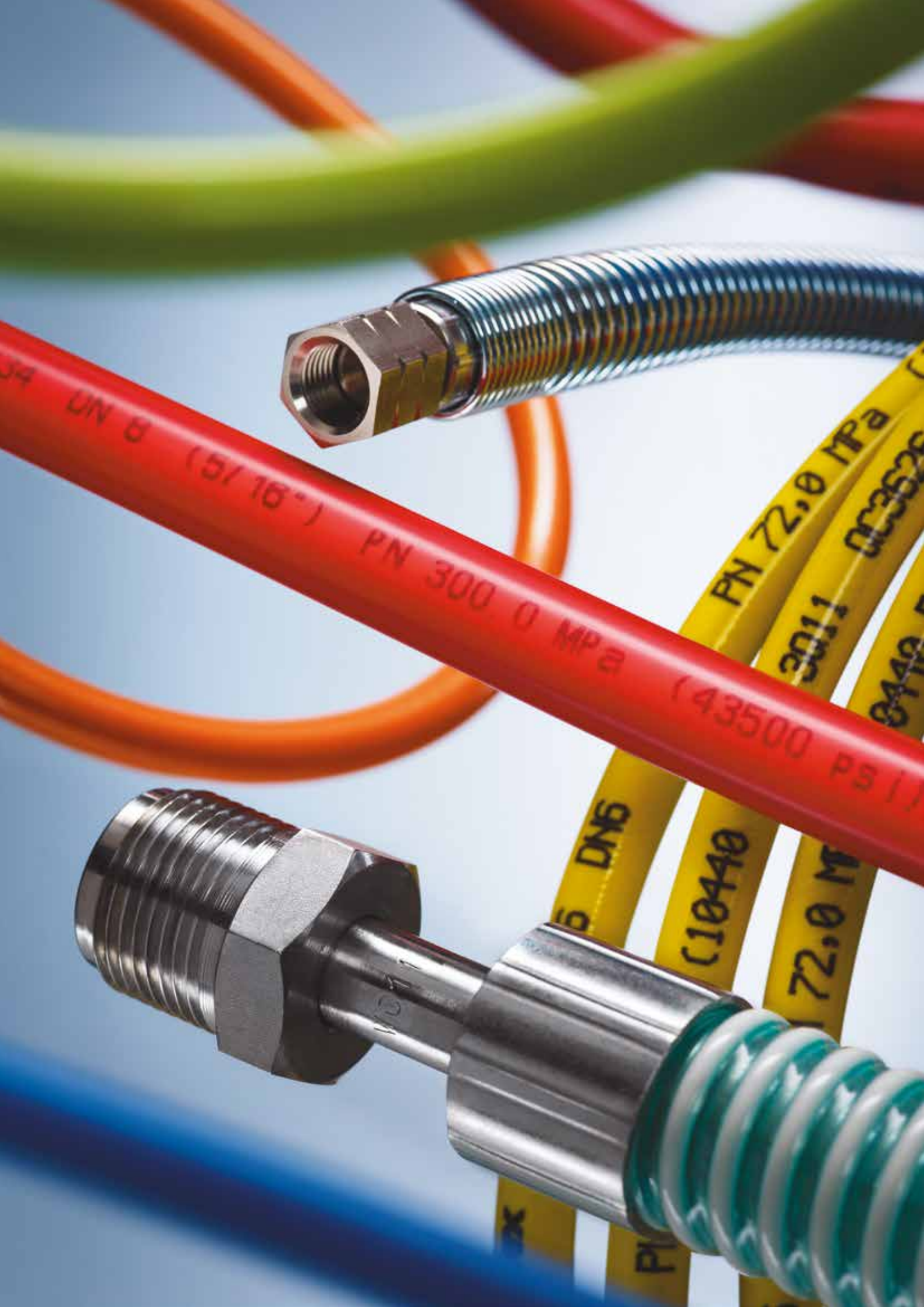
The Abdex Hose and Asset Management service brings you complete peace of mind for all your assets. Components can be barcoded, labelled, etched or tagged with RFID (A-Track) to allow full traceability. The software is simple to use and smartphone enabled. You and Abdex have instant and comprehensive information on all your assets, whether they're in store, in the field, or even in transit.

QUALITY & ACCREDITATIONS

Abdex has ISO 9001:2015 accreditation at each operating location. The Abdex Perth facility has NATA accreditation for pressure testing to 5,000 bar (72,500 psi). Abdex is a member of the British Fluid Power Association (BFPA), the Water Jetting Association (WJA) and the Australasian High Pressure Water Jetting Association (Ausjet).

All three of our manufacturing facilities are independently certified by Parker Polyflex for the assembly and test of hydraulic, water jetting and oil and gas assemblies to 4,000 bar (58,000 psi). Independent audits ensure our equipment and our people are certified to meet all the high standards we work to.





THERMOPLASTIC

THERMOPLASTIC HOSE

Wherever there's a technical challenge - or simply a tough job to do - thermoplastic hose is often the answer. Extreme pressures or temperatures? Maximum robustness? Special custom designs? With unique features and outstanding performance characteristics, Abdex thermoplastic hose can outperform the most tried and tested traditional alternatives. Abdex are fully certified by Parker Polyflex to crimp and test hoses up to 4000 bar working pressure.

ADVANTAGES

Abdex thermoplastic hoses come with a long list of valuable qualities. They're tough, resistant to abrasion (inside and out) and chemically inert. They can work at operating temperatures from -50°C to 230°C, always maintaining full working pressure.

Abdex thermoplastic hoses are lightweight, with smaller outside diameters, and they're easy to route in tight spots. They're easy to cut, with clean, contamination-free cuts. They have low volumetric expansion, for less energy loss and faster hydraulic response. They won't degrade in storage, and they're UV resistant, which means they have a long shelf life and a longer working life. They're resistant to ozone, seawater, acids and alkalis. And they come in any colour you like, in lengths as much as 5,000m. They're easy to pre-form, and easily ink-jet printed.

APPLICATIONS

Abdex offers a complete range of thermoplastic hose assemblies to cover many applications including: hydraulic fluid lines, water jetting and blasting, 10,000 psi jacking, torque wrench hoses, and more. Offering many different types of thermoplastic hose from stock, Abdex can respond to the most demanding requirements promptly.

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QUICK REFERENCE

HYDRAULIC & WATER JETTING

DN3

#											Nipple ID	Ferrule OD	DF	Page
	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m	mm	mm		
3130-02	-02	3.0	1/8	8.5	172	2,500	689	10,000	13.0	0.04	-	-	4:1	13
518C-2	-02	3.0	1/8	8.4	175	2,500	690	10,000	13.0	0.05	-	-	4:1	17
540N-2	-02	3.0	1/8	8.4	175	2,500	690	10,000	13.0	0.05	-	-	4:1	14
3800-02	-02	3.0	1/8	8.5	413	6,000	1655	24,000	20.0	0.04	-	-	4:1	20
2240D-02V32-TC	-02	3.0	1/8	7.0	1100	15,950	2750	39,875	60.0	0.07	1.60	9.10	2.5:1	53
2440D-02V32	-02	3.0	1/8	7.9	2070	30,000	5180	75,000	100.0	0.12	1.50	9.80	2.5:1	62

DN4

#											Nipple ID	Ferrule OD	DF	Page
	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m	mm	mm		
2244N-025V00	-025	3.9	5/32	9.6	750	10,875	3000	43,500	55.0	0.19	2.30	13.20	4:1	48
2240D-025V32-TC	-025	4.0	5/32	7.7	1200	17,400	3000	43,500	75.0	0.10	2.30	9.90	2.5:1	53
2248D-025V32	-025	4.0	5/32	7.9	1500	21,750	3750	54,375	75.0	0.11	2.30	9.80	2.5:1	55
2440D-025V32	-025	4.0	5/32	10.4	2200	31,900	5500	79,750	100.0	0.21	1.40	14.60	2.5:1	62
2640D-025V32	-025	3.9	5/32	12.0	2800	40,600	7000	101,500	140.0	0.29	1.90	15.60	2.5:1	67
2740D-025V16	-025	3.9	5/32	12.0	3000	43,500	7800	113,100	120.0	0.40	1.90	15.60	2.6:1	72
2448D-025V32-TC	-025	4.0	5/32	9.9	3250	47,120	6500	94,240	100.0	0.21	1.80	12.80	2:1	65

DN5

#											Nipple ID	Ferrule OD	DF	Page
	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m	mm	mm		
3130-03	-03	5.0	3/16	10.8	207	3,000	827	12,000	19.0	0.07	-	-	4:1	13
540N-3	-03	5.0	3/16	10.7	210	3,000	830	12,000	19.0	0.08	-	-	4:1	14
2030TU-04R14V17	-04	5.0	3/16	9.0	210	3,000	830	12,000	51.0	0.09	-	-	4:1	26
518C-3	-03	5.0	3/16	10.7	225	3,250	900	13,000	19.0	0.07	-	-	4:1	17
328-3	-03	5.0	3/16	9.0	345	5,000	1400	20,000	75.0	0.051	-	-	4:1	26
3800-03	-03	5.0	3/16	11.0	345	5,000	1379	20,000	38.0	0.09	-	-	4:1	20
3R80-03	-03	5.0	3/16	13.1	350	5,100	1400	20,400	38.0	0.11	-	-	4:1	21
2240D-03V32-TC	-03	4.8	3/16	9.5	1000	14,500	2500	36,250	95.0	0.13	2.80	12.00	2.5:1	53
2248D-03V32-TC	-03	4.9	3/16	9.5	1400	20,300	3500	50,750	95.0	0.14	2.80	12.10	2.5:1	55
2440D-03V32	-03	4.8	3/16	11.5	1800	26,100	4500	65,250	130.0	0.28	1.40	15.30	2.5:1	62
2640D-03V32	-03	4.8	3/16	13.0	2500	36,250	6250	90,625	175.0	0.41	2.30	18.60	2.5:1	67
2740D-03V34	-03	4.8	3/16	13.2	2800	40,600	7000	100,500	200.0	0.47	2.30	18.80	2.5:1	72
2749D-03V34	-03	4.8	3/16	13.3	3010	43,645	7000	101,500	200.0	0.47	2.30	18.80	2.3:1	80
2840D-03V34	-03	4.6	3/16	15.0	4000	58,000	8000	116,000	200.0	0.66	2.30	19.60	2:1	84

Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.

QUICK REFERENCE

HYDRAULIC & WATER JETTING

DN6

#											Nipple ID	Ferrule OD	DF	Page
	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m	mm	mm		
540N-4	-04	6.3	1/4	12.6	190	2,750	760	11,000	38.0	0.10	-	-	4:1	14
3130-04	-04	6.3	1/4	12.0	207	3,000	759	11,000	32.0	0.09	-	-	4:1	13
518C-4	-04	6.3	1/4	11.7	207	3,000	830	12,000	38.0	0.08	-	-	4:1	17
547-4 EXT	-04	6.3	1/4	12.1	215	3,100	860	12,400	100.0	0.09	-	-	4:1	29
HPG-04	-04	6.3	1/4	9.25	260	3,783	780	11,349	30.0	0.11	-	-	4:1	31
2040N-04V74	-04	6.3	1/4	11.9	310	4,495	1240	17,980	40.0	0.16	-	-	4:1	29
580N-4	-04	6.3	1/4	15.4	345	5,000	1380	20,000	51.0	0.16	-	-	4:1	22
588N-4	-04	6.3	1/4	15.4	345	5,000	1380	20,000	51.0	0.16	-	-	4:1	24
3800-04	-04	6.3	1/4	13.5	345	5,000	1379	20,000	51.0	0.12	-	-	4:1	20
2022N-04V15-5K	-04	6.3	1/4	12.7	345	5,000	1380	20,000	51.0	0.12	-	-	4:1	40
3R80-04	-04	6.3	1/4	15.9	350	5,100	1400	20,400	51.0	0.12	-	-	4:1	21
328-4 EXT	-04	6.3	1/4	12.3	350	5,000	1400	20,000	100.0	0.15	-	-	4:1	29
2245N-04V00	-04	6.3	1/4	12.5	450	6,525	1800	16,100	70.0	0.25	-	-	4:1	38
2370N-04V10	-04	6.3	1/4	12.4	465	6,750	1860	26,970	70.0	0.19	-	-	4:1	36
2022N-04V15-10K	-04	6.3	1/4	13.8	690	10,000	2760	40,000	100.0	0.14	-	-	4:1	40
2380N-04V10-MSHA	-04	6.3	1/4	13.3	700	10,150	2800	40,600	70.0	0.28	3.60	18.50	4:1	42
2340N-04	-04	6.3	1/4	12.5	720	10,440	2880	41,760	70.0	0.25	-	-	4:1	43
2340N-04-04	-04	6.3	1/4	12.5	720	10,440	2880	41,760	70.0	0.50	-	-	4:1	43
2388N-04V00	-04	6.3	1/4	13.3	800	11,600	3200	46,400	80.0	0.30	3.60	18.30	4:1	57
2240D-04V32-TC	-04	6.4	1/4	11.5	1100	15,950	2750	39,875	110.0	0.20	3.80	13.60	2.5:1	53
2380N-04V00W	-04	6.3	1/4	13.3	1100	15,950	2800	40,600	70.0	0.28	3.80	18.00	2.5:1	50
2388N-04V12W	-04	6.3	1/4	13.3	1280	18,560	3200	46,400	80.0	0.30	3.60	18.20	2.5:1	57
2440D-04V32	-04	6.4	1/4	12.5	1640	23,780	4100	59,450	155.0	0.33	2.90	17.00	2.5:1	62

DN8

#											Nipple ID	Ferrule OD	DF	Page
	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m	mm	mm		
540N-5	-05	8	5/16	14.6	175	2,500	690	10,000	44.0	0.12	-	-	4:1	14
518C-5	-05	8.0	5/16	14.3	175	2,500	690	10,000	44.0	0.11	-	-	4:1	17
2245N-05V00	-05	8.0	5/16	14.3	440	5,800	1600	23,200	100.0	0.32	-	-	4:1	38
2370N-05V10	-05	8.0	5/16	14.3	440	6,380	1760	25,520	100.0	0.25	-	-	4:1	36
2240D-05V32-TC	-05	8.1	5/16	13.3	900	13,050	2250	32,625	120.0	0.25	5.30	16.10	2.5:1	53
2248D-05V32-TC	-05	8.1	5/16	13.4	1000	14,500	2500	36,250	120.0	0.25	4.80	16.10	2.5:1	55
2440D-05V32	-05	8.1	5/16	15.1	1500	21,750	3750	54,375	175.0	0.44	3.70	21.00	2.5:1	62
2640D-05V32	-05	8.0	5/16	16.9	2100	30,450	5250	76,125	225.0	0.68	3.70	22.00	2.5:1	67
2740D-05V34	-05	7.8	5/16	17.2	2500	36,250	6250	90,625	200.0	0.83	3.70	22.80	2.5:1	72
2741D-05V32/18	-05	7.7	5/16	21.2	2500	36,250	6250	90,625	200.0	0.95	3.70	22.80	2.5:1	74
2748D-05V34	-05	7.8	5/16	17.3	2800	40,600	7000	101,500	230.0	0.83	3.70	22.80	2.5:1	76
2748D-05V32/14	-05	7.8	5/16	21.8	2800	40,600	7000	101,500	230.0	0.99	3.70	22.80	2.5:1	78
2840D-05V36	-05	7.8	5/16	19.5	3000	43,500	7000	101,500	250.0	1.10	3.70	24.00	2.3:1	84
2841D-05V36/17	-05	7.7	5/16	23.5	3000	43,500	7000	101,500	250.0	1.38	3.70	24.00	2.3:1	86
2749D-05V34	-05	7.8	5/16	17.3	3010	43,645	7000	101,500	230.0	0.83	3.70	22.80	2.3:1	80
2848D-05V34	-05	7.8	5/16	19.6	3200	46,400	8000	116,000	280.0	1.10	3.60	24.00	2.5:1	88
2849D-05V34	-05	7.8	5/16	19.6	3800	55,000	8000	116,000	280.0	1.10	3.60	24.00	2.1:1	89

Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.

QUICK REFERENCE

HYDRAULIC & WATER JETTING

DN10

#											Nipple ID	Ferrule OD	DF	Page
	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m	mm	mm		
3130-06	-06	9.5	3/8	17.0	155	2,250	620	9,000	51.0	0.12	-	-	4:1	13
540N-6	-06	9.5	3/8	16.4	155	2,250	620	9,000	51.0	0.14	-	-	4:1	14
518C-6	-06	9.5	3/8	16.0	155	2,250	620	9,000	51.0	0.14	-	-	4:1	17
580N-6	-06	9.5	3/8	19.3	275	4,000	1100	16,000	64.0	0.22	-	-	4:1	22
588N-6	-06	9.5	3/8	19.3	275	4,000	1100	16,000	64.0	0.22	-	-	4:1	24
3800-06	-06	9.5	3/8	16.9	276	4,000	1103	16,000	64.0	2.50	-	-	4:1	20
3R80-06	-06	10	3/8	19.4	280	4,050	1120	16,200	64.0	0.22	-	-	4:1	21
2022N-06V15-5K	-06	9.7	3/8	16.1	345	5,000	1380	20,000	76.0	0.15	-	-	4:1	40
2245N-06V00	-06	9.7	3/8	17.0	375	5,435	1500	21,750	120.0	0.42	-	-	4:1	38
2370N-06V10	-06	9.8	3/8	16.4	420	6,090	1680	24,360	120.0	0.33	-	-	4:1	36
2244N-06V00	-06	9.8	3/8	18.0	535	7,755	2150	31,175	120.0	0.50	6.80	23.80	4:1	48
2380N-06V10	-06	9.8	3/8	17.9	575	8,337	2300	33,350	120.0	0.44	6.80	23.40	4:1	50
2022N-06V15-10K	-06	9.7	3/8	19.0	690	10,000	2760	40,000	100.0	0.24	5.30	23.20	4:1	40
2X80N-06V10	-06	9.8	3/8	18.6	700	10,150	2800	40,600	70.0	0.54	-	-	4:1	46
2244N-06V10W	-06	9.7	3/8	18.0	860	12,470	2150	31,175	120.0	0.50	7.00	23.50	2.5:1	48
2440N-06V30	-06	9.7	3/8	19.4	1400	20,300	3500	50,750	190.0	0.73	5.80	26.90	2.5:1	62
2580N-06V12	-06	9.8	3/8	21.6	1600	23,200	4000	58,000	95.0	0.94	5.50	28.50	2.5:1	60

DN12

#											Nipple ID	Ferrule OD	DF	Page
	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m	mm	mm		
3130-08	-08	12.7	1/2	20.7	138	2,000	620	9,000	76.0	0.16	-	-	4:1	13
540N-8	-08	12.7	1/2	20.1	140	2,000	560	8,000	76.0	0.21	-	-	4:1	14
518C-8	-08	12.7	1/2	20.4	155	2,250	620	9,000	76.0	0.22	-	-	4:1	17
ESH-08	-08	12.7	1/2	20.6	200	2,900	500	7,250	100.0	0.23	-	-	2.5:1	32
3800-08	-08	12.7	1/2	21.3	240	3,500	965	14,000	102.0	0.22	-	-	4:1	20
580N-8	-08	12.7	1/2	22.3	240	3,500	960	14,000	102.0	0.31	-	-	4:1	22
588N-8	-08	12.7	1/2	22.3	240	3,500	960	14,000	102.0	0.31	-	-	4:1	24
3R80-08	-08	12	1/2	22.7	245	3,550	980	14,200	102.0	0.28	-	-	4:1	21
ESH250-08	-08	12.7	1/2	21.2	250	3,625	625	9,060	100.0	0.24	-	-	2.5:1	34
2022N-08V15-5K	-08	12.7	1/2	20.8	345	5,000	1380	20,000	102.0	0.17	-	-	4:1	40
2245N-08V00	-08	12.7	1/2	20.7	350	5,075	1400	20,300	165.0	0.52	-	-	4:1	38
2370N-08V10	-08	12.7	1/2	20.0	350	5,075	1400	20,300	150.0	0.42	-	-	4:1	36
2244N-08V10	-08	12.9	1/2	22.7	550	7,975	2200	31,900	150.0	0.80	8.80	29.50	4:1	48
2022N-08V15-10K	-08	12.9	1/2	23.0	690	10,000	2760	40,000	100.0	0.34	6.50	30.50	4:1	40
2244N-08V10W	-08	12.8	1/2	22.7	880	12,760	2200	31,900	150.0	0.80	9.30	29.00	2.5:1	48
2388N-08V12W	-08	13.0	1/2	23.0	1100	15,950	2750	39,875	100.0	0.80	7.50	28.50	2.5:1	57
2440N-08V30	-08	12.8	1/2	22.5	1400	20,300	3500	50,750	200.0	0.94	6.70	30.70	2.5:1	62
2580N-08V12	-08	12.9	1/2	25.0	1400	20,300	3500	50,750	110.0	1.19	7.50	30.50	2.5:1	60
2640N-08V32	-08	12.8	1/2	24.5	1800	26,100	4500	65,250	290.0	1.36	6.80	34.00	2.5:1	67
2740D-08V30	-08	12.7	1/2	27.0	2000	29,000	5000	72,500	300.0	1.85	7.50	31.80	2.5:1	72
2840D-08V30	-08	12.7	1/2	29.8	2500	36,250	6250	90,625	350.0	2.50	7.60	34.20	2.5:1	84
2848D-08V30	-08	13.0	1/2	29.9	3000	43,500	6250	90,625	350.0	2.50	7.50	33.80	2.1:1	88

Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
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QUICK REFERENCE

HYDRAULIC & WATER JETTING

DN16

#											Nipple ID	Ferrule OD	DF	Page
	size	mm	inch		bar	psi	bar	psi		kg/m	mm	mm		
518C-10	16	-10	5/8	24.9	105	1,500	420	6,000	102.0	0.30	-	-	4:1	17
580N-10	16	-10	5/8	24.9	190	2,750	760	11,000	152.0	0.32	-	-	4:1	22
588N-10	16	-10	5/8	24.9	190	2,750	760	11,000	152.0	0.32	-	-	4:1	24
2245N-10V30	16	-10	5/8	24.5	330	4,785	1320	19,140	200.0	0.72	-	-	4:1	38

DN20

#											Nipple ID	Ferrule OD	DF	Page
	size	mm	inch		bar	psi	bar	psi		kg/m	mm	mm		
518C-12	-12	19.1	3/4	27.4	85	1,250	345	5,000	152.0	0.31	-	-	4:1	17
540N-12	-12	19.1	3/4	26.5	85	1,250	345	5,000	152.0	0.25	-	-	4:1	14
3130-12	-12	19.1	3/4	27.1	86	1,250	345	5,000	127.0	0.27	-	-	4:1	13
580N-12	-12	19.1	3/4	29.5	155	2,250	620	9,000	203.0	0.35	-	-	4:1	22
588N-12	-12	19.1	3/4	29.5	155	2,250	620	9,000	203.0	0.35	-	-	4:1	24
3R80-12	-12	19.1	3/4	28.9	157	2,300	628	9,200	165.0	0.38	-	-	4:1	21
ESH-12	-12	19.2	3/4	28.6	200	2,900	500	7,250	125.0	0.37	-	-	2.5:1	32
ESH250-12	-12	19.0	3/4	28.6	250	3,625	625	9,060	125.0	0.40	-	-	2.5:1	34
2245N-12V30	-12	19.6	3/4	28.5	300	4,350	1200	17,400	240.0	0.92	-	-	4:1	38
2440N-12V30	-12	19.6	3/4	30.0	1000	14,500	2500	36,250	250.0	1.39	12.70	38.50	2.5:1	62
2580N-12V12	-12	19.8	3/4	32.6	1200	17,400	3000	43,500	170.0	1.76	12.50	39.80	2.5:1	60
2640N-12V32	-12	19.6	3/4	33.0	1400	20,300	3500	50,750	350.0	2.10	12.50	40.60	2.5:1	67
2648N-12V32	-12	19.8	3/4	33.7	1600	23,200	4000	58,000	350.0	2.28	12.50	41.10	2.5:1	70

Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
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QUICK REFERENCE

HYDRAULIC & WATER JETTING

DN25

#											Nipple ID	Ferrule OD	DF	Page
	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m	mm	mm		
3130-16	-16	25.0	1	34.0	69	1,000	276	4,000	203.0	0.46	-	-	4:1	13
518C-16	-16	25.0	1	33.5	70	1,000	275	4,000	203.0	0.40	-	-	4:1	17
580N-16	-16	25.0	1	37.6	140	2,000	560	8,000	254.0	0.56	-	-	4:1	22
588N-16	-16	25.0	1	37.6	140	2,000	560	8,000	254.0	0.56	-	-	4:1	24
ESH-16	-16	25.0	1	36.6	200	2,900	500	7,250	150.0	0.59	-	-	2.5:1	32
ESH250-16	-16	25.0	1	36.5	250	3,625	625	9,060	150.0	0.60	-	-	2.5:1	34
2245N-16V30	-16	25.0	1	34.0	275	3,985	1100	15,950	280.0	1.15	-	-	4:1	38
2440N-16V30	-16	25.0	1	37.0	900	13,050	2250	32,625	300.0	2.00	17.20	45.30	2.5:1	62
2640N-16V32	-16	25.0	1	40.0	1200	17,400	3000	43,500	400.0	2.90	17.30	49.00	2.5:1	67
2648N-16V32	-16	25.0	1	40.8	1500	21,750	3750	54,375	400.0	3.10	16.50	49.00	2.5:1	70

DN32

#											Nipple ID	Ferrule OD	DF	Page
	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m	mm	mm		
ESH-20	-20	31.9	1 1/4	46.0	200	2,900	500	7,250	150.0	0.60	-	-	2.5:1	32
ESH250-20	-20	32.0	1 1/4	46.0	250	3,625	625	9,060	225.0	1.00	-	-	2.5:1	34
2244N-20V30	-20	31.8	1 1/4	44.0	275	3,990	1100	15,950	400.0	1.83	25.30	50.00	4:1	48

General remark on column DF in the tables:

Ultra high pressure hoses are normally used with a design factor of 2.5:1 according to ISO 7751.

For hydraulic hoses, a design factor of 4:1 applies.

Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
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3130

EXCEEDS SAE 100R7

Thermoplastic - Medium Pressure

General applications

#	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
3130-02	3	-02	3.2	1/8	8.5	172	2,500	689	10,000	13.0	0.04
3130-03	5	-03	4.8	3/16	10.8	207	3,000	827	12,000	19.0	0.07
3130-04	6	-04	6.4	1/4	12.0	207	3,000	759	11,000	32.0	0.09
3130-06	10	-06	9.5	3/8	17.0	155	2,250	620	9,000	51.0	0.12
3130-08	12	-08	12.7	1/2	20.7	138	2,000	620	9,000	76.0	0.16
3130-12	19	-12	19.1	3/4	27.1	86	1,250	345	5,000	127.0	0.27
3130-16	25	-16	25.4	1	34.0	69	1,000	276	4,000	203.0	0.46

APPLICATIONS

General hydraulics, material handling, forklifts, chemical transfer, ROV's and marine steering.

FEATURES

- Meets or exceeds SAE 100R7 specifications
- Low elongation
- Highly flexible

CONSTRUCTION

Core tube: Nylon-lined.
Pressure reinforcement: Spiral or braided synthetic fibre.
Cover: Black perforated polyurethane.

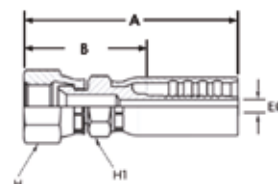
TEMPERATURE RANGE

-40°C up to +100°C.

FITTINGS

Female JIC / SAE 37° swivel stainless steel

#						A	B	EØ		
	DN	size	mm	inch		mm	mm	mm	inch	inch
90A03-045400-0	5	-03	4.7	3/16	7/16 - 20	54.6	33.3	2.8	5/8	9/16
90A04-045400-0	6	-04	6.4	1/4	7/16 - 20	64.2	36.6	4.0	5/8	5/8
90A06-065500-0	10	-06	9.5	3/8	9/16 - 20	71.6	39.6	7.1	3/4	3/4
90A08-085400-0	12	-08	12.5	1/2	3/4 - 16	80.0	41.4	9.9	15/16	7/8
90A08-105400-0	12	-08	12.5	1/2	7/8 - 14	80.0	41.4	9.9	1 1/16	7/8
90A12-125500-0	19	-12	19.0	3/4	1 1/16 - 12	87.2	44.5	15.9	1 1/4	1 1/8
90A16-165500-0	25	-16	25.0	1	1 5/16 - 12	103.0	50.8	20.7	1 1/2	1 3/8



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
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540N**PERFORMANCE EXCEEDS SAE 100R7****General applications**

#											
	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
540N-2	3	-02	3.2	1/8	8.4	175	2,500	690	10,000	13.0	0.05
540N-3	5	-03	4.8	3/16	10.7	210	3,000	830	12,000	19.0	0.08
540N-4	6	-04	6.3	1/4	12.6	190	2,750	760	11,000	38.0	0.10
540N-5	8	-05	7.9	5/16	14.6	175	2,500	690	10,000	44.0	0.12
540N-6	10	-06	9.5	3/8	16.4	155	2,250	620	9,000	51.0	0.14
540N-8	12	-08	12.7	1/2	20.1	140	2,000	560	8,000	76.0	0.21
540N-12	20	-12	19.1	3/4	26.5	85	1,250	345	5,000	152.0	0.25

APPLICATIONS

Medium pressure service for general industrial and mobile hydraulic applications. Especially suitable when an improved chemical resistance is required with some hydraulic / chemical fluids.

FEATURES

- High abrasion resistance
- High flexibility
- Low weight
- Excellent chemical resistance due to polyamide core tube

CONSTRUCTION

Core tube: Polyamide.
Pressure reinforcement: One braided layer of high tensile synthetic fibre.
Cover: Polyurethane, pinpricked.
Colour: Black.

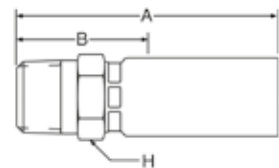
TEMPERATURE RANGE

-40°C up to +100°C.

FITTINGS

National pipe tapered (NPT) male: Galvanised steel with transparent Cr(IV)-free plating.
 Other materials available on request.

#									
	DN	size	mm	inch		mm	mm	mm	bar
10155-2-3	5	-03	4.8	3/16	1/8 - 27 NPTF	51.0	26.0	14.0	345
10155-4-3	5	-03	4.8	3/16	1/4 - 18 NPTF	55.0	30.0	17.0	345
10155-6-3	5	-03	4.8	3/16	3/8 - 18 NPTF	54.0	29.0	19.0	275
10155-2-4	6	-04	6.4	1/4	1/8 - 27 NPTF	54.0	22.0	17.0	345
10155-4-4	6	-04	6.4	1/4	1/4 - 18 NPTF	62.0	30.0	17.0	345
10155-6-4	6	-04	6.4	1/4	3/8 - 18 NPTF	61.0	29.0	19.0	275
10155-4-5	8	-05	7.9	5/16	1/4 - 18 NPTF	59.0	27.0	17.0	345
10155-6-5	8	-05	7.9	5/16	3/8 - 18 NPTF	61.0	29.0	19.0	275
10155-4-6	10	-06	9.5	3/8	1/4 - 18 NPTF	66.0	30.0	19.0	345
10155-6-6	10	-06	9.5	3/8	3/8 - 18 NPTF	70.0	33.0	19.0	275
10155-8-6	10	-06	9.5	3/8	1/2 - 14 NPTF	77.0	40.0	27.0	240
10155-6-8	12	-08	12.7	1/2	3/8 - 18 NPTF	71.0	30.0	22.0	275
10155-8-8	12	-08	12.7	1/2	1/2 - 14 NPTF	77.0	36.0	27.0	240
10155-12-12	20	-12	19.0	3/4	3/4 - 14 NPTF	82.0	36.0	30.0	210



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
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540N

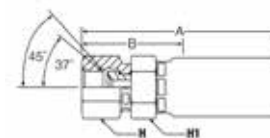
PERFORMANCE EXCEEDS SAE 100R7

THERMOPLASTIC - MEDIUM PRESSURE

SAE (JIC) 37° female swivel: Galvanised steel with transparent Cr(IV)-free plating.

For stainless steel (AISI 316) add C to the Part Number. Other materials available on request.

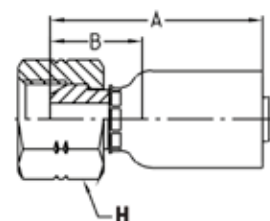
#	DN	size	mm	inch		A	B	H	H1	
						mm	mm	mm	mm	bar
10655-4-2	3	-02	3.2	1/8	7/16 - 20 UNF	44.0	27.0	16.0	13.0	410
10655-4-3	5	-03	4.8	3/16	7/16 - 20 UNF	55.0	30.0	17.0	16.0	410
10655-5-3	5	-03	4.8	3/16	1/2 - 20 UNF	57.0	32.0	17.0	16.0	410
10655-4-4	6	-04	6.4	1/4	7/16 - 20 UNF	65.0	33.0	17.0	17.0	410
10655-5-4	6	-04	6.4	1/4	1/2 - 20 UNF	65.0	33.0	17.0	16.0	410
10655-6-4	6	-04	6.4	1/4	9/16 - 18 UNF	67.0	35.0	19.0	17.0	345
10655-5-5	8	-05	7.9	5/16	1/2 - 20 UNF	65.0	33.0	17.0	16.0	410
10655-6-5	8	-05	7.9	5/16	9/16 - 18 UNF	65.0	33.0	19.0	16.0	345
10655-8-5	8	-05	7.9	5/16	3/4 - 16 UNF	68.0	37.0	22.0	19.0	345
10655-6-6	10	-06	9.5	3/8	9/16 - 18 UNF	69.0	33.0	19.0	19.0	345
10655-8-6	10	-06	9.5	3/8	3/4 - 16 UNF	72.0	35.0	24.0	19.0	345
10655-6-8	12	-08	12.7	1/2	9/16 - 18 UNF	76.0	35.0	19.0	22.0	345
10655-8-8	12	-08	12.7	1/2	3/4 - 16 UNF	79.0	38.0	22.0	22.0	345
10655-10-8	12	-08	12.7	1/2	7/8 - 14 UNF	82.0	41.0	27.0	22.0	345
10655-12-8	12	-08	12.7	1/2	1 1/16 - 12 UNF	83.0	42.0	32.0	27.0	345
10655-12-12	20	-12	19.0	3/4	1 1/16 - 12 UNF	88.0	42.0	32.0	30.0	345



BSP Female swivel 60° cone: Galvanised steel with transparent Cr(IV)-free plating.

Other materials available on request.

#	DN	size	mm	inch		A	B	H	
						mm	mm	mm	bar
19256-4-3	5	-03	4.8	3/16	G 1/4	37.0	19.0	19.0	630
19256-2-4	6	-04	6.4	1/4	G 1/8	43.0	18.0	14.0	350
19256-4-4	6	-04	6.4	1/4	G 1/4	44.0	20.0	19.0	630
19256-6-4	6	-04	6.4	1/4	G 3/8	44.0	20.0	22.0	550
19256-4-5	8	-05	7.9	5/16	G 1/4	45.0	20.0	19.0	630
19256-6-5	8	-05	7.9	5/16	G 3/8	45.0	20.0	22.0	550
19256-6-6	10	-06	9.5	3/8	G 3/8	45.0	20.0	22.0	550
19256-8-6	10	-06	9.5	3/8	G 1/2	47.0	22.0	27.0	430
19256-8-8	12	-08	12.7	1/2	G 1/2	51.0	22.0	27.0	430
19256-10-8	12	-08	12.7	1/2	G 5/8	49.0	22.0	30.0	375
19256-12-12	20	-12	19.0	3/4	G 3/4	58.0	24.0	32.0	350
19256-16-16	25	-16	25.4	1	G 1	73.0	26.0	41.0	280



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
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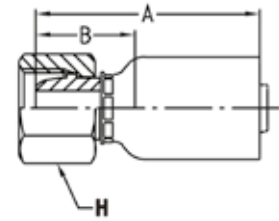
540N

PERFORMANCE EXCEEDS SAE 100R7



Metric female swivel 24°/60°: Galvanised steel with transparent Cr(IV)-free plating.
Other materials available on request.

#						A	B		
	DN	size	mm	inch		mm	mm	mm	bar
1C356-6-3	5	-03	4.8	3/16	M12 x 1.5	37.0	20.0	14.0	250
1C356-8-4	6	-04	6.4	1/4	M14 x 1.5	44.0	20.0	17.0	250
1C356-10-4	6	-04	6.4	1/4	M16 x 1.5	45.0	21.0	19.0	250
1C356-10-5	8	-05	7.9	5/16	M16 x 1.5	46.0	20.0	19.0	250
1C356-12-5	8	-05	7.9	5/16	M18 x 1.5	47.0	21.0	22.0	250
1C356-10-6	10	-06	9.5	3/8	M16 x 1.5	46.0	20.0	19.0	250
1C356-15-8	12	-08	12.7	1/2	M22 x 1.5	50.0	23.0	27.0	250
1C356-18-12	20	-12	19.0	3/4	M26 x 1.5	58.0	24.0	32.0	160
1C356-22-12	20	-12	19.0	3/4	M30 x 2	57.0	24.0	36.0	160



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
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518C

ELECTRICALLY NON-CONDUCTIVE

Non-conductive applications

#	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
518C-2	3	-02	3.2	1/8	8.4	175	2,500	690	10,000	13.0	0.05
518C-3	5	-03	4.8	3/16	10.7	225	3,250	900	13,000	19.0	0.07
518C-4	6	-04	6.3	1/4	11.7	207	3,000	830	12,000	38.0	0.08
518C-5	8	-05	7.9	5/16	14.3	175	2,500	690	10,000	44.0	0.11
518C-6	10	-06	9.5	3/8	16.0	155	2,250	620	9,000	51.0	0.14
518C-8	12	-08	12.7	1/2	20.4	155	2,250	620	9,000	76.0	0.22
518C-10	16	-10	15.9	5/8	24.9	105	1,500	420	6,000	102.0	0.30
518C-12	20	-12	19.1	3/4	27.4	85	1,250	345	5,000	152.0	0.31
518C-16	25	-16	25.4	1	33.5	70	1,000	275	4,000	203.0	0.40

APPLICATIONS

Medium pressure service for general industrial and mobile hydraulic applications when electrically non-conductive lines are required. For example, working platforms for high-voltage line repair and aluminium melting furnaces.

FEATURES

- High abrasion resistance
- High flexibility
- Low weight
- Orange colour
- Electrically non-conductive acc. to SAE J517 (less than 50 µA leakage under 250,000 volts per metre)

CONSTRUCTION

Core tube: Polyester elastomer, except -2: polyamide.
Pressure reinforcement: One braided layer of high tensile synthetic fibre.
Cover: Polyurethane.
Colour: Orange.

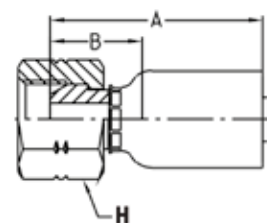
TEMPERATURE RANGE

-40°C up to +100°C for petroleum, max. 57°C for synthetic hydraulic fluids and water-based hydraulic fluids.

FITTINGS

BSP Female swivel 60° cone: Galvanised steel with transparent Cr(IV)-free plating.
 Other materials available on request.

#	DN	size	mm	inch		A	B	H	bar
19256-4-3	5	-03	4.8	3/16	G 1/4	37.0	19.0	19.0	630
19256-2-4	6	-04	6.4	1/4	G 1/8	43.0	18.0	14.0	350
19256-4-4	6	-04	6.4	1/4	G 1/4	44.0	20.0	19.0	630
19256-6-4	6	-04	6.4	1/4	G 3/8	44.0	20.0	22.0	550
19256-4-5	8	-05	7.9	5/16	G 1/4	45.0	20.0	19.0	630
19256-6-5	8	-05	7.9	5/16	G 3/8	45.0	20.0	22.0	550
19256-6-6	10	-06	9.5	3/8	G 3/8	45.0	20.0	22.0	550
19256-8-6	10	-06	9.5	3/8	G 1/2	47.0	22.0	27.0	430
19256-8-8	12	-08	12.7	1/2	G 1/2	51.0	22.0	27.0	430
19256-10-8	12	-08	12.7	1/2	G 5/8	49.0	22.0	30.0	375
19256-12-12	20	-12	19.0	3/4	G 3/4	58.0	24.0	32.0	350
19256-16-16	25	-16	25.4	1	G 1	73.0	26.0	41.0	280



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.

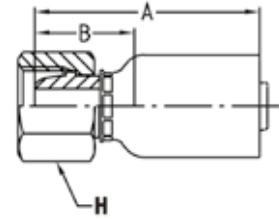
518C

ELECTRICALLY NON-CONDUCTIVE



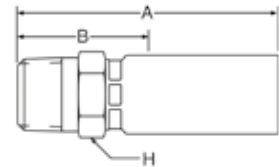
Metric female swivel 24°/60°: Galvanised steel with transparent Cr(IV)-free plating.
Other materials available on request.

#	DN	size	mm	inch		A	B	H	
						mm	mm	mm	bar
1C356-6-3	5	-03	4.8	3/16	M12 x 1.5	37.0	20.0	14.0	250
1C356-8-4	6	-04	6.4	1/4	M14 x 1.5	44.0	20.0	17.0	250
1C356-10-4	6	-04	6.4	1/4	M16 x 1.5	45.0	21.0	19.0	250
1C356-10-5	8	-05	7.9	5/16	M16 x 1.5	46.0	20.0	19.0	250
1C356-12-5	8	-05	7.9	5/16	M18 x 1.5	47.0	21.0	22.0	250
1C356-10-6	10	-06	9.5	3/8	M16 x 1.5	46.0	20.0	19.0	250
1C356-15-8	12	-08	12.7	1/2	M22 x 1.5	50.0	23.0	27.0	250
1C356-18-12	20	-12	19.0	3/4	M26 x 1.5	58.0	24.0	32.0	160
1C356-22-12	20	-12	19.0	3/4	M30 x 2	57.0	24.0	36.0	160
1C356-28-16	25	-16	25.4	1	M36 x 2	76.0	28.0	41.0	100



National pipe tapered (NPT) male: Galvanised steel with transparent Cr(IV)-free plating.
Other materials available on request.

#	DN	size	mm	inch		A	B	H	
						mm	mm	mm	bar
10157-2-2	3	-02	3.2	1/8	1/8 - 27 NPTF	35.0	18.0	13.0	345
10155-2-3	5	-03	4.8	3/16	1/8 - 27 NPTF	51.0	26.0	14.0	345
10155-4-3	5	-03	4.8	3/16	1/4 - 18 NPTF	55.0	30.0	17.0	345
10155-6-3	5	-03	4.8	3/16	3/8 - 18 NPTF	54.0	29.0	19.0	275
10155-2-4	6	-04	6.4	1/4	1/8 - 27 NPTF	54.0	22.0	17.0	345
10155-4-4	6	-04	6.4	1/4	1/4 - 18 NPTF	62.0	30.0	17.0	345
10155-6-4	6	-04	6.4	1/4	3/8 - 18 NPTF	61.0	29.0	19.0	275
10155-4-5	8	-05	7.9	5/16	1/4 - 18 NPTF	59.0	27.0	17.0	345
10155-6-5	8	-05	7.9	5/16	3/8 - 18 NPTF	61.0	29.0	19.0	275
10155-4-6	10	-06	9.5	3/8	1/4 - 18 NPTF	66.0	30.0	19.0	345
10155-6-6	10	-06	9.5	3/8	3/8 - 18 NPTF	70.0	33.0	19.0	275
10155-8-6	10	-06	9.5	3/8	1/2 - 14 NPTF	77.0	40.0	27.0	240
10155-6-8	12	-08	12.7	1/2	3/8 - 18 NPTF	71.0	30.0	22.0	275
10155-8-8	12	-08	12.7	1/2	1/2 - 14 NPTF	77.0	36.0	27.0	240
10155-12-12	20	-12	19.0	3/4	3/4 - 14 NPTF	82.0	36.0	30.0	210
10155-16-16	25	-06	25.4	1	1 - 11 1/2 NPTF	104.0	44.0	41.0	170



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.



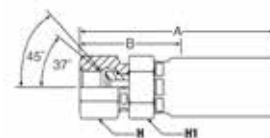
518C ELECTRICALLY NON-CONDUCTIVE

THERMOPLASTIC - MEDIUM PRESSURE

SAE (JIC) 37° female swivel: Galvanised steel with transparent Cr(IV)-free plating.

For stainless steel (AISI 316) add C to the Part Number. Other materials available on request.

#	DN	size	mm	inch		A	B	H	H1	
						mm	mm	mm	mm	bar
10657-4-2	3	-02	3.2	1/8	7/16 - 20 UNF	33.0	16.0	17.0	13.0	410
10655-4-3	5	-03	4.8	3/16	7/16 - 20 UNF	55.0	30.0	17.0	16.0	410
10655-5-3	5	-03	4.8	3/16	1/2 - 20 UNF	57.0	32.0	17.0	16.0	410
10655-4-4	6	-04	6.4	1/4	7/16 - 20 UNF	65.0	33.0	17.0	17.0	410
10655-5-4	6	-04	6.4	1/4	1/2 - 20 UNF	65.0	33.0	17.0	16.0	410
10655-6-4	6	-04	6.4	1/4	9/16 - 18 UNF	67.0	35.0	19.0	17.0	345
10655-5-5	8	-05	7.9	5/16	1/2 - 20 UNF	65.0	33.0	17.0	16.0	410
10655-6-5	8	-05	7.9	5/16	9/16 - 18 UNF	65.0	33.0	19.0	16.0	345
10655-8-5	8	-05	7.9	5/16	3/4 - 16 UNF	68.0	37.0	22.0	19.0	345
10655-6-6	10	-06	9.5	3/8	9/16 - 18 UNF	69.0	33.0	19.0	19.0	345
10655-8-6	10	-06	9.5	3/8	3/4 - 16 UNF	72.0	35.0	24.0	19.0	345
10655-6-8	12	-08	12.7	1/2	9/16 - 18 UNF	76.0	35.0	19.0	22.0	345
10655-8-8	12	-08	12.7	1/2	3/4 - 16 UNF	79.0	38.0	22.0	22.0	345
10655-10-8	12	-08	12.7	1/2	7/8 - 14 UNF	82.0	41.0	27.0	22.0	345
10655-12-8	12	-08	12.7	1/2	1 1/16 - 12 UNF	83.0	42.0	32.0	27.0	345
10655-12-12	20	-12	19.0	3/4	1 1/16 - 12 UNF	88.0	42.0	32.0	30.0	345
10655-16-16	25	-16	25.4	1	1 5/16 - 12 UNF	104.0	44.0	38.0	36.0	275



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.

3800

MEETS SAE 100R8



General applications

#											
	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
3800-02	3	-02	3.2	1/8	8.5	413	6,000	1655	24,000	20.0	0.04
3800-03	5	-03	4.8	3/16	11.0	345	5,000	1379	20,000	38.0	0.09
3800-04	6	-04	6.4	1/4	13.5	345	5,000	1379	20,000	51.0	0.12
3800-06	10	-06	9.5	3/8	16.9	276	4,000	1103	16,000	64.0	0.16
3800-08	12	-08	12.7	1/2	21.3	240	3,500	965	14,000	102.0	0.22

APPLICATIONS

General hydraulics, machine tools, mobile equipment, agricultural equipment and marine steering.

FEATURES

- 100R8 performance with 100R7 dimensions for fitting versatility
- Low volumetric expansion

CONSTRUCTION

Core tube: Nylon.
Pressure reinforcement: Braided, high-tensile aramid fibre.
Cover: Black perforated polyurethane.

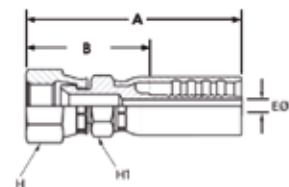
TEMPERATURE RANGE

-40°C up to +100°C.

FITTINGS

Female JIC / SAE 37° swivel stainless steel

#						A	B	EØ		
	DN	size	mm	inch		mm	mm	mm	inch	inch
90A03-045400-0	5	-03	4.7	3/16	7/16 - 20	54.6	33.3	2.8	5/8	9/16
90A04-045400-0	6	-04	6.4	1/4	7/16 - 20	64.2	36.6	4.0	5/8	5/8
90A06-065500-0	10	-06	9.5	3/8	9/16 - 20	71.6	39.6	7.1	3/4	3/4
90A08-085400-0	12	-08	12.5	1/2	3/4 - 16	80.0	41.4	9.9	15/16	7/8
90A08-105400-0	12	-08	12.5	1/2	7/8 - 14	80.0	41.4	9.9	1 1/16	7/8
90A12-125500-0	19	-12	19.0	3/4	1 1/16 - 12	87.2	44.5	15.9	1 1/4	1 1/8
90A16-165500-0	25	-16	25.0	1	1 5/16 - 12	103.0	50.8	20.7	1 1/2	1 3/8



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.



3R80

EXCEEDS SAE 100R8

General applications

#	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
3R80-03	5	-03	4.8	3/16	13.1	350	5,100	1400	20,400	38.0	0.11
3R80-04	6	-04	6.4	1/4	15.9	350	5,100	1400	20,400	51.0	0.12
3R80-06	10	-06	9.5	3/8	19.4	280	4,050	1120	16,200	64.0	0.22
3R80-08	12	-08	12.7	1/2	22.7	245	3,550	980	14,200	102.0	0.28
3R80-12	19	-12	19.1	3/4	28.9	157	2,300	628	9,200	165.0	0.38

APPLICATIONS

General hydraulics, machine tools, mobile equipment, agricultural equipment and marine steering.

FEATURES

- Low volumetric expansion
- High Chemical resistance
- Made in the USA

CONSTRUCTION

Core tube: Nylon.
Pressure reinforcement: Braided, high-tensile aramid fibre.
Cover: Black perforated polyurethane.

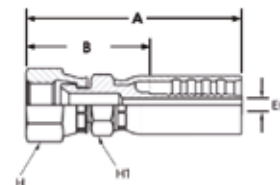
TEMPERATURE RANGE

-40°C up to +100°C.

FITTINGS

Female JIC / SAE 37° swivel stainless steel

#						A	B	EØ		
	DN	size	mm	inch		mm	mm	mm	inch	inch
90L03-045400-0	5	-04	4.7	3/16	7/16 - 20	54.6	35.1	2.8	5/8	9/16
90L04-045400-0	6	-04	6.4	1/4	7/16 - 20	64.2	36.6	4.0	5/8	5/8
90L06-065500-0	10	-06	9.5	3/8	9/16 - 18	71.6	39.6	7.1	3/4	3/4
90L06-085400-0	10	-08	9.5	3/8	3/4 - 16	71.3	39.6	7.1	15/16	3/4
90L08-085400-0	12	-08	12.5	1/2	3/4 - 16	80.0	41.4	9.9	15/16	7/8
90L08-105400-0	12	-10	12.5	1/2	7/8 - 14	80.0	41.4	9.9	1 1/16	7/8
90L12-125500-0	19	-12	19.0	3/4	1 1/16 - 12	87.2	44.5	15.9	1 1/4	1 1/8
90L16-165500-0	25	-16	25.0	1	1 5/16 - 12	103.0	49.3	20.6	1 1/2	1 3/8



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.

580N**PERFORMANCE EXCEEDS SAE 100R8****General applications**

#											
	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
580N-4	6	-04	6.3	1/4	15.4	345	5,000	1380	20,000	51.0	0.16
580N-6	10	-06	9.5	3/8	19.3	275	4,000	1100	16,000	64.0	0.22
580N-8	12	-08	12.7	1/2	22.3	240	3,500	960	14,000	102.0	0.31
580N-10	16	-10	15.9	5/8	24.9	190	2,750	760	11,000	152.0	0.32
580N-12	20	-12	19.1	3/4	29.5	155	2,250	620	9,000	203.0	0.35
580N-16	25	-16	25.4	1	37.6	140	2,000	560	8,000	254.0	0.56

APPLICATIONS

High pressure service for general industrial and mobile hydraulic applications as well as with gases.
Suitable for a wide variety of fluids due to the polyamide core tube.

FEATURES

- High abrasion resistance
- High flexibility
- Low weight
- Excellent chemical resistance due to polyamide core tube

CONSTRUCTION

Core tube: Polyamide.
Pressure reinforcement: Multiple braided layers of high tensile synthetic fibre.
Cover: Polyurethane, pinpricked.
Colour: Black.

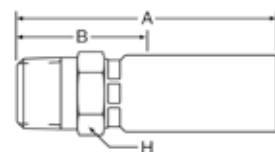
TEMPERATURE RANGE

-40°C up to +100°C for petroleum or synthetic hydraulic fluids.

FITTINGS

National pipe tapered (NPT) male: Galvanised steel with transparent Cr(IV)-free plating.
Other materials available on request.

#						A	B		
	DN	size	mm	inch		mm	mm	mm	bar
10158-2-3	5	-03	4.8	3/16	1/8 - 27 NPTF	51.0	26.0	14.0	345
10158-4-3	5	-03	4.8	3/16	1/4 - 18 NPTF	55.0	30.0	17.0	345
10158-6-3	5	-03	4.8	3/16	3/8 - 18 NPTF	54.0	29.0	19.0	275
10158-2-4	6	-04	6.4	1/4	1/8 - 27 NPTF	54.0	22.0	17.0	345
10158-4-4	6	-04	6.4	1/4	1/4 - 18 NPTF	62.0	30.0	17.0	345
10158-6-4	6	-04	6.4	1/4	3/8 - 18 NPTF	61.0	29.0	19.0	275
10158-4-5	8	-05	7.9	5/16	1/4 - 18 NPTF	59.0	27.0	17.0	345
10158-6-5	8	-05	7.9	5/16	3/8 - 18 NPTF	61.0	29.0	19.0	275
10158-4-6	10	-06	9.5	3/8	1/4 - 18 NPTF	66.0	30.0	19.0	345
10158-6-6	10	-06	9.5	3/8	3/8 - 18 NPTF	70.0	33.0	19.0	275
10158-8-6	10	-06	9.5	3/8	1/2 - 14 NPTF	77.0	40.0	27.0	240
10158-6-8	12	-08	12.7	1/2	3/8 - 18 NPTF	71.0	30.0	22.0	275
10158-8-8	12	-08	12.7	1/2	1/2 - 14 NPTF	77.0	36.0	27.0	240
10158-12-12	20	-12	19.0	3/4	3/4 - 14 NPTF	82.0	36.0	30.0	210
10158-16-16	25	-16	25.4	1	1 - 11 1/2 NPTF	104.0	44.0	41.0	170



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
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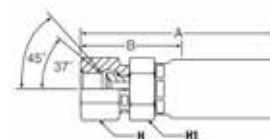
580N

PERFORMANCE EXCEEDS SAE 100R8

THERMOPLASTIC - MEDIUM PRESSURE

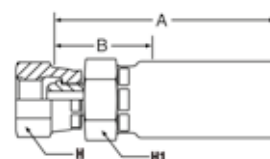
SAE (JIC) female swivel: Galvanised steel with transparent Cr(IV)-free plating.
For stainless steel (AISI 316) add C to the part number. Other materials available on request.

#	DN	size	mm	inch		A	B	H	H1	
						mm	mm	mm	mm	bar
10658-4-3	5	-03	4.8	3/16	7/16 - 20 UNF	55.0	30.0	17.0	16.0	410
10658-5-3	5	-03	4.8	3/16	1/2 - 20 UNF	57.0	32.0	17.0	16.0	410
10658-4-4	6	-04	6.4	1/4	7/16 - 20 UNF	65.0	33.0	17.0	17.0	410
10658-5-4	6	-04	6.4	1/4	1/2 - 20 UNF	65.0	33.0	17.0	16.0	410
10658-6-4	6	-04	6.4	1/4	9/16 - 18 UNF	67.0	35.0	19.0	17.0	345
10658-5-5	8	-05	7.9	5/16	1/2 - 20 UNF	65.0	33.0	17.0	16.0	410
10658-6-5	8	-05	7.9	5/16	9/16 - 18 UNF	65.0	33.0	19.0	16.0	345
10658-6-6	10	-06	9.5	3/8	9/16 - 18 UNF	69.0	33.0	19.0	19.0	345
10658-8-6	10	-06	9.5	3/8	3/4 - 16 UNF	72.0	35.0	24.0	19.0	345
10658-6-8	12	-08	12.7	1/2	9/16 - 18 UNF	76.0	35.0	19.0	22.0	345
10658-8-8	12	-08	12.7	1/2	3/4 - 16 UNF	79.0	38.0	22.0	22.0	345
10658-10-8	12	-08	12.7	1/2	7/8 - 14 UNF	82.0	41.0	27.0	22.0	345
10658-12-8	12	-08	12.7	1/2	1 1/16 - 12 UNF	83.0	42.0	32.0	27.0	345
10658-12-12	20	-12	19.0	3/4	1 1/16 - 12 UNF	88.0	42.0	32.0	30.0	345
10658-16-12	20	-12	19.0	3/4	1 5/16 - 12 UNF	90.0	44.0	38.0	36.0	275
10658-16-16	25	-16	25.4	1	1 5/16 - 12 UNF	104.0	44.0	38.0	36.0	275



BSP Female swivel 60° cone: Galvanised steel with transparent Cr(IV)-free plating.
Other materials available on request.

#	DN	size	mm	inch		A	B	H	H1	
						mm	mm	mm	mm	bar
19258-4-3	5	-03	4.8	3/16	G 1/4	53.0	28.0	19.0	17.0	630
19258-4-4	6	-04	6.4	1/4	G 1/4	58.0	26.0	19.0	17.0	630
19258-6-5	8	-05	7.9	5/16	G 3/8	59.0	27.0	22.0	19.0	550
19258-6-6	10	-06	9.5	3/8	G 3/8	64.0	27.0	22.0	19.0	550
19258-8-8	12	-08	12.7	1/2	G 1/2	72.0	31.0	27.0	24.0	430
19258-10-8	12	-08	12.7	1/2	G 5/8	75.0	32.0	30.0	27.0	375
19258-12-12	20	-12	19.0	3/4	G 3/4	81.0	35.0	32.0	32.0	350
19258-16-16	25	-16	25.4	1	G 1	99.0	39.0	41.0	36.0	280



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.

588N**NON-CONDUCTIVE SAE 100R8****Non conductive applications**

#											
	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
588N-4	6	-04	6.3	1/4	15.4	345	5,000	1380	20,000	51.0	0.16
588N-6	10	-06	9.5	3/8	19.3	275	4,000	1100	16,000	64.0	0.22
588N-8	12	-08	12.7	1/2	22.3	240	3,500	960	14,000	102.0	0.31
588N-10	16	-10	15.9	5/8	24.9	190	2,750	760	11,000	152.0	0.32
588N-12	20	-12	19.1	3/4	29.5	155	2,250	620	9,000	203.0	0.35
588N-16	25	-16	25.4	1	37.6	140	2,000	560	8,000	254.0	0.56

APPLICATIONS

Medium pressure service for general industrial and mobile hydraulic applications when electrically non-conductive lines are required. For example, working platforms for high-voltage line repair and aluminium melting furnaces.

FEATURES

- Electrically non-conductive
- Small outer diameter
- High resistance to abrasion
- High flexibility
- Low weight
- Excellent chemical resistance due to polyamide core tube
- Electrically non-conductive acc. to SAE J517 (less than 50 µA leakage under 250,000 volts per metre)

CONSTRUCTION

Core tube: Polyamide.
Pressure reinforcement: Two braided layers of high tensile synthetic fibre.
Cover: Polyurethane.
Colour: Orange.

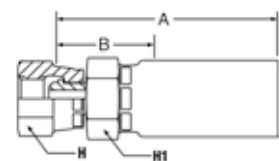
TEMPERATURE RANGE

-40°C up to +100°C for petroleum or synthetic hydraulic fluids.

FITTINGS

BSP Female swivel 60° cone: Galvanised steel with transparent Cr(IV)-free plating.
 Other materials available on request.

#						A	B	H	H1	
	DN	size	mm	inch		mm	mm	mm	mm	bar
19258-4-4	6	-04	6.4	1/4	G 1/4	58.0	26.0	19.0	17.0	630
19258-6-6	10	-06	9.5	3/8	G 3/8	64.0	27.0	22.0	19.0	550
19258-8-8	12	-08	12.7	1/2	G 1/2	72.0	31.0	27.0	24.0	430
19258-10-8	12	-08	12.7	1/2	G 5/8	75.0	32.0	30.0	27.0	375
19258-12-12	20	-12	19.0	3/4	G 3/4	81.0	35.0	32.0	32.0	350
19258-16-16	25	-16	25.4	1	G 1	99.0	39.0	41.0	36.0	280



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.



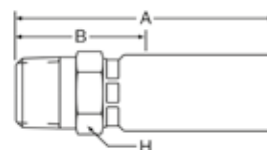
588N

NON-CONDUCTIVE SAE 100R8

THERMOPLASTIC - MEDIUM PRESSURE

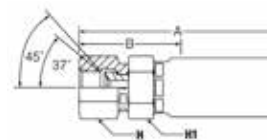
National pipe tapered (NPT) male: Galvanised steel with transparent Cr(IV)-free plating.
Other materials available on request.

#						A	B		
	DN	size	mm	inch		mm	mm	mm	bar
10158-2-4	6	-04	6.4	1/4	1/8 - 27 NPTF	54.0	22.0	17.0	345
10158-4-4	6	-04	6.4	1/4	1/4 - 18 NPTF	62.0	30.0	17.0	345
10158-6-4	6	-04	6.4	1/4	3/8 - 18 NPTF	61.0	29.0	19.0	275
10158-4-6	10	-06	9.5	3/8	1/4 - 18 NPTF	66.0	30.0	19.0	345
10158-6-6	10	-06	9.5	3/8	3/8 - 18 NPTF	70.0	33.0	19.0	275
10158-8-6	10	-06	9.5	3/8	1/2 - 14 NPTF	77.0	40.0	27.0	240
10158-6-8	12	-08	12.7	1/2	3/8 - 18 NPTF	71.0	30.0	22.0	275
10158-8-8	12	-08	12.7	1/2	1/2 - 14 NPTF	77.0	36.0	27.0	240
10158-12-12	20	-12	19.0	3/4	3/4 - 14 NPTF	82.0	36.0	30.0	210
10158-16-16	25	-16	25.4	1	1 - 11 1/2 NPTF	104.0	44.0	41.0	170



SAE (JIC) 37° female swivel: Galvanised steel with transparent Cr(IV)-free plating.
For stainless steel (AISI 316) add C to the part number. Other materials available on request.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	mm	bar
10658-4-4	6	-04	6.4	1/4	7/16 - 20 UNF	65.0	33.0	17.0	17.0	410
10658-5-4	6	-04	6.4	1/4	1/2 - 20 UNF	65.0	33.0	16.0	17.0	410
10658-6-4	6	-04	6.4	1/4	9/16 - 18 UNF	67.0	35.0	17.0	19.0	345
10658-6-6	10	-06	9.5	3/8	9/16 - 18 UNF	69.0	33.0	19.0	19.0	345
10658-8-6	10	-06	9.5	3/8	3/4 - 16 UNF	72.0	35.0	19.0	24.0	345
10658-6-8	12	-08	12.7	1/2	9/16 - 18 UNF	76.0	35.0	22.0	19.0	345
10658-8-8	12	-08	12.7	1/2	3/4 - 16 UNF	79.0	38.0	22.0	22.0	345
10658-10-8	12	-08	12.7	1/2	7/8 - 14 UNF	82.0	41.0	22.0	27.0	345
10658-12-8	12	-08	12.7	1/2	1 1/16 - 12 UNF	83.0	42.0	27.0	32.0	345
10658-12-12	20	-12	19.0	3/4	1 1/16 - 12 UNF	88.0	42.0	30.0	32.0	345
10658-16-12	20	-12	19.0	3/4	1 5/16 - 12 UNF	90.0	44.0	36.0	38.0	275
10658-16-16	25	-16	25.4	1	1 5/16 - 12 UNF	104.0	44.0	36.0	38.0	275



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.

328-3 / 2030TU

3/16" BEVERAGE DISPENSING



Gas applications

#											
	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
328-3	5	-3	4.7	3/16	9.0	345	5,000	1400	20,000	75.0	0.051
2030TU-04R14V17	5	-4	4.8	3/16	9.0	210	3,000	1840	12,000	51.0	0.09

APPLICATIONS

High pressure service for use with CO₂ (2030TU) and nitrogen (328-3) gas. Specifically used in the beverage dispense industry.

FEATURES

- Flavour free materials suitable for food applications
- FDA approved liner
- Pinpricked cover for gas use
- A large range of fittings and accessories available
- Private branding available

CONSTRUCTION - 328-3

Core tube: TEEE.
Pressure reinforcement: One braided layer of high tensile aramid fibre.
Outer cover: TPU black pinpricked.

CONSTRUCTION - 2030TU-04

Core tube: PTFE.
Pressure reinforcement: One braided layer of stainless steel wire.
Outer cover: TPU grey pinpricked.

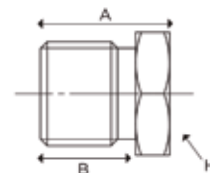
TEMPERATURE RANGE

-40°C up to +100°C.

FITTINGS

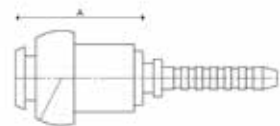
BSP Male bottle connection nut BS341 No.3

#						A	B	
	DN	size	mm	inch		mm	mm	mm
DS-R5/8	5	-03	4.7	3/16	5/8 BSP	28.5	21.0	27



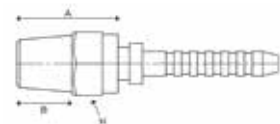
O-ring bottle connection insert to suit 5/8 BSP nut

#						A
	DN	size	mm	inch		mm
ABD244	5	-03	4.7	3/16	Insert	28.0



BSPT Male fixed

#						A	B	
	DN	size	mm	inch				
ABD248	5	-03	4.7	3/16	1/8 BSPT	19.3	10.5	12.0
ABD256	5	-03	4.7	3/16	1/4 BSPT	21.5	14.5	14.0



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.



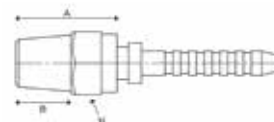
328-3 / 2030TU

3/16" BEVERAGE DISPENSING

THERMOPLASTIC - MEDIUM PRESSURE

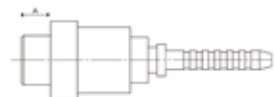
NPT Male fixed

#						A	B	
	DN	size	mm	inch		mm	mm	mm
K91PX-4-03	5	-03	4.7	3/16	1/4 NPT Male	19.0	14.0	14.0



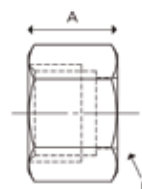
CO₂ Bottle connection insert to suit BS 341 No. 8 nut

#						A
	DN	size	mm	inch		mm
ABD265	5	-03	4.7	3/16	CO ₂ Female Insert	7.2



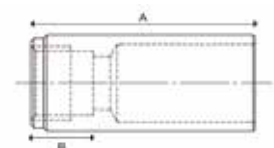
CO₂ Female nut BS 341 No.8

#						A	
	DN	size	mm	inch		mm	mm
ABD251	5	-03	4.7	3/16	21.8 Whitworth	21.0	28.0



CO₂ Female knurled BS 341 No.8

#						A	B
	DN	size	mm	inch		mm	mm
ABD253	5	-03	4.7	3/16	21.8 Whitworth	70.0	19.5



Plastic hand wheel to suit CO₂ and N₂ nut

#						A	
	DN	size	mm	inch		mm	mm
ABD950	-	-	-	-	-	-	28.0



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
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547-4 / 2040N / 328-4 1/4" BEVERAGE DISPENSING

CO₂ and mixed gas applications

#											
	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
547-4	6	-04	6.3	1/4	12.1	210	3,100	860	12,400	100.0	0.09
2040N-04V74	6	-04	6.3	1/4	11.9	310	4,495	1240	17,980	40.0	0.16
328-4 EXT	6	-04	6.3	1/4	12.3	350	5,000	1400	20,000	100.0	0.15

APPLICATIONS

Specifically designed for CO₂ and mixed gas dispensing lines requiring food approval (F.D.A).

FEATURES

- Excellent flex fatigue resistance
- Fungus resistant
- FDA approved inner tube material
- Small bend radius

CONSTRUCTION - 547

Core tube: Polyester elastomer compound.
Pressure reinforcement: Polyester.
Cover: Polyurethane compound, pinpricked.
Colour: Grey.

CONSTRUCTION - 2040N

Core tube: Polyamide.
Pressure reinforcement: One braided layer of high tensile steel wire.
Cover: Polyurethane.
Colour: Grey / black.

CONSTRUCTION - 328 EXT

Core tube: Polyester elastomer compound.
Pressure reinforcement: Aramid.
Cover: Polyurethane compound, pinpricked.
Colour: Grey.

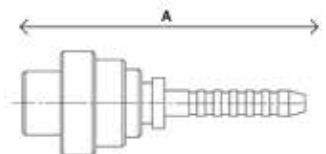
TEMPERATURE RANGE

-40°C up to +100°C.

FITTINGS

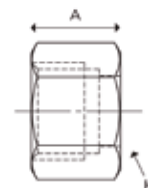
CO₂ Bottle connection insert to suit BS 341 No.8 nut

#						A mm
	DN	size	mm	inch		
ABD250	6	-04	6.4	1/4	-	53.5



CO₂ Female nut BS 341 No.8

#						A	
	DN	size	mm	inch		mm	mm
ABD251	6	-04	6.4	1/4	21.8 Whitworth	21.0	28.0



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
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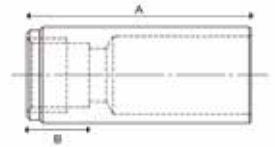
547-4 / 2040N / 328-4

1/4" BEVERAGE DISPENSING



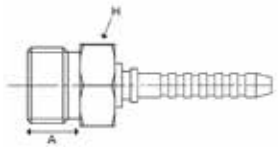
CO₂ Female knurled BS 341 No.8

#						A	B
	DN	size	mm	inch		mm	mm
ABD253	6	-04	6.4	1/4	21.8 Whitworth	70.0	19.5



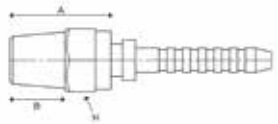
CO₂ Male fixed BS 341 No.8

#						A	
	DN	size	mm	inch		mm	mm
ABD249	6	-04	6.4	1/4	21.8 Whitworth	15.0	23.2



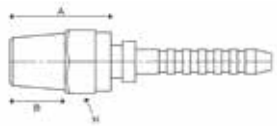
NPT Male fixed

#						A	B	
	DN	size	mm	inch		mm	mm	mm
ABD255	6	-04	6.4	1/4	1/4 NPT Male	19.0	14.0	14.0



BSPT Male fixed

#						A	B	
	DN	size	mm	inch		mm	mm	mm
ABD256	6	-04	6.4	1/4	1/4 BSPT	21.5	14.5	14.0



Plastic hand wheel to suit CO₂ and N₂ nut

#						A	
	DN	size	mm	inch		mm	mm
ABD950	-	-	-	-	-	-	28.0



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.



HPG-04

INDUSTRIAL GAS DISPENSE

Gas applications

#											
	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
HPG-04	6	-04	6.35	1/4	9.25	260	3783	780	11,349	30.0	0.11

APPLICATIONS

For heavy duty use with HP gases, steam, paints, fuels and oils.

FEATURES

- Post sintered hose for low permeation when using industrial gases
- Heavy walled PTFE liner
- Excellent chemical resistance
- FDA approved liner
- Long continuous lengths

CONSTRUCTION

Core tube: Seamless extruded PTFE tube – post sintered.
Pressure reinforcement: Stainless steel 304 wire.
Cover: Available on request at an extra cost.

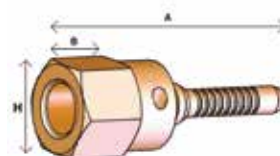
TEMPERATURE RANGE

-56°C up to +250°C.

FITTINGS

BSPT Fixed female brass

#						A	B	H
	DN	size	mm	inch		mm	mm	mm
DN6	-	-04	6.4	1/4	1/4 BSPT female	61.5	26.0	20.7



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.

ESH

SEWER CLEANING



Sewer cleaning applications

#											
	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
ESH-08	12	-08	12.7	1/2	20.6	200	2,900	500	7,250	100.0	0.23
ESH-12	20	-12	19.2	3/4	28.6	200	2,900	500	7,250	125.0	0.37
ESH-16	25	-16	25.3	1	36.6	200	2,900	500	7,250	150.0	0.59
ESH-20	32	-20	31.9	1 1/4	46.0	200	2,900	500	7,250	225.0	0.89

APPLICATIONS

Hydrodynamic cleaning of sewers.

FEATURES

- Fibre reinforced product meaning low weight and high flexibility
- Abrasion resistant cover
- Excellent cover bonding

CONSTRUCTION

Core tube: Polyethylene compound, grey.
Pressure reinforcement: Two braided layers of high tensile synthetic yarn.
Cover: Polyurethane compound.
Colour: Yellow.

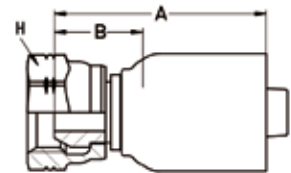
TEMPERATURE RANGE

-10°C up to +50°C.

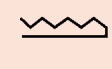
FITTINGS

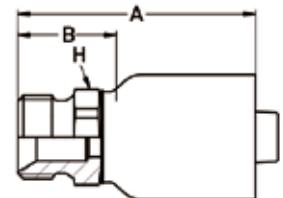
BSP Female swivel: Carbon steel, zinc plated.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
192EH-08-08	12	-08	12.8	1/2	G 1/2	57.0	22.0	27.0	250	3,625
192EH-12-12	20	-12	19.6	3/4	G 3/4	61.0	22.0	32.0	250	3,625
192EH-16-16	25	-16	25.0	1	G 1	55.0	25.0	41.0	250	3,625
192EH-20-20	32	-20	32.0	1 1/4	G 1 1/4	80.0	32.0	50.0	250	3,625



BSP Male: Carbon steel, zinc plated.

#						A	B			
	DN	size	mm	inch					bar	psi
1D9EH-08-08	12	-08	12.8	1/2	G 1/2	64.0	30.0	27.0	250	3,625
1D9EH-12-12	20	-12	19.6	3/4	G 3/4	72.0	33.0	32.0	250	3,625
1D9EH-16-16	25	-16	25.0	1	G 1	72.0	42.0	41.0	250	3,625
1D9EH-20-20	32	-20	32.0	1 1/4	G 1 1/4	93.0	45.0	50.0	250	3,625



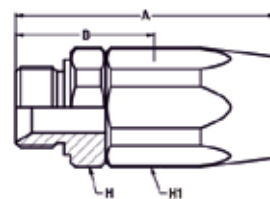
Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.



ESH SEWER CLEANING

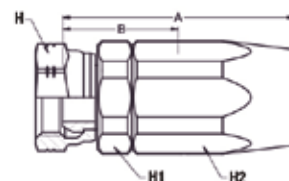
Field attachable BSP male: Carbon steel, zinc plated.

#						A	B	H	H1		
	DN	size	mm	inch		mm	mm	mm	mm	bar	psi
2D9NC-08-08	12	-08	12.8	1/2	G 1/2	75.0	35.0	27.0	27.0	170	2,465
2D9NC-12-12	20	-12	19.6	3/4	G 3/4	86.0	38.0	36.0	36.0	170	2,465
2D9NC-16-16	25	-16	25.0	1	G 1	100.0	50.0	46.0	46.0	170	2,465
2D9NC-20-20	32	-20	32.0	1 1/4	G 1 1/4	113.0	60.0	55.0	55.0	170	2,465



Field attachable BSP female swivel (60° cone): Carbon steel, zinc plated.

#						A	B	H	H1	H2		
	DN	size	mm	inch		mm	mm	mm	mm	mm	bar	psi
292NC-08-08	12	-08	12.8	1/2	G 1/2	77.0	37.0	27.0	27.0	27.0	170	2,465
292NC-12-12	20	-12	19.6	3/4	G 3/4	87.0	39.0	32.0	36.0	36.0	170	2,465
292NC-16-16	25	-16	25.0	1	G 1	100.0	50.0	46.0	46.0	46.0	170	2,465
292NC-20-20	32	-20	32	1 1/4	G 1 1/4	113.0	60.0	55.0	55.0	55.0	170	2,465



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.

ESH 250

SEWER CLEANING



Sewer cleaning applications

#											
	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
ESH250-08	12	-08	12.4	1/2	21.2	250	3,625	625	9,060	100.0	0.24
ESH250-12	20	-12	19.0	3/4	28.6	250	3,625	625	9,060	125.0	0.40
ESH250-16	25	-16	25.4	1	36.5	250	3,625	625	9,060	150.0	0.60
ESH250-20	32	-20	32.0	1 1/4	46.0	250	3,625	625	9,060	225.0	1.00

APPLICATIONS

Hydrodynamic cleaning of sewers.

FEATURES

- Fibre reinforced product meaning low weight and high flexibility
- Abrasion, cut and kink resistant cover
- Very high pressure
- Long continuous lengths

CONSTRUCTION

Core tube: Thermoplastic elastomere.
Pressure reinforcement: Two braided layers of high tensile synthetic fibre, homogenous compound.
Cover: Polyurethane, extreme abrasion and cut resistance.
Colour: Red.

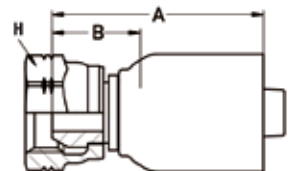
TEMPERATURE RANGE

-10°C up to +50°C.

FITTINGS

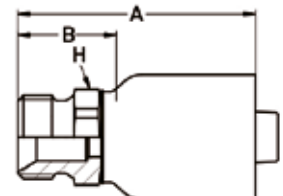
BSP Female swivel (60° cone): Carbon steel, zinc plated.

#						A	B			
	DN	size	mm	inch					mm	mm
192EH-08-08	12	-08	12.8	1/2	G 1/2	57.0	22.0	27.0	250	3,625
192EH-12-12	20	-12	19.6	3/4	G 3/4	61.0	22.0	32.0	250	3,625
192EH-16-16	25	-16	25.0	1	G 1	55.0	25.0	41.0	250	3,625
192EH-20-20	32	-20	32.0	1 1/4	G 1 1/4	80.0	32.0	50.0	250	3,625



BSP Male: Carbon steel, zinc plated.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
1D9EH-08-08	12	-08	12.8	1/2	G 1/2	64.0	30.0	27.0	250	3,625
1D9EH-12-12	20	-12	19.6	3/4	G 3/4	72.0	33.0	32.0	250	3,625
1D9EH-16-16	25	-16	25.0	1	G 1	72.0	42.0	41.0	250	3,625
1D9EH-20-20	32	-20	32.0	1 1/4	G 1 1/4	93.0	45.0	50.0	250	3,625



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.

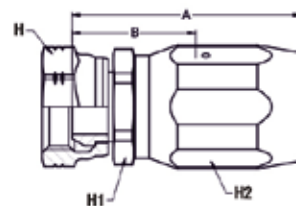


ESH 250

SEWER CLEANING

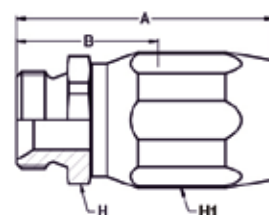
Field attachable BSP female swivel (60° cone): Carbon steel, zinc plated

#						A	B					
	DN	size	mm	inch		mm	mm	mm	mm	mm	bar	psi
292EJ-8-08	12	-08	12.8	1/2	G 1/2	71.0	33.0	27.0	27.0	27.0	180	2,610
292EJ-12-12	20	-12	19.6	3/4	G 3/4	82.0	37.0	32.0	32.0	36.0	180	2,610
292EJ-16-16	25	-16	25.0	1	G 1	89.0	48.0	41.0	41.0	46.0	180	2,610
292EJ-20-20	32	-20	32.0	1 1/4	G 1 1/4	112.0	59.0	50.0	50.0	55.0	180	2,610



Field attachable BSP male: Carbon steel, zinc plated.

#						A	B				
	DN	size	mm	inch		mm	mm	mm	mm	bar	psi
2D9EJ-8-08	12	-08	12.8	1/2	G 1/2	70.0	32.0	27.0	27.0	180	2,610
2D9EJ-12-12	20	-12	19.6	3/4	G 3/4	83.0	38.0	32.0	36.0	180	2,610
2D9EJ-16-16	25	-16	25.0	1	G 1	91.0	50.0	41.0	46.0	180	2,610
2D9EJ-20-20	32	-20	32.0	1 1/4	G 1 1/4	112.0	59.0	50.0	55.0	180	2,610



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.

2370N

PERFORMANCE EXCEEDS DIN 20 022



Hose applications

#	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
2370N-04V10	6	-04	6.3	1/4	12.4	465	6,750	1860	26,970	70.0	0.19
2370N-05V10	8	-05	8.2	5/16	14.3	440	6,380	1760	25,520	100.0	0.25
2370N-06V10	10	-06	9.8	3/8	16.4	420	6,090	1680	24,360	120.0	0.33
2370N-08V10	12	-08	12.8	1/2	20.0	350	5,075	1400	20,300	150.0	0.42

APPLICATIONS

Medium pressure service for general industrial and mobile hydraulic applications as well as with gases. Usable for a wide variety of fluids due to the polyamide core tube.

FEATURES

- Working pressures up to 465 bar
- Short ferrules allowing more flexibility in fixtures
- Excellent chemical resistance due to polyamide core tube

CONSTRUCTION

Core tube: Polyamide; alternative -08: polyester elastomer.
Pressure reinforcement: Two spiral layers of high tensile steel wire, two open spiral layers of high tensile synthetic fibre.
Cover: Polyurethane.
Colour: Black; other colours on request.

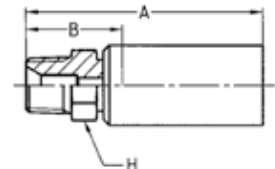
TEMPERATURE RANGE

-40°C up to +100°C (short term +120°C) for petroleum or synthetic hydraulic fluids.

FITTINGS

National pipe tapered (NPT) male: Galvanised steel with transparent Cr(IV)-free plating. Other materials available on request.

#						A	B		
	DN	size	mm	inch					
101NX-4-04	6	-04	6.4	1/4	1/4 - 18 NPTF	65.0	33.0	14.0	345
101NX-6-05	8	-05	7.9	5/16	3/8 - 18 NPTF	64.0	30.0	19.0	275
101NX-6-06	10	-06	9.5	3/8	3/8 - 18 NPTF	71.0	31.0	19.0	275
101NX-8-06	10	-06	9.5	3/8	1/2 - 14 NPTF	76.0	36.0	22.0	240
101NX-8-08	12	-08	12.7	1/2	1/2 - 14 NPTF	79.0	37.0	22.0	240



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.



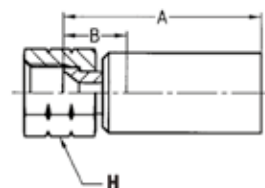
2370N

PERFORMANCE EXCEEDS DIN 20 022

THERMOPLASTIC - MEDIUM PRESSURE

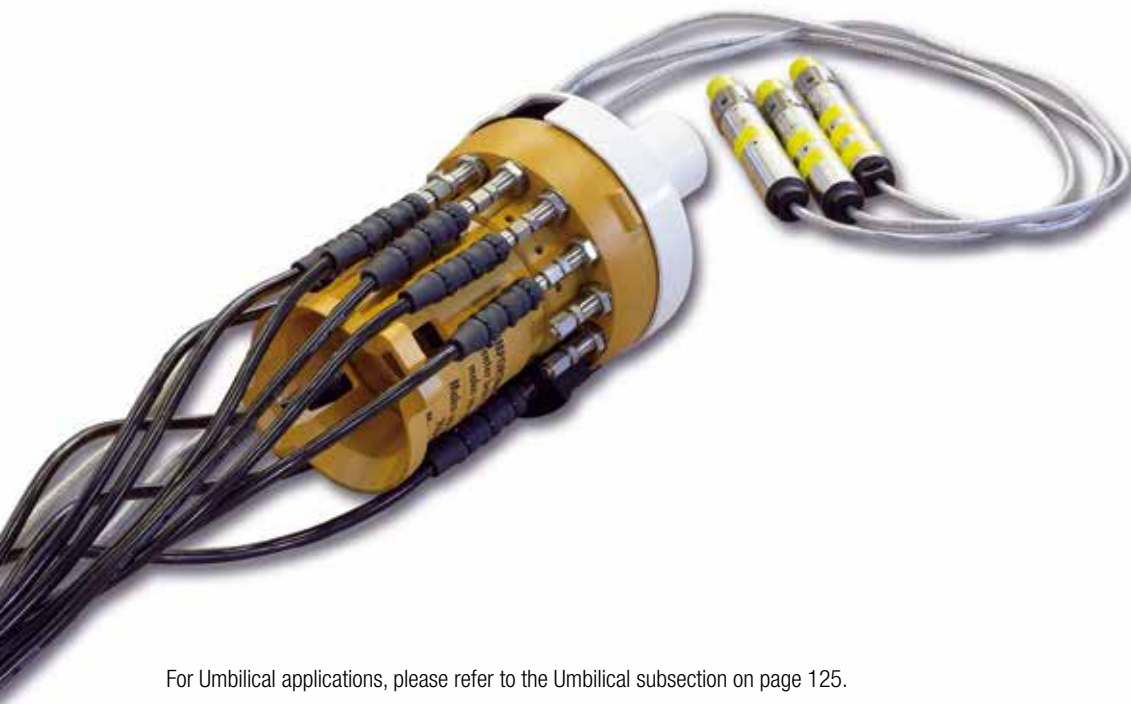
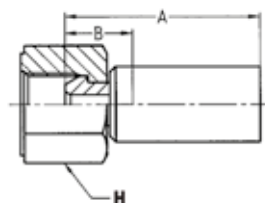
SAE (JIC) 37° female swivel: Galvanised steel with transparent Cr(IV)-free plating.
Other materials available on request.

#	DN	size	mm	inch		A	B	H	
106NX-4-04	6	-04	6.4	1/4	7/16 - 20 UNF	58.0	25.0	19.0	410
106NX-5-04	6	-04	6.4	1/4	1/2 - 20 UNF	55.0	23.0	19.0	410
106NX-6-05	8	-05	7.9	5/16	9/16 - 18 UNF	50.0	16.0	19.0	345
106NX-6-06	10	-06	9.5	3/8	9/16 - 18 UNF	59.0	18.0	22.0	345
106NX-8-06	10	-06	9.5	3/8	3/4 - 16 UNF	59.0	19.0	24.0	345
106NX-8-08	12	-08	12.7	1/2	3/4 - 16 UNF	64.0	21.0	27.0	345
106NX-10-08	12	-08	12.7	1/2	7/8 - 14 UNF	62.0	19.0	27.0	345



BSP female swivel 60° cone: Galvanised steel with transparent Cr(IV)-free plating.
Other materials available on request.

#	DN	size	mm	inch		A	B	H	
192NX-4-04	6	-04	6.4	1/4	G 1/4	56.0	25.0	19.0	630
192NX-6-05	8	-05	7.9	5/16	G 3/8	52.0	18.0	22.0	550
192NX-6-06	10	-06	9.5	3/8	G 3/8	59.0	19.0	22.0	550
192NX-8-06	10	-06	9.5	3/8	G 1/2	60.0	20.0	27.0	430
192NX-8-08	12	-08	12.7	1.2	G 1/2	63.0	20.0	27.0	430



For Umbilical applications, please refer to the Umbilical subsection on page 125.



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.

2245N

PERFORMANCE EXCEEDS SAE 100R9



General applications

#	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
2245N-04V00	6	-04	6.3	1/4	12.5	450	6,525	1800	16,100	70.0	0.25
2245N-05V00	8	-05	8.2	5/16	14.3	440	5,800	1600	23,200	100.0	0.32
2245N-06V00	10	-06	9.7	3/8	17.0	375	5,435	1500	21,750	120.0	0.42
2245N-08V00	12	-08	12.8	1/2	20.7	350	5,075	1400	20,300	165.0	0.52
2245N-10V30	16	-10	16.0	5/8	24.5	330	4,785	1320	19,140	200.0	0.72
2245N-12V30	20	-12	19.6	3/4	28.5	300	4,350	1200	17,400	240.0	0.92
2245N-16V30	25	-16	25.0	1	34.0	275	3,985	1100	15,950	280.0	1.15

APPLICATIONS

High pressure service for general industrial and mobile hydraulic applications as well as with gases. Suitable for a wide variety of fluids due to the polyamide core tube.

FEATURES

- High working pressures for large bore sizes
- Combination of spiral and braided wire reinforcement
- Excellent chemical resistance due to polyamide core tube

CONSTRUCTION

Core tube: Polyamide.
Pressure reinforcement: Two spiral layers of high tensile steel wire, one braided layer of steel wire.
Cover: Polyurethane; -10 and above: polyamide.
Colour: Black; other colours on request.

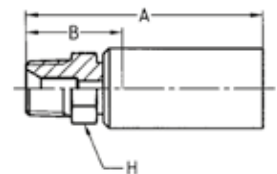
TEMPERATURE RANGE

-40°C up to +100°C (short term +120°C) for petroleum or synthetic hydraulic fluids.

FITTINGS

National pipe tapered (NPT) male: Galvanised steel with transparent Cr(IV)-free plating. Other materials available on request.

#	DN	size	mm	inch		A	B	H	bar
101NX-4-04	6	-04	6.4	1/4	1/4 - 18 NPTF	65.0	33.0	14.0	345
101NX-6-05	8	-05	7.9	5/16	3/8 - 18 NPTF	64.0	30.0	19.0	275
101NX-6-06	10	-06	9.5	3/8	3/8 - 18 NPTF	71.0	31.0	19.0	275
101NX-8-06	10	-06	9.5	3/8	1/2 - 14 NPTF	76.0	36.0	22.0	240
101NX-8-08	12	-08	12.7	1/2	1/2 - 14 NPTF	79.0	37.0	22.0	240
101NX-12-10	16	-10	15.9	1/2	3/4 - 14 NPTF	89.0	38.0	27.0	210
101NX-12-12	20	-12	19.0	3/4	3/4 - 14 NPTF	91.0	40.0	27.0	210
101NX-16-12	20	-12	19.0	3/4	1 - 11 1/2 NPTF	96.0	45.0	36.0	170
101NX-16-16	25	-16	25.4	1	1 - 11 1/2 NPTF	96.0	45.0	36.0	170
101NX-20-16	25	-16	25.4	1	1 1/4 - 11 1/2 NPTF	97.0	46.0	46.0	150



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.



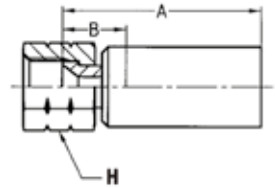
2245N

PERFORMANCE EXCEEDS SAE 100R9

THERMOPLASTIC - MEDIUM PRESSURE

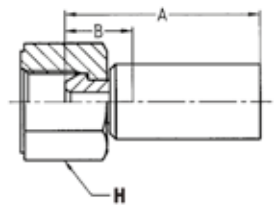
SAE (JIC) 37° female swivel: Galvanised steel with transparent Cr(IV)-free plating.
Other materials available on request.

#						A	B	H	
	DN	size	mm	inch		mm	mm	mm	bar
106NX-4-04	6	-04	6.4	1/4	7/16 - 20 UNF	58.0	25.0	19.0	410
106NX-5-04	6	-04	6.4	1/4	1/2 - 20 UNF	55.0	23.0	19.0	410
106NX-6-05	8	-05	7.9	5/16	9/16 - 18 UNF	50.0	16.0	19.0	345
106NX-6-06	10	-06	9.5	3/8	9/16 - 18 UNF	59.0	18.0	22.0	345
106NX-8-06	10	-06	9.5	3/8	3/4 - 16 UNF	59.0	19.0	24.0	345
106NX-8-08	12	-08	12.7	1/2	3/4 - 16 UNF	64.0	21.0	27.0	345
106NX-10-08	12	-08	12.7	1/2	7/8 - 14 UNF	62.0	19.0	27.0	345
106NX-10-10	16	-10	15.9	5/8	7/8 - 14 UNF	73.0	22.0	27.0	345
106NX-12-10	16	-10	15.9	5/8	1 1/16 - 12 UNF	73.0	22.0	32.0	345
106NX-12-12	20	-12	19.0	3/4	1 1/16 - 12 UNF	79.0	28.0	36.0	345
106NX-16-12	20	-12	19.0	3/4	1 5/16 - 12 UNF	75.0	24.0	41.0	275
106NX-16-16	25	-16	25.4	1	1 5/16 - 12 UNF	77.0	26.0	41.0	275
106NX-20-16	25	-16	25.4	1	1 5/8 - 12 UNF	75.0	24.0	50.0	200



BSP Female swivel 60° cone: Galvanised steel with transparent Cr(IV)-free plating.
Other materials available on request.

#						A	B	H	
	DN	size	mm	inch		mm	mm	mm	bar
192NX-4-04	6	-04	6.4	1/4	G 1/4	56.0	25.0	19.0	630
192NX-6-05	8	-05	7.9	5/16	G 3/8	52.0	18.0	22.0	550
192NX-6-06	10	-06	9.5	3/8	G 3/8	59.0	19.0	22.0	550
192NX-8-06	10	-06	9.5	3/8	G 1/2	60.0	20.0	27.0	430
192NX-8-08	12	-08	12.7	1.2	G 1/2	63.0	20.0	27.0	430
192NX-12-10	16	-10	15.9	5/8	G 3/4	73.0	22.0	32.0	375
192NX-12-12	20	-12	19.0	3/4	G 3/4	77.0	26.0	32.0	375
192NX-16-12	20	-12	19.0	3/4	G 1	77.0	26.0	41.0	280
192NX-16-16	25	-16	25.4	1	G 1	88.0	27.0	41.0	280
192NX-20-16	25	-16	25.4	1	G 1 1/4	77.0	26.0	50.0	250



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.

2022N**NON-CONDUCTIVE 5,000 & 10,000 PSI****Non-conductive applications**

#											
	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
2022N-04V15-5K	6	-04	6.4	1/4	12.7	345	5,000	1380	20,000	51.0	0.12
2022N-06V15-5K	10	-06	9.7	3/8	16.1	345	5,000	1380	20,000	76.0	0.15
2022N-08V15-5K	12	-08	12.9	1/2	20.8	345	5,000	1380	20,000	102.0	0.17
2022N-04V15-10K	6	-04	6.4	1/4	13.8	690	10,000	2760	40,000	100.0	0.14
2022N-06V15-10K	10	-06	9.7	3/8	19.0	690	10,000	2760	40,000	100.0	0.24
2022N-08V15-10K	12	-08	12.9	1/2	23.0	690	10,000	2760	40,000	100.0	0.34

APPLICATIONS

High pressure applications where non-conductivity is required. For offshore use due to methanol washed bore and sea water resistant cover. Often used for offshore umbilicals.

FEATURES

- Sea water resistant cover
- Methanol washed bore
- Fibre reinforced for flexibility and light weight

CONSTRUCTION

Core tube: Polyamide 11, methanol washed.
Pressure reinforcement: Two braided layers of high tensile aramid fibre.
Cover: Sea water resistant TPU.
Colour: Orange.

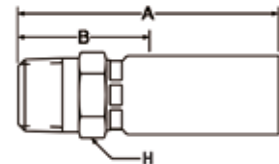
TEMPERATURE RANGE

-40°C up to +55°C.

FITTINGS - 5,000 psi hoses only.

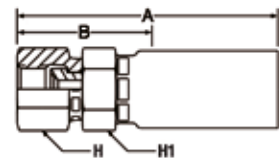
NPT Male 60° cone: Carbon steel, zinc plated.

#						A	B	H		
	DN	size	mm	inch		mm	mm	mm	bar	psi
10155-4-4	6	-04	6.4	1/4	1/4 - 18 NPTF	59.0	30.0	18.0	345	5,000
10155-6-4	6	-04	6.4	1/4	3/8 - 18 NPTF	62.0	30.0	17.0	345	5,000
10155-6-6	10	-06	9.5	3/8	3/8 - 18 NPTF	70.0	33.0	19.0	275	4,000
10155-8-8	12	-08	12.7	1/2	1/2 - 14 NPTF	77.0	36.0	27.0	240	3,500



JIC Female swivel: Carbon steel, zinc plated.

#						A	B	H	H1		
	DN	size	mm	inch		mm	mm	mm	mm	bar	psi
10655-4-4	6	-04	6.4	1/4	7/16 - 20 UNF	65.0	33.0	17.0	17.0	345	5,000
10655-6-6	10	-06	9.5	3/8	9/16 - 18 UNF	69.0	33.0	19.0	19.0	345	5,000
10655-8-8	12	-08	12.7	1/2	3/4 - 16 UNF	79.0	38.0	21.0	21.0	345	5,000



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.



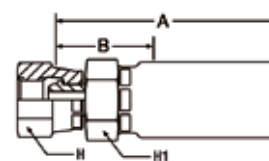
2022N

NON-CONDUCTIVE 5,000 & 10,000 PSI

THERMOPLASTIC - HIGH PRESSURE

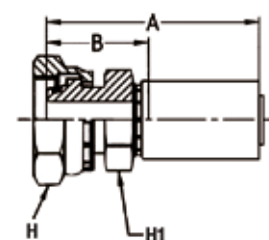
BSP Female swivel (60° cone): Carbon steel, zinc plated.

#	DN	size	mm	inch		A	B	H	H1		
19255-4-4	6	-04	6.4	1/4	G 1/4	58.0	26.0	19.0	17.0	345	5,000
19255-6-6	10	-06	9.5	3/8	G 3/8	64.0	27.0	22.0	19.0	345	5,000
19255-8-8	12	-08	12.7	1/2	G 1/2	73.0	32.0	27.0	24.0	345	5,000



Metric female swivel: Carbon steel, zinc plated

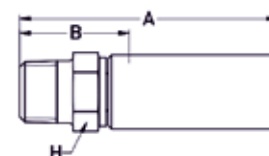
#	DN	size	mm	inch		A	B	H	H1		
1C955-8-4	6	-04	6.4	1/4	M16 x 1.5	70.0	38.0	19.0	17.0	345	5,000
1C955-10-4	6	-04	6.4	1/4	M18 x 1.5	67.0	36.0	22.0	19.0	345	5,000
1C955-12-4	6	-04	6.4	1/4	M20 x 1.5	64.0	32.0	24.0	19.0	345	5,000
1C955-12-6	10	-06	9.5	3/8	M20 x 1.5	68.0	32.0	24.0	19.0	345	5,000
1C955-16-8	12	-08	12.7	1/2	M24 x 1.5	77.0	36.0	30.0	24.0	345	5,000



FITTINGS - 10,000 psi hoses only.

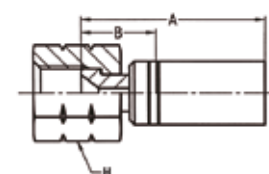
NPT Male: Carbon steel, zinc plated.

#	DN	size	mm	inch		A	B	H		
1018X-4-04	6	-04	6.4	1/4	1/4 - 18 NPTF	65.0	33.0	14.0	800	11,600
1018X-6-04	6	-04	6.4	1/4	3/8 - 18 NPTF	67.0	35.0	19.0	800	11,600
601LX-8-8	12	-08	12.7	1/2	1/2 NPT	95.0	43.0	29.0	1034	15,000



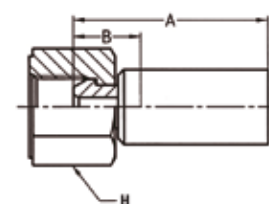
JIC Female swivel: Stainless steel (AISI 316), other materials on request.

#	DN	size	mm	inch		A	B	H		
1068X-6-04C	6	-04	6.4	1/4	9/16 - 18 UNF	55.0	24.0	19.0	690	10,000
1063X-6-06C	10	-06	9.5	3/8	9/16 - 18 UNF	69.0	33.0	22.0	690	10,000
106LX-8-08C	12	-08	12.7	1/2	3/4 - 16 UNF	85.0	41.0	24.0	690	10,000



BSP Female swivel 60° cone: Stainless steel (AISI 316), other materials on request.

#	DN	size	mm	inch		A	B	H		
1928X-6-04C	6	-04	6.4	1/4	G 1/4	56.0	25.0	19.0	690	10,000
1923X-8-06C	10	-06	9.5	3/8	G 1/2	66.0	22.0	30.0	690	10,000



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.

2380N-MSHA

700 BAR – MDG41 COMPLIANT



Mining applications

#	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
2380N-04V10-MSHA	6	-04	6.3	1/4	13.3	700	10,150	2800	40,600	70.0	0.28

APPLICATIONS

Hydraulic applications in a mining environment where MDG 41 specifications are required.

FEATURES

- Extremely high abrasion resistant. Exceeds ISO 6945 by factor of 10
- Impulse life > 200,000 cycles
- Fittings with special 'ZE' plating meets the minimum 200 hrs (red rust) salt spray test
- Hose cover MSHA approved IC40/31
- Can be fitted with MSHA burst resistant sleeve

CONSTRUCTION

Core tube: Polyamide.
Pressure reinforcement: Two spiral layers and two open spiral layers of high tensile steel wire.
Cover: Polyurethane, MSHA approved.
Colour: Black.

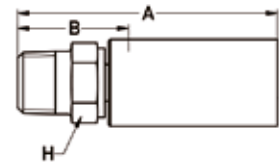
TEMPERATURE RANGE

-40°C up to +100°C.

FITTINGS

National pipe tapered (NPT) male: Carbon steel, special plating for high corrosion protection in mining applications.

#	DN	size	mm	inch		A	B	H	bar	psi
1018X-4-04ZE	6	-04	6.4	1/4	1/4 NPTF	65.0	33.0	14.0	800	11,600
1018X-6-04ZE	6	-04	6.4	1/4	3/8 NPTF	67.0	35.0	19.0	800	11,600



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.



2340N

720 BAR JACKING & RESCUE

Hydraulic applications

#	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
2340N-04	6	-04	6.4	1/4	12.5	720	10,440	2880	41,760	70.0	0.25
2340N-04-04	6	-04	6.4	1/4	12.5	720	10,440	2880	41,760	70.0	0.5

APPLICATIONS

High pressure service for use with petroleum or synthetic hydraulic fluids. Hydraulic tools including jacking, presses and torque wrenches. Used widely within rescue tool industry.

FEATURES

- High kink resistance and high flexibility
- 4:1 Safety factor
- Available in twin line
- Excellent chemical resistance
- Wide range of matched fittings available

CONSTRUCTION

Core tube: Polyamide.
Pressure reinforcement: Two spiral layers and two open spiral layers of high tensile steel wire.
Cover: Polyurethane.
Colour: Custom branding available.

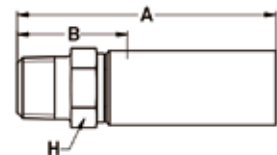
TEMPERATURE RANGE

-40°C up to +100°C.

FITTINGS

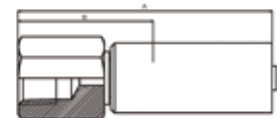
NPT Male: Mild steel, zinc plated.

#	DN	size	mm	inch		A	B	H	bar	psi
1018X-4-04	6	-04	6.4	1/4	1/4 - 18 NPTF	65.0	33.0	14.0	800	11,600
1018X-6-04	6	-04	6.4	1/4	3/8 - 18 NPTF	67.0	35.0	19.0	800	11,600



NPT Fixed Female: Carbon steel, zinc plated.

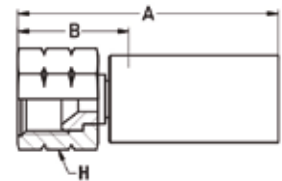
#	DN	size	mm	inch		A	B	H	bar	psi
1028X-4-04	6	-04	6.4	1/4	1/4 - 18 NPTF	70.0	38.0	19.0	800	11,600
1028X-6-04	6	-04	6.4	1/4	3/8 - 18 NPTF	74.0	42.0	24.0	800	11,600



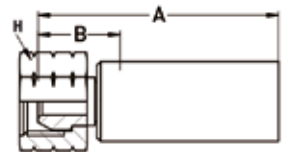
Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.

2340N**720 BAR JACKING & RESCUE****JIC Female swivel:** Carbon steel, zinc plated.

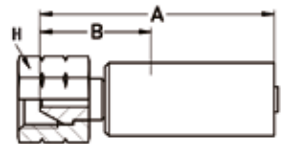
#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
1068X-4-04	6	-04	6.4	1/4	7/16 - 20 UNF	57.0	26.0	19.0	800	11,600
1068X-5-04	6	-04	6.4	1/4	1/2 - 20 UNF	67.0	35.0	19.0	800	11,600
1068X-6-04	6	-04	6.4	1/4	9/16 - 18 UNF	55.0	24.0	19.0	800	11,600

**NPSM Female swivel:** Carbon steel, zinc plated.

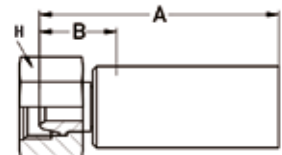
#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
1078X-4-04	6	-04	6.4	1/4	1/4 - 18 NPSM	59.0	28.0	19.0	800	11,600

**Type "M" female swivel:** Carbon steel, zinc plated.

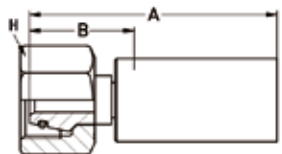
#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
1AY8X-6-04	6	-04	6.4	1/4	9/16 - 18 UNF	60.0	28.0	19.0	800	11,600

**Metric female swivel light series:** Carbon steel, zinc plated.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
1C38X-8-04	6	-04	6.4	1/4	M14 x 1.5	62.0	30.0	19.0	800	11,600

**Metric female swivel heavy series with o-ring:** Carbon steel, zinc plated.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
1C98X-8-04	6	-04	6.4	1/4	M16 x 1.5	59.0	27.0	19.0	800	11,600
1C98X-10-04	6	-04	6.4	1/4	M18 x 1.5	56.0	33.0	22.0	800	11,600



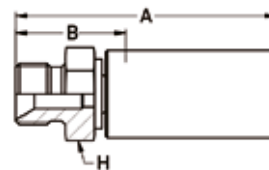
Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.



2340N 720 BAR JACKING & RESCUE

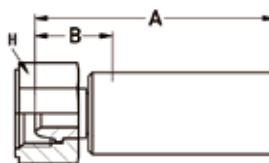
BSP Male: Carbon steel, zinc plated.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
1D98X-4-04	6	-04	6.4	1/4	G 1/4	67.0	35.0	19.0	800	11,600



BSP Female swivel: Carbon steel, zinc plated.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
1U08X-4-04	6	-04	6.4	1/4	G 1/4	58.0	27.0	19.0	800	11,600



For 700 bar hose accessories, please refer to the couplings and accessories section on page 215.
More fittings on page 134.



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.

2X80N

HYDRAULIC JACKING



Hydraulic applications

#	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
2X80N-06V10	10	-06	9.8	3/8	18.6	700	10,150	2800	40,600	70.0	0.54

APPLICATIONS

High pressure service for use with petroleum or synthetic hydraulic fluids, where increased flow is required, jacking and rescue tools.

FEATURES

- High kink resistance and high flexibility for hydraulic tools including jacking where increased flow is required or where pressure drop is a concern
- 4:1 Safety factor
- Matched high pressure fittings

CONSTRUCTION

Core tube: Polyamide.
Pressure reinforcement: Steel wire / aramid combination.
Cover: Polyurethane.
Colour: Custom branding and colour available.

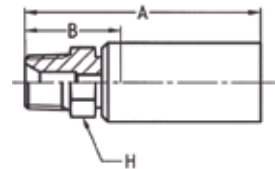
TEMPERATURE RANGE

-40°C up to +100°C.

FITTINGS

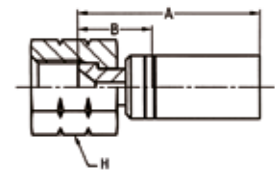
NPT Male: Mild steel, zinc plated.

#	DN	size	mm	inch		A	B	H	bar	psi
101LX-6-06	10	-06	9.5	3/8	3/8 - 18 NPT	71.0	31.0	22.0	700	10,150



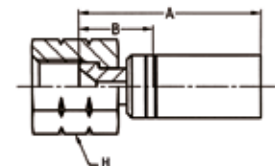
JIC Female swivel: Stainless steel (AISI 316), other materials on request.

#	DN	size	mm	inch		A	B	H	bar	psi
106LX-6-06C	10	-06	9.5	3/8	9/16 - 18UNF	59.0	18.0	22.0	690	10,000
106LX-8-06C	10	-06	9.5	3/8	3/4 - 16UNF	59.0	19.0	24.0	865	12,500



JIC Female swivel: Carbon steel, zinc plated.

#	DN	size	mm	inch		A	B	H	bar	psi
106LX-6-06	10	-06	9.5	3/8	3/4 - 16UNF	59.0	19.0	24.0	690	10,000



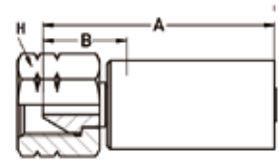
Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.



2X80N HYDRAULIC JACKING

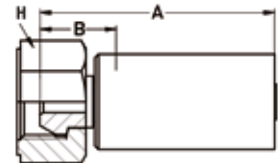
Type "M" female swivel: High strength carbon steel, zinc plated.

#						A	B		
	DN	size	mm	inch		mm	mm	mm	bar / psi
1AYLX-8-06	10	-06	9.5	3/8	3/4 - 16 UNF	40.0	26.0	27.0	1400 / 20,300



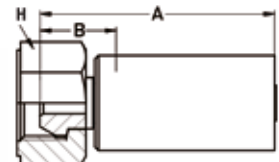
BSP Female swivel (60° cone): High strength carbon steel, zinc plated.

#						A	B		
	DN	size	mm	inch		mm	mm	mm	bar / psi
192LX-8-06	10	-06	9.5	3/8	G 1/2	66.0	22.0	30.0	1400 / 20,300



Metric female swivel Heavy Series with O-ring: High strength carbon steel, zinc plated.

#						A	B		
	DN	size	mm	inch		mm	mm	mm	bar / psi
1C9LX-14-06	10	-06	9.5	3/8	M22 x 1.5	76.0	30.0	30.0	1400 / 20,300



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.

2244N**HYDRAULIC & WATER JETTING****Water jetting applications**

#	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
2244N-06V10W	10	-06	9.7	3/8	18.0	860	12,470	2150	31,175	120.0	0.50
2244N-08V10W	12	-08	12.8	1/2	22.7	880	12,760	2200	31,900	150.0	0.80

Hydraulic applications

#	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
2244N-025V00	4	-025	3.9	5/32	9.6	750	10,875	3000	43,500	55.0	0.19
2244N-06V00	10	-06	9.8	3/8	18.0	535	7,755	2150	31,175	120.0	0.50
2244N-08V10	12	-08	12.9	1/2	22.7	550	7,975	2200	31,900	150.0	0.80
2244N-20V30	32	-20	31.8	1 1/4	44.0	275	3,990	1100	15,950	400.0	1.83

APPLICATIONS

Multi-purpose hose used in hydraulics and water jetting. Spiral and braided construction.

FEATURES

- Resistant to twisting applications due to braided construction
- 4:1 Safety factor supplied as standard
- 2.5:1 Safety factor version available on request for water jetting applications

CONSTRUCTION

Core tube: Polyamide.
Pressure reinforcement: Two spiral layers, one braided layer of high tensile steel wire.
Cover: Polyurethane, DN32: Polyamide.
Colour: Black.

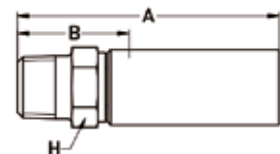
TEMPERATURE RANGE

-10°C up to +70°C for water jetting applications.
 -40°C up to +100°C for hydraulic applications.

FITTINGS

NPT Male: Carbon steel, zinc plated.

#	DN	size	mm	inch		A	B	H	bar	psi
1018X-2-025	4	-025	4.0	5/32	1/8 - 27 NPT	51.0	24.0	8.0	750	10,875
1018X-4-025	4	-025	4.0	5/32	1/4 - 18 NPT	59.0	32.0	13.0	750	10,875
1018X-6-06	10	-06	9.5	3/8	3/8 - 18 NPT	71.0	31.0	19.0	535	7,755
1018X-8-06	10	-06	9.5	3/8	1/2 - 14 NPT	76.0	36.0	22.0	535	7,755
1018X-8-08	12	-08	12.7	1/2	1/2 - 14 NPT	79.0	37.0	22.0	550	7,975



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.



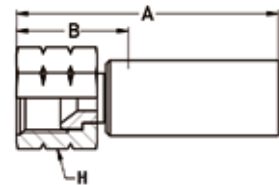
2244N

HYDRAULIC & WATER JETTING

THERMOPLASTIC - HIGH PRESSURE

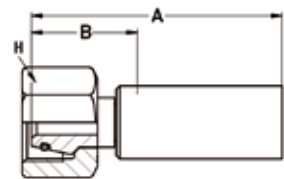
JIC Female swivel: Carbon steel, zinc plated.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
1068X-6-06	10	-06	9.5	3/8	9/16 - 18 UNF	59.0	18.0	22.0	690	10,000
1068X-8-06	10	-06	9.5	3/8	3/4 - 16 UNF	59.0	19.0	24.0	690	10,000
1068X-8-08	12	-08	12.7	1/2	3/4 - 16 UNF	64.0	21.0	27.0	690	10,000
1068X-10-08	12	-08	12.7	1/2	7/8 - 14 UNF	62.0	19.0	27.0	690	10,000



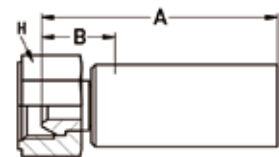
Metric female swivel heavy series with O-ring: Carbon steel, zinc plated.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
1C98X-8-025	4	-025	4.0	5/32	M16 x 1.5	54.0	27.0	19.0	750	10,875
1C98X-12-06	10	-06	9.5	3/8	M20 x 1.5	70.0	30.0	24.0	535	7,755
1C98X-14-06	10	-06	9.5	3/8	M22 x 1.5	71.0	30.0	27.0	535	7,755
1C98X-16-08	12	-08	12.7	1/2	M24 x 1.5	78.0	35.0	30.0	550	7,975



BSP Female swivel (60° cone): Carbon steel, zinc plated.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
1928X-4-025	4	-025	4.0	5/32	G 1/4	48.0	20.0	19.0	750	10,875
1928X-6-06	10	-06	9.5	3/8	G 3/8	59.0	19.0	22.0	535	7,755
1928X-8-06	10	-06	9.5	3/8	G 1/2	60.0	20.0	27.0	535	7,755
1928X-8-08	12	-08	12.7	1/2	G 1/2	63.0	20.0	27.0	550	7,975



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.

2380N**HYDRAULIC & WATER JETTING****Water jetting application**

#	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
2380N-04V00W	6	-04	6.3	1/4	13.3	1100	15,950	2800	40,600	70.0	0.28

Hydraulic application

#	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
2380N-06V10	10	-06	9.8	3/8	17.9	575	8,337	2300	33,350	120.0	0.44

APPLICATIONS

High pressure service for use within different industries. Replaces high pressure rigid tubing where vibration and routing constraints are a concern. Used also for hydraulic controls, test systems with synthetic and phosphate ester fluids.

FEATURES

- High kink resistance and high flexibility for use within industries including hydraulic jacking, water jetting and testing applications
- Low dimensional change under pressure
- Smooth bore for low pressure drop

CONSTRUCTION

Core tube: Polyamide.
Pressure reinforcement: Two spiral layers and two open spiral layers of high tensile steel wire.
Cover: Polyurethane.
Colour: Black.

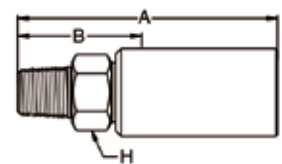
TEMPERATURE RANGE

-10°C up to +70°C.

FITTINGS - Water jetting applications.

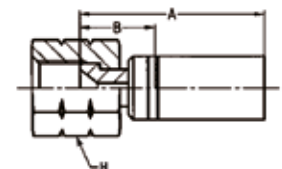
NPT Male: Stainless steel (AISI 316), other materials on request.

#						A	B			
	DN	size	mm	inch					bar	psi
1018X-4-04C	6	-04	6.4	1/4	1/4 NPT	60.0	28.0	16.0	1100	16,000



JIC Female swivel fitting: Stainless steel (AISI 316), other materials on request.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
1068X-4-04C	6	-04	6.4	1/4	7/16 - 20 UNF	57.0	25.0	16.0	1100	16,000
1068X-6-04C	6	-04	6.4	1/4	9/16 - 18 UNF	60.0	28.0	17.0	1100	16,000



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.



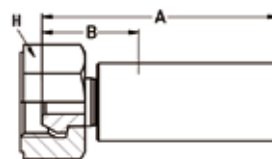
2380N

HYDRAULIC & WATER JETTING

THERMOPLASTIC - HIGH PRESSURE

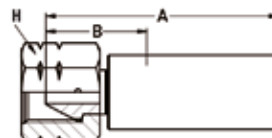
BSP female swivel (60° cone): Special materials.

#	DN	size	mm	inch		A	B	H		
192KY-4-04	6	-04	6.4	1/4	G 1/4	56.0	25.0	19.0	1100	15,950



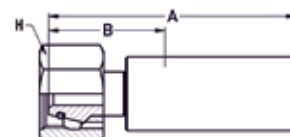
Type "M" female swivel: Special materials.

#	DN	size	mm	inch		A	B	H		
1AYKY-6-04	6	-04	6.4	1/4	9/16 - 18 UNF	61.0	30.0	22.0	1000	15,950



Metric female swivel heavy series: Carbon steel, zinc plated.

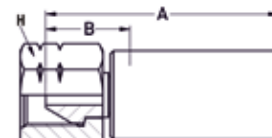
#	DN	size	mm	inch		A	B	H		
1C9KY-10-04	6	-04	6.4	1/4	M18 x 1.5	68.0	36.0	22.0	1100	15,950



FITTINGS - Hydraulic applications.

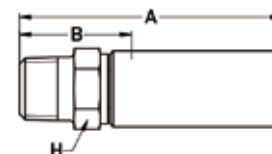
Type "M" female swivel: Carbon steel, zinc plated.

#	DN	size	mm	inch		A	B	H		
1AY8X-8-06	10	-06	9.5	3/8	3/4 - 16 UNF	70.0	26.0	27.0	575	8,340



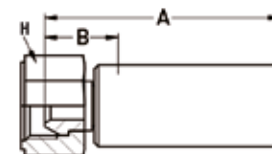
NPT Male: Carbon steel, zinc plated.

#	DN	size	mm	inch		A	B	H		
1018X-6-06	10	-06	9.5	3/8	3/8 - 18 NPT	71.0	31.0	19.0	535	7,755



BSP Female swivel (60° cone): Carbon steel, zinc plated.

#	DN	size	mm	inch		A	B	H		
1928X-6-06	10	-06	9.5	3/8	G 3/8	59.0	19.0	22.0	535	7,755
1928X-8-06	10	-06	9.5	3/8	G 1/2	60.0	20.0	27.0	535	7,755



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.

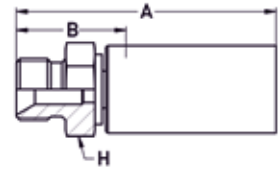
2380N

HYDRAULIC & WATER JETTING



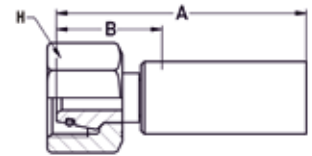
BSP Male: Carbon steel, zinc plated.

#						A	B			
	DN	size	mm	inch		mm	mm		bar	psi
13B8X-6-06	10	-06	9.5	3/0	G 3/8	70.0	30.0	22.0	575	8,340
13B8X-8-06	10	-06	9.5	3/0	G 1/2	75.0	35.0	22.0	575	8,340



Metric female swivel heavy series with O-ring: Carbon steel, zinc plated.

#						A	B			
	DN	size	mm	inch		mm	mm		bar	psi
1C98X-12-06	10	-06	9.5	3/0	M20 x 1.5	70.0	30.0	24.0	625	9,060
1C98X-14-06	10	-06	9.5	3/0	M22 x 1.5	70.0	30.0	27.0	575	8,340



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.



2240D TOUGH COVER TUBE CLEANING / LANCE HOSE

Water jetting applications

#	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
2240D-02V32-TC	3	-02	3.0	1/8	7.0	1100	15,950	2750	39,875	60.0	0.07
2240D-025V32-TC	4	-025	4.0	5/32	7.7	1200	17,400	3000	43,500	75.0	0.10
2240D-03V32-TC	5	-03	4.8	3/16	9.5	1000	14,500	2500	36,250	95.0	0.13
2240D-04V32-TC	6	-04	6.4	1/4	11.5	1100	15,950	2750	39,875	110.0	0.20
2240D-05V32-TC	8	-05	8.1	5/16	13.3	900	13,050	2250	32,625	120.0	0.25

APPLICATIONS

High pressure service for tube cleaning applications such as heat exchanging in the chemical and oil refining industries.

FEATURES

- Compact outside diameter for tight spaces
- Resistant against hydrolysis, ozone and UV radiation
- Tough Cover is up to 40% more resistant to abrasion over Standard Version

CONSTRUCTION

Core tube: Polyoxymethylene.
 Pressure reinforcement: Two spiral layers of high tensile steel wire.
 Cover: Polyamide.
 Colour: Blue.

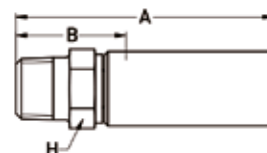
TEMPERATURE RANGE

-10°C up to +70°C.

FITTINGS

National pipe tapered (NPT) male: Carbon steel, zinc plated.

#	DN	size	mm	inch		A	B	H	bar	psi
101TX-1-02W	3	-02	3.0	1/8	1/16 NPT	46.0	25.0	10.0	1034	15,000
101TX-2-02W	3	-02	3.0	1/8	1/8 NPT	44.0	22.0	10.0	1034	15,000
101TX-1-025W	4	-025	4.0	5/32	1/16 NPT	47.0	25.0	10.0	1500	21,750
101TX-2-025W	4	-025	4.0	5/32	1/8 NPT	49.0	27.0	10.0	1500	21,750
101TX-4-025W	4	-025	4.0	5/32	1/4 NPT	56.0	34.0	13.0	1500	21,750
101TX-2-03W	5	-03	4.8	3/16	1/8 NPT	54.0	27.0	10.0	1400	20,300
101TX-4-03W	5	-03	4.8	3/16	1/4 NPT	61.0	34.0	13.0	1400	20,300
101TX-4-04W	6	-04	6.4	1/4	1/4 NPT	62.0	35.0	13.0	1400	20,300
101TX-4-05W	8	-05	7.9	5/16	1/4 NPT	69.0	35.0	13.0	1034	15,000
101TX-6-05W	8	-05	7.9	5/16	3/8 NPT	69.0	35.0	17.0	1034	15,000



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.

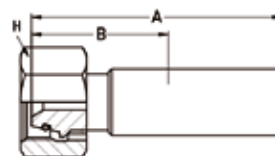
2240D TOUGH COVER

TUBE CLEANING / LANCE HOSE



Metric female swivel heavy series with O-ring: Carbon steel, zinc plated.

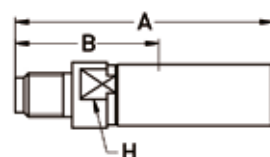
#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
1C9TX-16-02W	3	-02	3.0	1/8	M24 x 1.5	60.0	39.0	30.0	1100	15,950
1C9TX-16-025W	4	-025	4.0	5/32	M24 x 1.5	66.0	35.0	30.0	1500	21,750
1C9TX-16-03W	5	-03	4.8	3/16	M24 x 1.5	74.0	42.0	30.0	1500	21,750
1C9TX-16-04W	6	-04	6.4	1/4	M24 x 1.5	70.0	44.0	30.0	1100	15,950
1C9TX-16-05W	8	-05	7.9	5/16	M24 x 1.5	71.0	38.0	30.0	1000	14,500



Note: DN4-6 with support ferrule - DN3 and 8 without support ferrule.

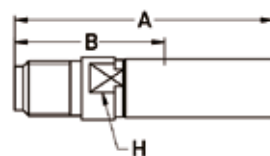
Metric male nozzle nipple: Carbon steel, zinc plated.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
1YZTX-1-02WS	3	-02	3.0	1/8	M5	49.0	28.0	6.0	1100	15,950
1YZTX-2-02W	3	-02	3.0	1/8	M7	49.0	28.0	7.0	1100	15,950
1YZTX-1-025W	4	-025	4.0	5/32	M5	51.0	29.0	8.0	1500	21,750
1YZTX-2-25W	4	-025	4.0	5/32	M7	51.0	29.0	8.0	1500	21,750
1YZTX-4-025W	4	-025	4.0	5/32	M8	53.0	30.0	8.0	1500	21,750
1YZTX-5-025W	4	-025	4.0	5/32	M10 x 1	52.0	30.0	8.0	1500	21,750
1YZTX-2-03W	5	-03	4.8	3/16	M7	55.0	28.0	10.0	1500	21,750
1YZTX-4-03W	5	-03	4.8	3/16	M8	53.0	28.0	10.0	1500	21,750
1YZTX-5-04W	6	-04	6.4	1/4	M10 x 1	59.0	33.0	13.0	1100	15,950
1YZTX-5-05W	8	-05	7.9	5/16	M10 x 1	68.0	34.0	13.0	1000	14,500



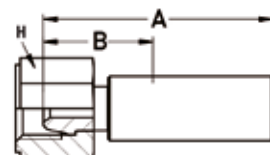
BSP Male nozzle nipple: Carbon steel, zinc plated.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
1YBTX-2-025W	4	-025	4.0	5/32	G 1/8	53.0	30.0	8.0	1500	21,750
1YBTX-4-025W	4	-025	4.0	5/32	G 1/4	54.0	30.0	10.0	1500	21,750
1YBTX-2-03W	5	-03	4.8	3/16	G 1/8	53.0	27.0	10.0	1500	21,750
1YBTX-4-03W	5	-03	4.8	3/16	G 1/4	58.0	31.0	10.0	1500	21,750
1YBTX-2-04W	6	-04	6.4	1/4	G 1/8	60.0	33.0	10.0	1100	15,950
1YBTX-4-04W	6	-04	6.4	1/4	G 1/4	62.0	36.0	10.0	1100	15,950
1YBTX-4-05W	8	-05	7.9	5/16	G 1/4	68.0	35.0	13.0	1000	14,500
1YBTX-6-05W	8	-05	7.9	5/16	G 3/8	71.0	37.0	17.0	1000	14,500



BSP Female swivel: Carbon steel, zinc plated.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
1U0TX-2-02W	3	-02	3.0	1/8	G 1/8	36.0	18.0	12.0	1100	15,950
1U0TX-4-02W	3	-02	3.0	1/8	G 1/4	44.0	22.0	17.0	1100	15,950
1U0TX-4-025W	4	-025	4.0	5/32	G 1/4	45.0	23.0	17.0	1500	21,750
1U0TX-4-03W	5	-03	4.7	3/16	G 1/4	49.0	23.0	17.0	1500	21,750
1U0TX-4-04W	6	-04	6.3	1/4	G 1/4	51.0	25.0	17.0	1100	15,950
1U0TX-6-05W	8	-05	7.9	5/16	G 3/8	60.0	26.0	27.0	1000	14,500



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.



2248D

TUBE CLEANING / LANCE HOSE

Water jetting applications

#	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
2248D-025V32-TC	4	-025	4.0	5/32	7.9	1500	21,750	3750	54,375	75.0	0.10
2248D-03V32-TC	5	-03	4.9	3/16	9.5	1400	20,300	3500	5,750	95.0	0.14
2248D-05V32-TC	8	-05	8.1	5/16	13.4	1000	14,500	2500	36,250	120.0	0.25

APPLICATIONS

High pressure service for tube cleaning applications such as heat exchanging in the chemical and oil refining industries. Designed to have the smallest outer diameter available in the market.

FEATURES

- Outperforms competing products by a size decrease of 20%
- Resistant against hydrolysis, ozone and UV radiation
- Tough cover is up to 40% more resistant to abrasion than standard cover

CONSTRUCTION

Core tube: Polyoxymethylene.
Pressure reinforcement: Two spiral layers of high tensile steel wire.
Cover: Polyamide.
Colour: Blue.

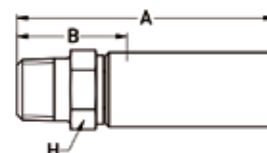
TEMPERATURE RANGE

-10°C up to +70°C.

FITTINGS

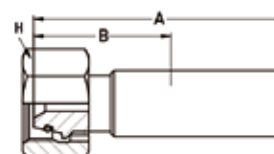
National pipe tapered (NPT) male: Carbon steel, zinc plated.

#	DN	size	mm	inch		A	B	H	bar	psi
101TX-1-025W	4	-025	4.0	5/32	1/16 NPT	47.0	25.0	10.0	1500	21,750
101TX-2-025W	4	-025	4.0	5/32	1/8 NPT	49.0	27.0	10.0	1500	21,750
101TX-4-025W	4	-025	4.0	5/32	1/4 NPT	56.0	34.0	13.0	1500	21,750
101TX-2-03W	5	-03	4.8	3/16	1/8 NPT	54.0	27.0	10.0	1400	20,300
101TX-4-03W	5	-03	4.8	3/16	1/4 NPT	61.0	34.0	13.0	1400	20,300
101TX-4-05W	8	-05	7.9	5/16	1/4 NPT	69.0	35.0	13.0	1034	15,000
101TX-6-05W	8	-05	7.9	5/16	3/8 NPT	69.0	35.0	17.0	1034	15,000



Metric female swivel heavy series with O-ring: Carbon steel, zinc plated.

#	DN	size	mm	inch		A	B	H	bar	psi
1C9TX-16-025W	4	-025	4.0	5/32	M24 x 1.5	66.0	35.0	30.0	1500	21,750
1C9TX-16-03W	5	-03	4.8	3/16	M24 x 1.5	74.0	42.0	30.0	1500	21,750
1C9TX-16-05W	8	-05	7.9	5/16	M24 x 1.5	71.0	38.0	30.0	1000	14,500



Note: DN4-6 with support ferrule - DN3 and 8 without support ferrule.

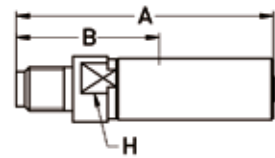


Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.



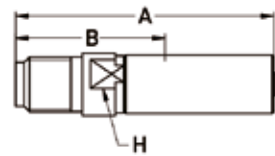
Metric male nozzle nipple: Carbon steel, zinc plated.

#						A	B			
	DN	size	mm	inch		mm	mm		bar	psi
1YZTX-1-02WS	3	-02	3.0	1/8	M5	49.0	28.0	6.0	1100	15,950
1YZTX-1-025W	4	-025	4.0	5/32	M5	51.0	29.0	8.0	1500	21,750
1YZTX-2-25W	4	-025	4.0	5/32	M7	51.0	29.0	8.0	1500	21,750
1YZTX-4-025W	4	-025	4.0	5/32	M8	53.0	30.0	8.0	1500	21,750
1YZTX-5-025W	4	-025	4.0	5/32	M10 x 1	52.0	30.0	8.0	1500	21,750
1YZTX-2-03W	5	-03	4.8	3/16	M7	55.0	28.0	100.0	1500	21,750
1YZTX-4-03W	5	-03	4.8	3/16	M8	53.0	28.0	10.0	1500	21,750
1YZTX-5-05W	8	-05	7.9	5/16	M10 x 1	68.0	34.0	13.0	1000	14,500



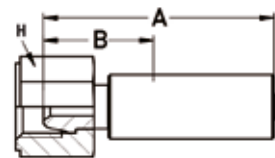
BSP Male nozzle nipple: Carbon steel, zinc plated.

#						A	B			
	DN	size	mm	inch		mm	mm		bar	psi
1YBTX-2-025W	4	-025	4.0	5/32	G 1/8	53.0	30.0	8.0	1500	21,750
1YBTX-4-025W	4	-025	4.0	5/32	G 1/4	54.0	30.0	10.0	1500	21,750
1YBTX-2-03W	5	-03	4.8	3/16	G 1/8	53.0	27.0	10.0	1500	21,750
1YBTX-4-03W	5	-03	4.8	3/16	G 1/4	58.0	31.0	10.0	1500	21,750
1YBTX-4-05W	8	-05	7.9	5/16	G 1/4	68.0	35.0	13.0	1000	14,500
1YBTX-6-05W	8	-05	7.9	5/16	G 3/8	71.0	37.0	17.0	1000	14,500



BSP Female swivel: Carbon steel, zinc plated.

#						A	B			
	DN	size	mm	inch		mm	mm		bar	psi
1U0TX-4-025W	4	-025	4.0	5/32	G 1/4	45.0	23.0	17.0	1500	21,750
1U0TX-4-03W	5	-03	4.7	3/16	G 1/4	49.0	23.0	17.0	1500	21,750
1U0TX-6-05W	8	-05	7.9	5/16	G 3/8	60.0	26.0	27.0	1000	14,500



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.



2388N

HYDRAULIC & WATER JETTING

THERMOPLASTIC - HIGH PRESSURE

Water jetting applications

#	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
2388N-04V12W	6	-04	6.3	1/4	13.3	1280	18,560	3200	46,400	80.0	0.30
2388N-08V12W	12	-08	13.0	1/2	23.0	1100	15,950	2750	39,875	100.0	0.80

Hydraulic applications

#	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
2388N-04V00	6	-04	6.3	1/4	13.3	800	11,600	3200	46,400	80.0	0.30

APPLICATIONS

High pressure service for the construction and shipbuilding industries and for general industrial cleaning applications. Also used with hydraulic lifting equipment and tools.

FEATURES

- Mainly used to remove different kinds of dirt accumulation or materials from various surfaces
- Light weight when compared to equivalent rubber products
- 8X Fitting series used for hydraulics. BS Series for water jetting
- Highly flexible and abrasion resistant

CONSTRUCTION

Core tube: Polyamide.
Pressure reinforcement: Two spiral layers and two open spiral layers of high tensile steel wire.
Cover: Polyurethane.
Colour: Blue for water jetting, black for hydraulic.

TEMPERATURE RANGE

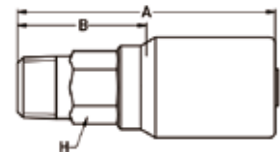
-10°C up to +70°C for water jetting applications.
 -40°C up to +100°C for hydraulic applications.

FITTINGS - Water jetting applications.

National pipe tapered (NPT) male: Carbon steel, zinc plated.

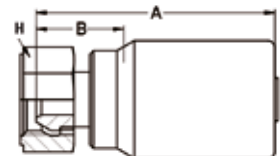
For stainless steel (AISI 316) add C to the Part Number. Other materials available on request.

#	DN	size	mm	inch		A	B	H	bar	psi
101BS-4-04	6	-04	6.3	1/4	1/4 NPT	60.0	30.0	14.0	1035	15,000
101BS-8-08	12	-08	12.7	1/2	1/2 NPT	93.0	40.0	22.0	1035	15,000
101BS-8-08C	12	-08	12.7	1/2	1/2 NPT	93.0	40.0	22.0	1035	15,000



BSP Female swivel (60° cone): Carbon steel, zinc plated.

#	DN	size	mm	inch		A	B	H	bar	psi
192BS-4-04	6	-04	6.4	1/4	G 1/4	54.0	20.0	19.0	1280	18,560
192BS-8-08	12	-08	12.7	1/2	G 1/2	81.0	28.0	27.0	1100	15,950

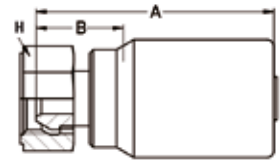


Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
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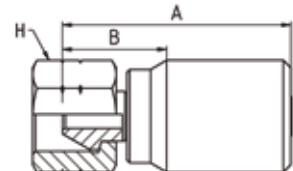
BSP Female swivel (60° cone): Stainless steel.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
192BS-8-08C	12	-08	12.7	1/2	G 1/2	81.0	28.0	27.0	1100	15,950



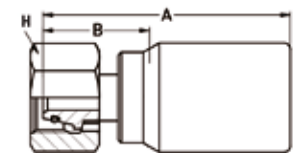
Type "M" female swivel: Carbon steel, zinc plated.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
1AYBS-11-08	12	-08	12.7	1/2	1 - 12 UNF	77.0	31.0	32.0	1100	15,950



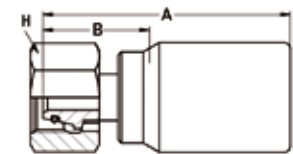
Metric female swivel heavy series with O-ring: Carbon steel, zinc plated.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
1C9BS-10-04	6	-04	6.4	1/4	M18 x 1.5	63.0	32.0	22.0	1280	18,560
1C9BS-16-04	6	-04	6.4	1/4	M24 x 1.5	65.0	34.0	30.0	1280	18,560
1C9BS-14-08	12	-08	12.7	1/2	M22 x 1.5	89.0	36.0	27.0	1100	15,950
1C9BS-16-08	12	-08	12.7	1/2	M24 x 1.5	89.0	36.0	30.0	1100	15,950



Metric female swivel heavy series with O-ring: Stainless steel.

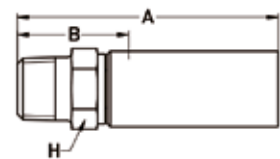
#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
1C9BS-14-08C	12	-08	12.7	1/2	M22 x 1.5	89.0	36.0	27.0	1100	15,950
1C9BS-16-08C	12	-08	12.7	1/2	M24 x 1.5	89.0	36.0	30.0	1100	15,950



FITTINGS - Hydraulic applications.

National pipe tapered (NPT) male: Carbon steel, zinc plated.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
1018X-4-04	6	-04	6.4	1/4	1/4 - 18 NPT	65.0	33.0	14.0	800	11,600
1018X-6-04	6	-04	6.4	1/4	3/8 - 18 NPT	67.0	35.0	19.0	800	11,600



Polyflex Lok components

#	Description
1TMBS-9-08-HPK	Fitting for DN12 hoses incl. caps (refer to page 84)



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.



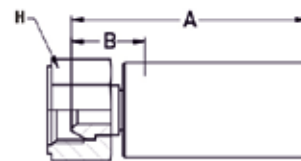
2388N

HYDRAULIC & WATER JETTING

THERMOPLASTIC - HIGH PRESSURE

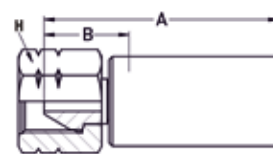
BSP Female swivel (60° cone): Carbon steel, zinc plated.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
1928X-4-04	6	-04	6.4	1/4	G 1/4	56.0	25.0	19.0	800	11,600



Type "M" female swivel: Carbon steel, zinc plated.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
1AY8X-6-04	6	-04	6.4	1/4	9/16 - 18 UNF	65.0	33.0	19.0	800	11,600



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.

2580N

WATER JETTING



Water jetting application

#	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
2580N-06V12	10	-06	9.8	3/8	21.6	1600	23,200	4000	58,000	95.0	0.94
2580N-08V12	12	-08	12.9	1/2	25.0	1400	20,300	3500	50,750	110.0	1.19
2580N-12V12	20	-12	19.8	3/4	32.6	1200	17,400	3000	43,500	170.0	1.76

APPLICATIONS

Ultra high pressure service for use in hydro-demolition and cleaning in construction and shipbuilding industries and for general industrial cleaning applications. Also available as a mining hose / fitting combination. Contact Abdex for further information.

FEATURES

- Mainly used to remove different kinds of dirt accumulation or materials from various surfaces
- Light weight when compared to equivalent rubber products
- Highly flexible

CONSTRUCTION

Core tube: Polyamide.
Pressure reinforcement: Two spiral layers and two open spiral layers of high tensile steel wire.
Cover: Polyurethane.
Colour: Dark blue.

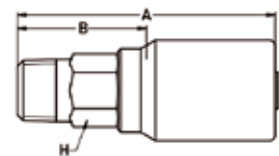
TEMPERATURE RANGE

-10°C up to +70°C.

FITTINGS

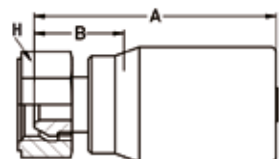
National pipe tapered (NPT) male: Carbon steel, zinc plated / stainless steel.

#	DN	size	mm	inch		A	B	H	bar	psi
101BL-6-06	10	-06	9.8	3/8	3/8 x 14 NPT	80.0	35.0	22.0	1600	23,200
101BL-8-08	12	-08	12.7	1/2	1/2 x 14 NPT	90.0	45.0	22.0	1400	20,300
101BL-12-12	20	-12	19.6	3/4	3/4 x 14 NPT	98.0	45.0	30.0	1200	17,400



BSP Female swivel (60° cone): Carbon steel, zinc plated.

#	DN	size	mm	inch		A	B	H	bar	psi
192BL-6-06	10	-06	9.8	3/8	G 3/8	68.0	24.0	22.0	1600	23,200
192BL-8-08	12	-08	12.7	1/2	G 1/2	71.0	26.0	27.0	1400	20,300
192BL-16-12	20	-12	19.6	3/4	G1	82.0	28.0	41.0	1200	17,400



Polyflex Lok components

#	Description
1TMBL-9-08-HPK	Fitting for DN12 hoses incl. caps (refer to page 84)



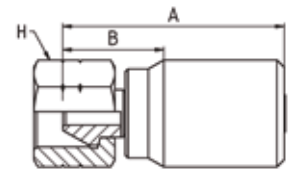
Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.



2580N WATER JETTING

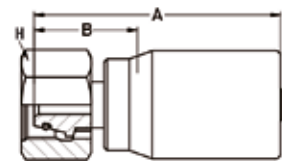
Type "M" female swivel: Carbon steel, zinc plated.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
1AYBL-11-06	10	-06	9.8	3/8	1 - 12 UNF	77.0	31.0	32.0	1600	23,200
1AYBL-11-08	12	-08	12.7	1/2	1 - 12 UNF	77.0	31.0	32.0	1400	20,300
1AYBL-11-08C	12	-08	12.7	1/2	1 - 12 UNF	77.0	31.0	32.0	1400	20,300



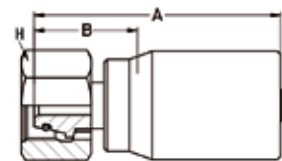
Metric female swivel heavy series with O-ring: Carbon steel, zinc plated.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
1C9BL-14-06	10	-06	9.8	3/8	M22 x 1.5	80.0	36.0	30.0	1600	23,200
1C9BL-16-06	10	-06	9.8	3/8	M24 x 1.5	84.0	36.0	30.0	1600	23,200
1C9BL-14-08	12	-08	12.7	1/2	M22 x 1.5	80.0	36.0	27.0	1400	20,300
1C9BL-16-08	12	-08	12.7	1/2	M24 x 1.5	80.0	36.0	30.0	1400	20,300
1C9BL-25-12	20	-12	19.6	3/4	M36 x 2.0	97.0	44.0	46.0	1200	17,400



Metric female swivel heavy series with O-ring: Stainless steel.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
1C9BL-14-08C	12	-08	12.7	1/2	M22 x 1.5	80.0	36.0	27.0	1400	20,300
1C9BL-16-08C	12	-08	12.7	1/2	M24 x 1.5	80.0	36.0	30.0	1400	20,300



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.

2440D / 2440N

HYDRAULIC & WATER JETTING



Hydraulic and water jetting applications

#	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
2440D-02V32	3	-02	3.0	1/8	7.9	2070	30,000	5180	75,000	100.0	0.12
2440D-025V32	4	-025	4.0	5/32	10.4	2200	31,900	5500	79,750	100.0	0.21
2440D-03V32	5	-03	4.8	3/16	11.5	1800	26,100	4500	65,250	130.0	0.28
2440D-04V32	6	-04	6.4	1/4	12.5	1640	23,780	4100	59,450	155.0	0.33
2440D-05V32	8	-05	8.1	5/16	15.1	1500	21,750	3750	54,375	175.0	0.44
2440N-06V30	10	-06	9.7	3/8	19.4	1400	20,300	3500	50,750	190.0	0.73
2440N-08V30	12	-08	12.8	1/2	22.5	1400	20,300	3500	50,750	200.0	0.95
2440N-12V30	20	-12	19.6	3/4	30.0	1000	14,500	2500	36,250	250.0	1.39
2440N-16V30	25	-16	25.0	1	37.0	900	13,050	2250	32,625	300.0	2.00

APPLICATIONS

Ultra high pressure service for the construction and shipbuilding industries and for general industrial cleaning applications. For use with petroleum or synthetic hydraulic fluids, gas and chemical fluids. Especially suitable for hydraulic bolt tensioning equipment, test rigs, as well as in offshore hydraulic and gas applications.

FEATURES

- Industry standard on ultra high pressure thermoplastic applications
- Light weight and abrasion resistant thermoplastic hose
- Used in hydraulic flying lead bundles

CONSTRUCTION

Core tube: DN 3-8: Polyoxymethylene; DN 10-25: Polyamide.
Pressure reinforcement: Four spiral layers of maximum tensile steel wire.
Cover: Polyamide.
Colour: DN 3-8: blue; DN 10-25: black.

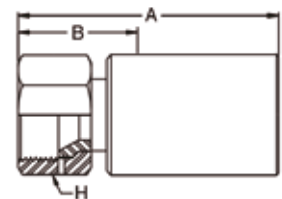
TEMPERATURE RANGE

-10°C up to 100°C.

FITTINGS

JIC Female swivel fitting: Stainless steel (AISI 316), other materials on request.

#	DN	size	mm	inch	mm	A	B	H	bar	psi
106LX-6-04C	6	-04	6.4	1/4	9/16 - 18 UNF	55.0	23.0	19.0	865	12,500
106LX-6-06C	10	-06	9.5	3/8	9/16 - 18 UNF	59.0	18.0	22.0	690	10,000
106LX-8-06C	10	-06	9.5	3/8	3/4 - 16 UNF	59.0	19.0	24.0	865	12,500
106LX-8-08C	12	-08	12.7	1/2	3/4 - 16 UNF	64.0	21.0	27.0	690	10,000
106LX-10-08C	12	-08	12.7	1/2	1 - 12 UNF	85.0	41.0	24.0	810	11,700
106LX-16-12C	20	-12	19.0	3/4	1 5/16 - 12 UNF	109.0	43.0	41.0	630	9,100
106LX-16-16C	25	-16	25.4	1	1 5/16 - 12 UNF	96.0	42.0	41.0	560	8,100



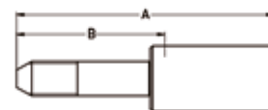
Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.



2440D / 2440N HYDRAULIC & WATER JETTING

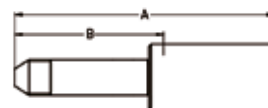
High pressure metric tube nipple (LH thread): High strength carbon steel, zinc plated.

#						A	B		
	DN	size	mm	inch		mm	mm	bar	psi
1YMLX-6-05	8	-05	7.9	5/16	M14 x 1.5-LH	110.0	66.0	1500	21,750
1YMLX-11-08	12	-08	12.7	1/2	M18 x 1.5-LH	120.0	65.0	1300	18,850



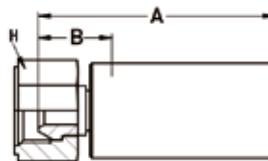
Medium pressure tube nipple: Special materials.

#						A	B		
	DN	size	mm	inch		mm	mm	bar	psi
1Y2LX-3-04C	6	-04	6.4	1/4	3/8 - 24 UNF LH	109.0	65.0	1379	20,000
1Y2LX-9-5C	8	-05	7.9	5/16	9/16 - 18 LH	97.0	54.0	1379	20,000
1Y2LX-12-5C	8	-05	7.9	5/16	3/4 - 16 LH	95.0	52.0	1379	20,000
1Y2LX-9-6C	10	-06	9.5	3/8	9/16 - 18 LH	97.0	52.0	1379	20,000
1Y2LX-9-8C	12	-08	12.7	1/2	9/16 - 18 LH	107.0	56.0	1379	20,000
1Y2LX-12-8C	12	-08	22.7	1/2	3/4 - 16 LH	105.0	53.0	1379	20,000
1Y2LX-16-12C	20	-12	19.0	3/4	1 - 4 UNS LH	137.0	70.0	1034	15,000



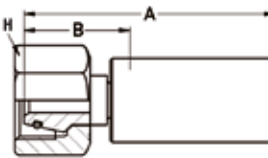
BSP Female swivel (60° cone): High strength carbon steel, zinc plated.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
192LX-4-03	5	-03	4.8	3/16	G 1/4	64.0	25.0	22.0	1800	26,100
192LX-6-05	8	-05	7.9	5/16	G 3/8	69.0	25.0	27.0	1500	21,750
192LX-8-06	10	-06	9.5	3/8	G 1/2	66.0	22.0	30.0	1400	20,300
192LX-8-08	12	-08	12.7	1/2	G 1/2	75.0	21.0	32.0	1300	18,850
192LX-16-12	20	-12	19.0	3/4	G 1	77.0	24.0	41.0	1000	14,500
192LX-20-16	25	-16	25.1	1	G 1 1/4	78.0	25.0	50.0	900	13,050



Metric female swivel heavy series with O-ring: High strength carbon steel, zinc plated.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
1C9LX-16-04	6	-04	6.4	1/4	M24 x 1.5	70.0	39.0	30.0	1640	23,780
1C9LX-14-06	10	-06	9.5	3/8	M22 x 1.5	75.0	30.0	30.0	1400	20,300
1C9LX-16-08	12	-08	12.7	1/2	M24 x 1.5	88.0	34.0	32.0	1300	18,850
1C9LX-25-12	20	-12	19.0	3/4	M36 x 2	92.0	39.0	46.0	1000	14,500
1C9LX-30-16	25	-16	25.4	1	M42 x 2	98.0	45.0	50.0	900	13,050



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.

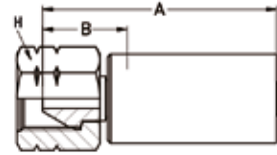
2440D / 2440N

HYDRAULIC & WATER JETTING



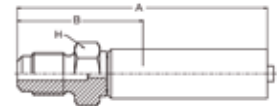
Type "M" female swivel: Stainless steel.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
6AYLX-6-2AC	4	-025	4.0	5/32	9/16 - 18 UNF	64.0	33.0	17.0	2200	31,900
1AYLX-6-03C	5	-03	4.8	3/16	9/16 - 18 UNF	67.0	26.0	22.0	1800	26,100
1AYLX-8-05C	8	-05	7.9	5/16	3/4 - 16 UNF	70.0	31.0	27.0	1500	21,750
1AYLX-8-06C	10	-06	9.5	3/8	3/4 - 16 UNF	70.0	25.0	27.0	1400	20,300
1AYLX-11-08C	12	-08	12.7	1/2	1 - 12 UNF	81.0	27.0	32.0	1300	18,850
1AYLX-16-12C	20	-12	19.0	3/4	1 5/16 - 12 UNF	82.0	29.0	41.0	1000	14,500
6AYLX-16-16C	25	-16	25.4	1	1 5/16 - 12 UNF	139.0	52.0	38.0	900	13,050



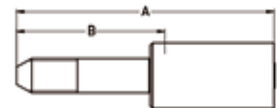
BSP Male (120° cone): High strength carbon steel, zinc plated.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
1YBLX-4-03	5	-03	4.8	3/16	G 1/4	78.5	39.5	17.0	1800	26,100



High pressure tube nipple: Special materials. C: Stainless Steel.

#						A	B		
	DN	size	mm	inch		mm	mm	bar	psi
1YALX-1-025	4	-025	4.0	5/32	1/4 - 28 UNF-LH	87.0	50.0	2200	31,900
1YALX-1-025C	4	-025	4.0	5/32	1/4 - 28 UNF-LH	87.0	50.0	2200	31,900
1YALX-3-025	4	-025	4.0	5/32	3/8 - 24 UNF-LH	89.0	50.0	2200	31,900
1YALX-1-03	5	-03	4.8	3/16	1/4 - 28 UNF-LH	92.0	53.0	1800	26,100
1YALX-1-03C	5	-03	4.8	3/16	1/4 - 28 UNF-LH	92.0	53.0	1800	26,100
1YALX-3-03	5	-03	4.8	3/16	3/8 - 24 UNF-LH	99.0	57.0	1800	26,100
1YALX-3-03C	5	-03	4.8	3/16	3/8 - 24 UNF-LH	99.0	57.0	1800	26,100
1YALX-6-03	5	-03	4.8	3/16	9/16 - 18 UNF-LH	108.0	78.0	1800	26,100
1YALX-6-03C	5	-03	4.8	3/16	9/16 - 18 UNF-LH	108.0	78.0	1800	26,100
1YALX-3-04	6	-04	6.4	1/4	3/8 - 24 UNF-LH	102.0	58.0	1640	23,780
1YALX-6-04	6	-04	6.4	1/4	9/16 - 18 UNF-LH	112.0	67.0	1640	23,780
1YALX-3-05C	8	-05	7.9	5/16	3/8 - 24 UNF-LH	103.0	59.0	1500	21,750
1YALX-6-05	8	-05	7.9	5/16	9/16 - 18 UNF-LH	110.0	66.0	1500	21,750
1YALX-6-05C	8	-05	7.9	5/16	9/16 - 18 UNF-LH	110.0	66.0	1500	21,750
1YALX-6-06	10	-06	9.5	3/8	9/16 - 18 UNF-LH	106.0	62.0	1400	20,300



For high pressure Parker Tema couplings. Refer to couplings and accessories section on page 215.



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.



2448D TOUGH COVER WATER JETTING

Hydraulic and water jetting applications

#											
	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
2448D-025V32-TC	4	-025	4.0	5/32	9.9	325	47,120	6500	94,240	100.0	0.21

APPLICATIONS

Ultra-high pressure service for tube cleaning applications such as heat exchanging in the chemical and oil refining industries, Marine cleaning and water jet cutting.

FEATURES

- Meets or exceeds the requirements of DIN EN 1829-2. This standard prescribes that the hose assemblies have to resist at least 20,000 impulse cycles amongst other challenges
- Tough Cover is up to 40% more resistant to abrasion over Standard Version
- Compact design
- Resistant against hydrolysis, ozone and UV radiation

CONSTRUCTION

Core tube: Polyoxymethylene.
Pressure reinforcement: Four spiral layers of maximum tensile steel wire.
Cover: Polyamide.
Colour: Blue.

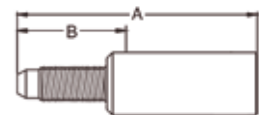
TEMPERATURE RANGE

-10°C up to +70°C.

FITTINGS

UNF Male nozzle nipple: Stainless steel.

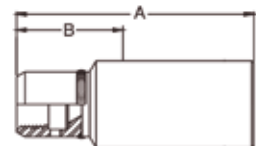
#						A	B		
	DN	size	mm	inch		mm	mm	bar	psi
6YHLYX-4-2AC-PL*	4	-025	4.0	5/32	1/4 - 28 UNF	58.0	26.0	2800	40,600
6YHLYX-4-2AC-PL-LH*	4	-025	4.0	5/32	1/4 - 28 UNF LH	58.0	26.0	2800	40,600



*ProLance fitting.

UNF Female for water jetting nozzle: Stainless steel.

#						A	B		
	DN	size	mm	inch		mm	mm	bar	psi
6HLYX-4-2AC-PL*	4	-025	4.0	5/32	1/4 - 28 UNF	51.0	19.0	2800	40,600
6HLYX-4-2AC-PL-LH*	4	-025	4.0	5/32	1/4 - 28 UNF LH	51.0	19.0	2800	40,600
6HLYX-6-2AC-PL-LH*	4	-025	4.0	5/32	3/8 - 24 UNF LH	49.0	21.0	2800	40,600



*ProLance fitting.



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.

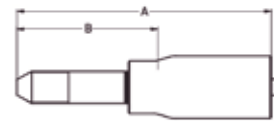
2448D TOUGH COVER

WATER JETTING



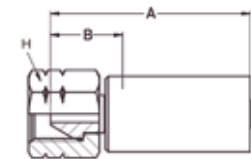
High pressure tube nipple UNF - LH Thread: Stainless steel.

#						A	B		
	DN	size	mm	inch		mm	mm	bar	psi
6Y4LX-4-2AC	4	-025	4.0	5/32	1/4 - 28 UNF LH	75.0	44.0	4000	58,000
6Y4LX-6-2AC	4	-025	4.0	5/32	3/8 - 24 UNF LH	86.0	55.0	4000	58,000



Type "M" female swivel: Stainless steel.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
6AYLX-6-2AC	4	-025	4.0	5/32	9/16 - 18 UNF	64.0	33.0	17.0	3010	43,645



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.



2640D / 2640N

HYDRAULIC & WATER JETTING

Hydraulic and water jetting applications

#	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
2640D-025V32	4	-025	3.9	5/32	12.0	2800	40,600	7000	101,505	140.0	0.29
2640D-03V32	5	-03	4.7	3/16	13.0	2500	36,250	6250	90,625	175.0	0.41
2640D-05V32	8	-05	8.0	5/16	16.9	2100	30,450	5250	76,125	225.0	0.68
2640N-08V32	12	-08	12.8	1/2	24.5	1800	26,100	4500	65,250	290.0	1.36
2640N-12V32	20	-12	19.6	3/4	33.0	1400	20,300	3500	50,750	350.0	2.10
2640N-16V32	25	-16	25.0	1	40.0	1200	17,400	3000	43,500	400.0	2.90

APPLICATIONS

Ultra high pressure service for the construction and shipbuilding industries and for general industrial cleaning applications. For use with petroleum or synthetic hydraulic fluids, gas and chemical fluids. Especially suitable for hydraulic bolt tensioning equipment, test rigs, as well as in offshore hydraulic and gas applications.

FEATURES

- Light weight and abrasion resistant thermoplastic hose
- Compact design

CONSTRUCTION

Core tube: DN 4-8: Polyoxymethylene; DN 12-25: Polyamide.
Pressure reinforcement: Six spiral layers of maximum tensile steel.
Cover: Polyamide.
Colour: Blue.

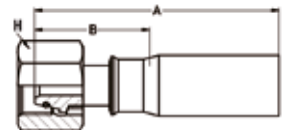
TEMPERATURE RANGE

-10°C up to +70°C.

FITTINGS

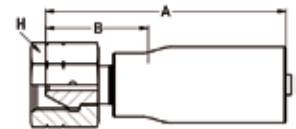
Metric female swivel heavy series with O-ring: Nipple: very high strength stainless steel.
 Shell and nut: high strength carbon steel, zinc plated.

#	DN	size	mm	inch		A	B	H	bar	psi
1C9JX-16-08W	12	-08	12.7	1/2	M24 x 1.5	96.0	39.0	32.0	1800	26,100
1C9JX-25-12W	20	-12	19.0	3/4	M36 x 2	108.0	49.0	46.0	1600	23,200
1C9JX-30-16W	25	-16	25.4	1	M42 x 2	121.0	55.0	55.0	1500	21,750



Type "M" female swivel: Nipple: very high strength stainless steel.
 Shell and nut: high strength carbon steel, zinc plated.

#	DN	size	mm	inch		A	B	H	bar	psi
1AY2X-6-025	4	-025	4.0	5/32	9/16 - 18 UNF	61.0	24.0	22.0	4000	58,000
1AY2X-6-03	5	-03	4.8	3/16	9/16 - 18 UNF	91.0	38.0	22.0	4000	58,000
1AY2X-8-05	8	-05	7.9	5/16	3/4 - 16 UNF	91.0	38.0	27.0	3200	46,400
1AY2X-10-05	8	-05	7.9	5/16	7/8 - 14 UNF	91.0	38.0	30.0	3200	46,400
1AY2X-13-05	8	-05	7.9	5/16	1 1/8 - 11 UNF	91.0	38.0	36.0	3200	46,400
1AYJX-11-08W	12	-08	12.7	1/2	1 - 12 UNF	86.0	29.0	32.0	1800	26,100
1AYJX-16-12W	20	-12	19.0	3/4	1 5/8 - 12 UNF	90.0	31.0	41.0	1600	23,200



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.

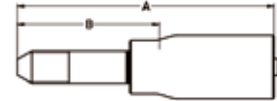
2640D / 2640N

HYDRAULIC & WATER JETTING



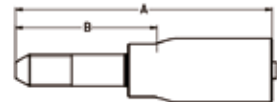
High pressure tube nipple UNF – LH thread: Nipple: very high strength stainless steel.
Shell: high strength carbon steel, zinc plated.

#	DN	size	mm	inch		A	B	bar	psi
1Y42X-4-025	4	-025	4.0	5/32	1/4 - 28 UNF-LH	87.0	50.0	4000	58,000
1Y42X-6-025	4	-025	4.0	5/32	3/8 - 24 UNF-LH	92.0	55.0	4000	58,000
1Y42X-4-03	5	-03	4.8	3/16	1/4 - 28 UNF-LH	116.0	63.0	4000	58,000
1Y42X-6-03	5	-03	4.8	3/16	3/8 - 24 UNF-LH	108.0	58.0	4000	58,000
1Y42X-9-03	5	-03	4.8	3/16	9/16 - 18 UNF-LH	116.0	63.0	4000	58,000
1Y42X-6-05	8	-05	7.9	5/16	3/8 - 24 UNF-LH	116.0	63.0	4000	58,000
1Y42X-9-05	8	-05	7.9	5/16	9/16 - 18 UNF-LH	116.0	63.0	4000	58,000



High pressure tube nipple metric – LH thread: Nipple: very high strength stainless steel.
Shell: high strength carbon steel, zinc plated.

#	DN	size	mm	inch		A	B	bar	psi
1YM2X-6-03	5	-03	4.8	3/16	M14 x 1.5-LH	116.0	63.0	4000	58,000
1YM2X-6-05	8	-05	7.9	5/16	M14 x 1.5-LH	116.0	63.0	4000	58,000



Polyflex Lok components

#	Description
1TM2X-8-05-HPK	Fitting for DN8 hoses incl. caps (refer to page 84)
1TM2X-8-03-HPK	Fitting for DN5 hoses incl. caps (refer to page 84)



For UHP accessories. Refer to page 92.



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.



2648N

WATER JETTING



Water jetting applications

#											
	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
2648N-08V32	12	-08	12.9	1/2	26.7	2100	30,450	5250	76,125	290.0	1.64
2648N-12V32	20	-12	19.8	3/4	33.7	1600	23,200	4000	58,000	350.0	2.28
2648N-16V32	25	-16	25.0	1	40.8	1500	21,750	3750	54,375	400.0	3.10

APPLICATIONS

Ultra high pressure service for the construction and shipbuilding industries and for general industrial cleaning applications. Mainly used for hydrodemolition and removal of accumulated dirt and materials from surfaces such as concrete, asphalt and tanks.

FEATURES

- For use where high flow rates are required at high pressures
- Available in long lengths to avoid joins and subsequent pressure drop
- Light weight when compared with alternative rubber product
- Available with extruded double cover

CONSTRUCTION

Core tube: Polyamide.
Pressure reinforcement: Six spiral layers of maximum tensile steel wire.
Cover: Polyamide.
Colour: Blue.

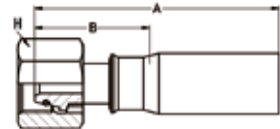
TEMPERATURE RANGE

-10°C up to +70°C.

FITTINGS

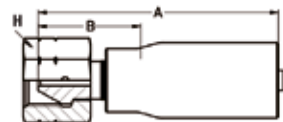
Metric female swivel heavy series with O-ring: Nipple: very high strength stainless steel.
 Shell and nut: high strength carbon steel, zinc plated.

#						A	B			
	DN	size	mm	inch					bar	psi
1C9CX-16-08W	12	-08	12.7	1/2	M24 x 1.5	112.0	48.0	32.0	2100	30,450
1C9JX-25-12W	20	-12	19.0	3/4	M36 x 2	108.0	50.0	46.0	1600	23,200
1C9CX-30-16W	25	-16	25.4	1	M42 x 2	121.0	55.0	55.0	1500	21,750



Type "M" female swivel: Nipple: very high strength stainless steel.
 Shell and nut: high strength carbon steel, zinc plated.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
1AYJX-11-08W	12	-08	12.7	1/2	1 - 12 UNF	102.0	41.0	32.0	2100	30,450
1AYJX-16-12W	20	-12	19.0	3/4	1 5/16 - 12 UNF	90.0	31.0	41.0	1600	23,200



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.



2648N WATER JETTING

High pressure tube nipple UNF - LH thread: Nipple: very high strength stainless steel.
Shell: high strength carbon steel, zinc plated.

#						A	B		
	DN	size	mm	inch		mm	mm	bar	psi
1Y4CX-9-08W	12	-08	12.7	1/2	9/16 - 18 UNF-LH	135.0	70.0	210	30,450



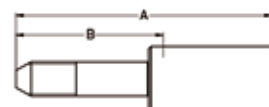
High pressure tube nipple metric - LH thread: Nipple: very high strength stainless steel.
Shell: high strength carbon steel, zinc plated.

#						A	B		
	DN	size	mm	inch		mm	mm	bar	psi
1YMJX-11-08W	12	-08	12.7	1/2	M18 x 1.5-LH	143.0	82.0	210	30,450
1YMJX-12-08W	12	-08	12.7	1/2	M 20 x 1.5-LH	143.0	82.0	210	30,450



Medium pressure tube nipple: Nipple: very high strength stainless steel.
Shell: high strength carbon steel, zinc plated.

#						A	B		
	DN	size	mm	inch		mm	mm	bar	psi
1Y2CX-16-16W	25	-16	25.4	1	1-14 UNF-LH	146.0	72.0	138	20,000



For UHP accessories. Refer to page 92.



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.

2740D

WATER JETTING



Water jetting applications

#											
	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
2740D-025V16	4	-025	4.0	5/32	12.0	3000	43,500	7800	113,100	120.0	0.40
2740D-03V34	5	-03	4.7	3/16	13.2	2800	40,600	7000	101,500	200.0	0.47
2740D-05V34	8	-05	7.7	5/16	17.2	2500	36,250	6250	90,625	200.0	0.83
2740D-08V30	12	-08	12.7	1/2	27.0	2000	29,000	5000	72,500	300.0	1.85

APPLICATIONS

For very-high pressure lances for the construction and shipbuilding industries or for common industrial cleaning applications. Mainly used for hydrodemolition and removal of accumulated dirt and materials from surfaces such as concrete, asphalt and tanks.

FEATURES

- Meets or exceeds the requirements of DIN EN 1829-2. This standard prescribes that hose assemblies have to resist at least 20,000 impulse cycles amongst other challenges
- Available with a wide range of protective sleeves and hose restraints
- Light weight and flexible
- Available with quick connect Polyflex Lok system

CONSTRUCTION

Core tube: Polyoxymethylene.
Pressure reinforcement: Six spiral layers of maximum tensile steel wire.
Cover: DN4: Polyurethane, DN5-12: Polyamide.
Colour: DN4: yellow, DN5-8: red, DN12: black.

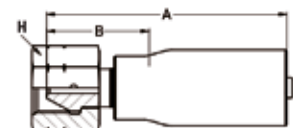
TEMPERATURE RANGE

-10°C up to +70°C.

FITTINGS

Type "M" female swivel: Nipple: very high strength stainless steel.
 Shell and nut: high strength carbon steel, zinc plated.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
1AY2X-6-025	4	-025	4.0	5/32	9/16 - 18 UNF	61.0	24.0	22.0	4000	58,000
1AY2X-6-03	5	-03	4.8	3/16	9/16 - 18 UNF	91.0	38.0	22.0	4000	58,000
1AY2X-8-05	8	-05	7.9	5/16	3/4 - 16 UNF	91.0	38.0	27.0	3200	46,400
1AY2X-10-05	8	-05	7.9	5/16	7/8 - 14 UNF	91.0	38.0	30.0	3200	46,400
1AY2X-13-05	8	-05	7.9	5/16	1 1/8 - 11 UNF	91.0	38.0	36.0	3200	46,400



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.



2740D WATER JETTING

High pressure tube nipple UNF – LH thread: Nipple: very high strength stainless steel.
Shell: high strength carbon steel, zinc plated.

#	DN	size	mm	inch		A	B	bar	psi
1Y42X-4-025	4	-025	4.0	5/32	1/4 - 28 UNF-LH	87.0	50.0	4000	58,000
1Y42X-4-03	5	-03	4.8	3/16	1/4 - 28 UNF-LH	116.0	63.0	4000	58,000
1Y42X-6-025	4	-025	4.0	5/32	3/8 - 24 UNF-LH	92.0	55.0	4000	58,000
1Y42X-6-03	5	-03	4.8	3/16	3/8 - 24 UNF-LH	108.0	58.0	4000	58,000
1Y42X-9-03	5	-03	4.8	3/16	9/16 - 18 UNF-LH	116.0	63.0	4000	58,000
1Y42X-6-05	8	-05	7.9	5/16	3/8 - 24 UNF-LH	116.0	63.0	4000	58,000
1Y42X-9-05	8	-05	7.9	5/16	9/16 - 18 UNF-LH	116.0	63.0	4000	58,000
6Y4HX-16-8C	12	-08	12.7	1/2	1 - 14 UNF-LH	138.0	80.0	3000	43,500



High pressure tube nipple metric – LH thread: Nipple: very high strength stainless steel.
Shell: high strength carbon steel, zinc plated.

#	DN	size	mm	inch		A	B	bar	psi
1YM2X-6-05	8	-05	7.9	5/16	M14 x 1.5-LH	116.0	63.0	4000	58,000



Polyflex Lok components

#	Description
1TM2X-8-05-HPK	Fitting for DN8 hoses incl. caps (refer to page 90)



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.

2741D EASTERN TIGER - DOUBLE COVER WATER JETTING



Water jetting applications

#	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
2741D-05V32/18	8	-05	7.7	5/16	21.2	2500	36,250	6250	90,625	200.0	0.95

APPLICATIONS

For very-high pressure lances with working pressures up to 300 MPa for the construction and shipbuilding industries or for common industrial cleaning applications. Mainly used for hydrodemolition and removal of accumulated dirt and materials from surfaces such as concrete, asphalt and tanks.

FEATURES

- The hose benefits from an integral bonded second cover which is a different colour so the second cover acts as an early warning without having to take the hose out of service
- Polyurethane cover increases abrasion resistance
- The hose is lighter than one with a spiral guard or helix reinforced cover
- Smoother cover means the cover is less likely to be damaged
- Same great flexibility as a single covered hose of the same pressure
- Smaller OD when compared to the same spiral guarded or helix reinforced sleeved hose with a single cover
- Fully branded along the entire length of the hose with operating pressures
- Safety colours for different operating pressures

CONSTRUCTION

Core tube: Polyoxymethylene.
Pressure reinforcement: Six spiral layers of maximum tensile steel wire.
Cover: 1st: Polyamide; 2nd: Polyurethane, abrasion resistant.
Colour: 1st: Blue; 2nd: Gold.

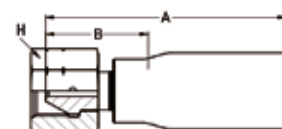
TEMPERATURE RANGE

-10°C up to +70°C.

FITTINGS

Type "M" female swivel: Nipple: very high strength stainless steel.
 Shell and nut: high strength carbon steel, zinc plated.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
1AY2X-8-05	8	-05	7.9	5/16	3/4 - 16 UNF	91.0	38.0	27.0	3200	46,400
1AY2X-10-05	8	-05	7.9	5/16	7/8 - 14 UNF	91.0	38.0	30.0	3200	46,400
1AY2X-13-05	8	-05	7.9	5/16	1 1/8 - 11 UNF	91.0	38.0	36.0	3200	46,400



High pressure tube nipple UNF – LH thread: Nipple: very high strength stainless steel.
 Shell: high strength carbon steel, zinc plated.

#						A	B		
	DN	size	mm	inch				bar	psi
1Y42X-6-05	8	-05	7.9	5/16	3/8 - 24 UNF-LH	116.0	63.0	4000	58,000
1Y42X-9-05	8	-05	7.9	5/16	9/16 - 18 UNF-LH	116.0	63.0	4000	58,000



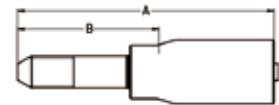
Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.



2741D EASTERN TIGER - DOUBLE COVER WATER JETTING

High pressure tube nipple metric – LH thread: Nipple: very high strength stainless steel.
Shell: high strength carbon steel, zinc plated.

#						A	B		
	DN	size	mm	inch		mm	mm	bar	psi
1YM2X-6-05	8	-05	7.9	5/16	M14 x 1.5-LH	116.0	63.0	4000	58,000



Polyflex Lok components

#	Description
1TM2X-8-05-HPK	Fitting for DN8 hoses incl. caps (refer to page 90)



For UHP accessories. Refer to page 92.



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.

2748D

WATER JETTING



Water jetting applications

#	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
2748D-05V34	8	-05	7.8	5/16	17.3	2800	40,600	7000	101,500	230.0	0.83

APPLICATIONS

For very-high pressure lances for the construction and shipbuilding industries or for common industrial cleaning applications. Mainly used for hydrodemolition and removal of accumulated dirt and materials from surfaces such as concrete, asphalt and tanks.

FEATURES

- Meets or exceeds the requirements of DIN EN 1829-2. This standard prescribes that hose assemblies have to resist at least 20,000 impulse cycles amongst other challenges
- Parker Polyflex hose is the first to be fully compliant
- UHP Compact design and light weight
- Available with quick connect Polyflex Lok system
- Wide range of protective sleeves and hose restraints available

CONSTRUCTION

Core tube: Polyoxymethylene.
Pressure reinforcement: Six spiral layers of maximum tensile steel wire.
Cover: Polyamide.
Colour: Red.

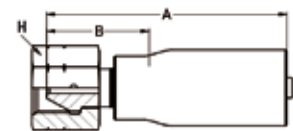
TEMPERATURE RANGE

-10°C up to +70°C.

FITTINGS

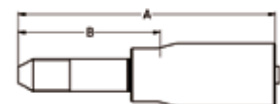
Type “M” female swivel: Nipple: very high strength stainless steel.
 Shell and nut: high strength carbon steel, zinc plated.

#	DN	size	mm	inch		A	B	H	bar	psi
1AY2X-8-05	8	-05	7.9	5/16	3/4 - 16 UNF	91.0	38.0	27.0	3200	46,400
1AY2X-10-05	8	-05	7.9	5/16	7/8 - 14 UNF	91.0	38.0	30.0	3200	46,400
1AY2X-13-05	8	-05	7.9	5/16	1 1/8 - 11 UNF	91.0	38.0	36.0	3200	46,400



High pressure tube nipple UNF – LH thread: Nipple: very high strength stainless steel.
 Shell: high strength carbon steel, zinc plated.

#	DN	size	mm	inch		A	B	bar	psi
1Y42X-6-05	8	-05	7.9	5/16	3/8 - 24 UNF-LH	116.0	63.0	4000	58,000
1Y42X-9-05	8	-05	7.9	5/16	9/16 - 18 UNF-LH	116.0	63.0	4000	58,000



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.



2748D WATER JETTING

High pressure tube nipple metric – LH thread: Nipple: very high strength stainless steel.
Shell: high strength carbon steel, zinc plated.

#						A	B		
	DN	size	mm	inch		mm	mm	bar	psi
1YM2X-6-05	8	-05	7.9	5/16	M14 x 1.5-LH	116.0	63.0	4000	58,000



Polyflex Lok components

#	Description
1TM2X-8-05-HPK	Fitting for DN8 hoses incl. caps (refer to page 90)



For UHP accessories. Refer to page 92.



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.

2748D COPPER HEAD - DOUBLE COVER WATER JETTING



Water jetting applications

#	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
2748D-05V32/15	8	-05	7.8	5/16	21.8	2800	40,600	7000	101,500	230.0	0.99

APPLICATIONS

For very-high pressure lances for the construction and shipbuilding industries or for common industrial cleaning applications. Mainly used for hydrodemolition and removal of accumulated dirt and materials from surfaces such as concrete, asphalt and tanks.

FEATURES

- The hose benefits from an integral bonded second cover which is a different colour so the second cover acts as an early warning without having to take the hose out of service
- Polyurethane cover increases abrasion resistance
- The hose is lighter than one with a spiral guard or helix reinforced cover
- Smoother cover means the cover is less likely to be damaged
- Same great flexibility as a single covered hose of the same pressure
- Smaller OD when compared to the same spiral guarded or helix reinforced sleeved hose with a single cover
- Fully branded along the entire length of the hose with operating pressures
- Safety colours for different operating pressures

CONSTRUCTION

Core tube: Polyoxymethylene.
Pressure reinforcement: Six spiral layers of maximum tensile steel wire.
Cover: 1st: Polyamide; 2nd: Polyurethane, abrasion resistant.
Colour: 1st: Blue; 2nd: Orange.

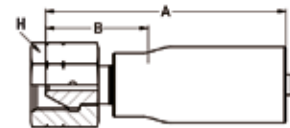
TEMPERATURE RANGE

-10°C up to +70°C.

FITTINGS

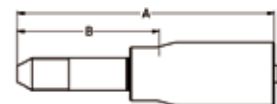
Type "M" female swivel: Nipple: very high strength stainless steel.
 Shell and nut: high strength carbon steel, zinc plated.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
1AY2X-8-05	8	-05	7.9	5/16	3/4 - 16 UNF	91.0	38.0	27.0	3200	46,400
1AY2X-10-05	8	-05	7.9	5/16	7/8 - 14 UNF	91.0	38.0	30.0	3200	46,400
1AY2X-13-05	8	-05	7.9	5/16	1 1/8 - 11 UNF	91.0	38.0	36.0	3200	46,400



High pressure tube nipple UNF – LH thread: Nipple: very high strength stainless steel.
 Shell: high strength carbon steel, zinc plated.

#						A	B		
	DN	size	mm	inch				bar	psi
1Y42X-6-05	8	-05	7.9	5/16	3/8 - 24 UNF-LH	116.0	63.0	4000	58,000
1Y42X-9-05	8	-05	7.9	5/16	9/16 - 18 UNF-LH	116.0	63.0	4000	58,000



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.



2748D COPPER HEAD - DOUBLE COVER WATER JETTING

High pressure tube nipple metric – LH thread: Nipple: very high strength stainless steel.
Shell: high strength carbon steel, zinc plated.

#						A	B		
	DN	size	mm	inch		mm	mm	bar	psi
1YM2X-6-05	8	-05	7.9	5/16	M14 x 1.5-LH	116.0	63.0	4000	58,000



Polyflex Lok components

#	Description
1TM2X-8-05-HPK	Fitting for DN8 hoses incl. caps (refer to page 90)



For UHP accessories. Refer to page 92.



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.

2749D

WATER JETTING



Water jetting applications

#											
	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
2749D-03V34	5	-03	4.8	3/16	13.3	3010	43,645	7000	101,500	200.0	0.47
2749D-05V34	8	-05	7.8	5/16	17.3	3010	43,645	7000	101,500	230.0	0.83

APPLICATIONS

For very-high pressure lances for the construction and shipbuilding industries or for common industrial cleaning applications. Mainly used for hydrodemolition and removal of accumulated dirt and materials from surfaces such as concrete, asphalt and tanks.

FEATURES

- Meets or exceeds the requirements of DIN EN 1829-2. This standard prescribes that hose assemblies have to resist at least 20,000 impulse cycles amongst other challenges
- Available with quick connect Polyflex Lok System
- Compact lightweight hose
- Excellent flexibility

CONSTRUCTION

Core tube: Polyoxymethylene.
Pressure reinforcement: Six spiral layers of maximum tensile steel wire.
Cover: Polyurethane.
Colour: Red.

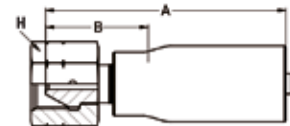
TEMPERATURE RANGE

-10°C up to +70°C.

FITTINGS

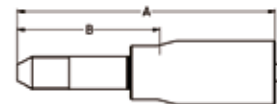
Type "M" female swivel: Nipple: very high strength stainless steel.
 Shell and nut: high strength carbon steel, zinc plated.

#						A	B			
	DN	size	mm	inch					mm	mm
1AY2X-6-03	5	-03	4.8	3/16	9/16 - 18 UNF	91.0	38.0	22.0	4000	58,000
1AY2X-8-05	8	-05	7.9	5/16	3/4 - 16 UNF	91.0	38.0	27.0	3200	46,400
1AY2X-10-05	8	-05	7.9	5/16	7/8 - 14 UNF	91.0	38.0	30.0	3200	46,400
1AY2X-13-05	8	-05	7.9	5/16	1 1/8 - 11 UNF	91.0	38.0	36.0	3200	46,400



High pressure tube nipple UNF – LH thread: Nipple: very high strength stainless steel.
 Shell: high strength carbon steel, zinc plated.

#						A	B		
	DN	size	mm	inch		mm	mm	bar	psi
1Y42X-4-03	5	-03	4.8	3/16	1/4 - 28 UNF-LH	116.0	63.0	4000	58,000
1Y42X-6-03	5	-03	4.8	3/16	3/8 - 24 UNF-LH	108.0	58.0	4000	58,000
1Y42X-9-03	5	-03	4.8	3/16	9/16 - 18 UNF-LH	116.0	63.0	4000	58,000
1Y42X-6-05	8	-05	7.9	5/16	3/8 - 24 UNF-LH	116.0	63.0	4000	58,000
1Y42X-9-05	8	-05	7.9	5/16	9/16 - 18 UNF-LH	116.0	63.0	4000	58,000



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.



2749D WATER JETTING

High pressure tube nipple metric – LH thread: Nipple: very high strength stainless steel.
Shell: high strength carbon steel, zinc plated.

#	DN	size	mm	inch		A	B	bar	psi
1YM2X-6-03	5	-03	4.8	3/16	M14 x 1.5-LH	116.0	63.0	4000	58,000
1YM2X-6-05	8	-05	7.9	5/16	M14 x 1.5-LH	116.0	63.0	4000	58,000



Polyflex Lok components

#	Description
1TM2X-8-03-HPK	Fitting for DN5 hoses incl. caps (refer to page 90)
1TM2X-8-05-HPK	Fitting for DN8 hoses incl. caps (refer to page 90)



For UHP accessories. Refer to page 92.



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.

2749D RED BELLY - DOUBLE COVER WATER JETTING



Water jetting applications

#	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
2749D-05V32/14	8	-05	7.8	5/16	21.8	3010	43,645	7000	101,500	230.0	0.99

APPLICATIONS

Double cover product for extra protection to extend working life. For very-high pressure lances for the construction and shipbuilding industries or for common industrial cleaning applications. Mainly used for hydrodemolition and removal of accumulated dirt and materials for surfaces such as concrete, asphalt and tanks.

FEATURES

- The hose benefits from an integral bonded second cover which is a different colour so the second cover acts as an early warning without having to take the hose out of service
- Polyurethane cover increases abrasion resistance
- The hose is lighter than one with a spiral guard or helix reinforced cover
- Smoother cover means the cover is less likely to be damaged
- Same great flexibility as a single covered hose of the same pressure
- Smaller OD when compared to the same spiral guarded or helix reinforced sleeved hose with a single cover
- Fully branded along the entire length of the hose with operating pressures
- Safety colours for different operating pressures

CONSTRUCTION

Core tube: Polyoxymethylene.
Pressure reinforcement: Six spiral layers of maximum tensile steel wire.
Cover: 1st: Polyamide; 2nd: Polyurethane, abrasion resistant.
Colour: 1st: Blue. 2nd: Red.

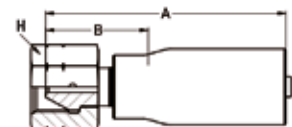
TEMPERATURE RANGE

-10°C up to +70°C.

FITTINGS

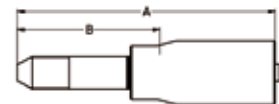
Type "M" female swivel: Nipple: very high strength stainless steel.
 Shell and nut: high strength carbon steel, zinc plated.

#	DN	size	mm	inch		A	B	H	bar	psi
1AY2X-8-05	8	-05	7.9	5/16	3/4 - 16 UNF	91.0	38.0	27.0	3200	46,400
1AY2X-10-05	8	-05	7.9	5/16	7/8 - 14 UNF	91.0	38.0	30.0	3200	46,400
1AY2X-13-05	8	-05	7.9	5/16	1 1/8 - 11 UNF	91.0	38.0	36.0	3200	46,400



High pressure tube nipple UNF – LH thread: Nipple: very high strength stainless steel.
 Shell: high strength carbon steel, zinc plated.

#	DN	size	mm	inch		A	B	bar	psi
1Y42X-9-05	8	-05	7.9	5/16	9/16 - 18 UNF-LH	116.0	63.0	4000	58,000



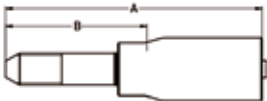
Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.



2749D RED BELLY - DOUBLE COVER WATER JETTING

High pressure tube nipple metric – LH thread: Nipple: very high strength stainless steel.
Shell: high strength carbon steel, zinc plated.

#						A	B		
	DN	size	mm	inch		mm	mm	bar	psi
1YM2X-6-05	8	-05	7.9	5/16	M14 x 1.5-LH	116.0	63.0	4000	58,000



Polyflex Lok components

#	Description
1TM2X-8-05-HPK	Fitting for DN8 hoses incl. caps (refer to page 90)



For UHP accessories. Refer to page 92.



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.

2840D

WATER JETTING



Water jetting applications

#	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
2840D-03V34	5	-03	4.5	3/16	15.0	4000	58,000	8000	116,000	200.0	0.66
2840D-05V36	8	-05	7.7	5/16	19.5	3000	43,500	7000	101,500	250.0	1.10
2840D-08V30	12	-08	12.7	1/2	29.8	2500	36,250	6250	90,625	350.0	2.50

APPLICATIONS

For very-high pressure lances for the construction and shipbuilding industries or for common industrial cleaning applications. Mainly used for hydrodemolition and removal of accumulated dirt and materials from surfaces such as concrete, asphalt and tanks.

FEATURES

- Meets or exceeds the requirements of DIN EN 1829-2. This standard prescribes that hose assemblies have to resist at least 20,000 impulses cycles amongst other challenges
- Available with quick connect Polyflex Lok System

CONSTRUCTION

Core tube: Polyoxymethylene.
Pressure reinforcement: Eight spiral layers of maximum tensile steel wire.
Cover: Polyamide.
Colour: DN5: red, DN8: red, DN12: black.

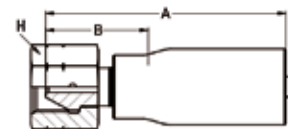
TEMPERATURE RANGE

-10°C up to +70°C.

FITTINGS

Type "M" female swivel: Nipple: very high strength stainless steel.
 Shell and nut: high strength carbon steel, zinc plated.

#	DN	size	mm	inch		A	B	H	bar	psi
1AY2X-6-03	5	-03	4.8	3/16	9/16 - 18 UNF	91.0	38.0	22.0	4000	58,000
1AY2X-8-05	8	-05	7.9	5/16	3/4 - 16 UNF	91.0	38.0	27.0	3200	46,400
1AY2X-10-05	8	-05	7.9	5/16	7/8 - 14 UNF	91.0	38.0	30.0	3200	46,400
1AY2X-13-05	8	-05	7.9	5/16	1 1/8 - 11 UNF	91.0	38.0	36.0	3200	46,400



High pressure tube nipple UNF – LH thread: Nipple: very high strength stainless steel.
 Shell: high strength carbon steel, zinc plated.

#	DN	size	mm	inch		A	B	bar	psi
1Y42X-4-03	5	-03	4.8	3/16	1/4 - 28 UNF-LH	116.0	63.0	4000	58,000
1Y42X-6-03	5	-03	4.8	3/16	3/8 - 24 UNF-LH	108.0	58.0	4000	58,000
1Y42X-9-03	5	-03	4.8	3/16	9/16 - 18 UNF-LH	116.0	63.0	4000	58,000
1Y42X-6-05	8	-05	7.9	5/16	3/8 - 24 UNF-LH	116.0	63.0	4000	58,000
1Y42X-9-05	8	-05	7.9	5/16	9/16 - 18 UNF-LH	116.0	63.0	4000	58,000
6Y4WX-16-8C	12	-08	12.7	1/2	1 - 14 UNF-LH	147.0	77.0	3000	43,500



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.



2840D WATER JETTING

High pressure tube nipple metric – LH thread: Nipple: very high strength stainless steel.
Shell: high strength carbon steel, zinc plated.

#						A	B		
	DN	size	mm	inch				bar	psi
1YM2X-6-03	5	-03	4.8	3/16	M14 x 1.5-LH	116.0	63.0	4000	58,000
1YM2X-6-05	8	-05	7.9	5/16	M14 x 1.5-LH	116.0	63.0	4000	58,000
6YMWX-11-8C	12	-08	12.8	1/2	M18 x 1.5-LH	189.0	125.0	2500	36,250
6YMWX-12-8C	12	-08	12.8	1/2	M20 x 1.5-LH	190.0	125.0	3000	43,500



Polyflex Lok components

#	Description
1TM2X-8-03-HPK	Fitting for DN5 hoses incl. caps (refer to page 90)
1TM2X-8-05-HPK	Fitting for DN8 hoses incl. caps (refer to page 90)



For UHP accessories. Refer to page 92.



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.

2841D – DOUBLE COVER WATER JETTING



Water jetting applications

#											
	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
2841D-05V36/17	8	-05	7.7	5/16	23.5	3000	43.500	7000	101.500	250.0	1.38

APPLICATIONS

Ultra high pressure service for water jet cutting equipment with water only or with abrasive additives.
Replaces steel pipe where flexibility is important.

FEATURES

- Double cover product for extra protection to extend working life
- Meets or exceeds the requirements of DIN EN 1829-2. This standard prescribes that hose assemblies have to resist at least 20,000 impulses cycles among other challenges
- Lighter and more flexible than hose with extra cover or spiral guard fitted
- Available with quick connect Polyflex Lok System

CONSTRUCTION

Core tube: Polyoxymethylene.
Pressure reinforcement: Eight spiral layers of maximum tensile steel wire.
Cover: 1st: Polyamide; 2nd: Polyurethane, abrasion resistant.
Colour: 1st: Yellow; 2nd: Grey.

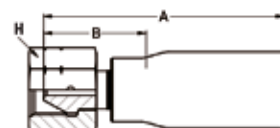
TEMPERATURE RANGE

-10°C up to +70°C.

FITTINGS

Type “M” female swivel: Nipple: very high strength stainless steel.
 Shell and nut: high strength carbon steel, zinc plated.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
1AY2X-8-05	8	-05	7.9	5/16	3/4 - 16 UNF	91.0	38.0	27.0	3200	46,400
1AY2X-10-05	8	-05	7.9	5/16	7/8 - 14 UNF	91.0	38.0	30.0	3200	46,400
1AY2X-13-05	8	-05	7.9	5/16	1 1/8 - 11 UNF	91.0	38.0	36.0	3200	46,400



High pressure tube nipple UNF – LH thread: Nipple: very high strength stainless steel.
 Shell: high strength carbon steel, zinc plated.

#						A	B		
	DN	size	mm	inch				bar	psi
1Y42X-6-05	8	-05	7.9	5/16	3/8 - 24 UNF-LH	116.0	63.0	4000	58,000
1Y42X-9-05	8	-05	7.9	5/16	9/16 - 18 UNF-LH	116.0	63.0	4000	58,000



High pressure tube nipple metric – LH thread: Nipple: very high strength stainless steel.
 Shell: high strength carbon steel, zinc plated.

#						A	B		
	DN	size	mm	inch				bar	psi
1YM2X-6-05	8	-05	7.9	5/16	M14 x 1.5-LH	116.0	63.0	4000	58,000



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.



2848D

WATER JETTING



Water jetting applications

#											
	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
2848D-05V34	8	-05	7.8	5/16	19.6	3200	46,400	8000	116,000	280.0	1.10
2848D-08V30	12	-08	13.0	1/2	29.9	3000	43,500	6250	90,625	350	2.5

APPLICATIONS

For very-high pressure lances for the construction and shipbuilding industries or for common industrial cleaning applications. Mainly used for hydrodemolition and removal of accumulated dirt and materials from surfaces such as concrete, asphalt and tanks.

FEATURES

- Meets or exceeds the requirements of DIN EN 1829-2. This standard prescribes that hose assemblies have to resist at least 20,000 cycles of 0 pressure to working pressure impulses among other challenges

CONSTRUCTION

Core tube: Polyoxymethylene.
Pressure reinforcement: Eight spiral layers of maximum tensile steel wire.
Cover: Polyamide.
Colour: Red.

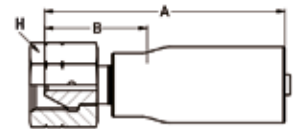
TEMPERATURE RANGE

-10°C up to +70°C.

FITTINGS

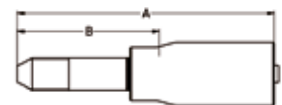
Type "M" female swivel: Nipple: very high strength stainless steel.
 Shell and nut: high strength carbon steel, zinc plated.

#						A	B			
	DN	size	mm	inch					bar	psi
1AY2X-8-05	8	-05	7.9	5/16	3/4 - 16 UNF	91.0	38.0	27.0	3200	46,400
1AY2X-10-05	8	-05	7.9	5/16	7/8 - 14 UNF	91.0	38.0	30.0	3200	46,400
1AY2X-13-05	8	-05	7.9	5/16	1 1/8 - 11 UNF	91.0	38.0	36.0	3200	46,400



High pressure tube nipple UNF – LH thread: Nipple: very high strength stainless steel.
 Shell: high strength carbon steel, zinc plated.

#						A	B		
	DN	size	mm	inch		mm	mm	bar	psi
1Y42X-6-05	8	-05	7.9	5/16	3/8 - 24 UNF-LH	116.0	63.0	4000	58,000
1Y42X-9-05	8	-05	7.9	5/16	9/16 - 18 UNF-LH	116.0	63.0	4000	58,000
6Y4WX-16-8C	12	-08	12.7	1/2	1 - 14 UNF-LH	138.0	80.0	3000	43,500



High pressure tube nipple metric – LH thread: Nipple: very high strength stainless steel.
 Shell: high strength carbon steel, zinc plated.

#						A	B		
	DN	size	mm	inch				bar	psi
1YM2X-6-05	8	-05	7.9	5/16	M14 x 1.5-LH	116.0	63.0	4000	58,000



For UHP accessories. Refer to page 92.



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.



2849D WATER JETTING

Water jetting / cutting applications

#	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
2849D-05V34	8	-05	7.8	5/16	19.6	3800	55,000	8000	116,000	280.0	1.10

APPLICATIONS

Ultra high pressure service for water jet cutting equipment with water only or with abrasive additives. Replaces steel pipe where flexibility is important. Also used in compression forming (hydroforming).

FEATURES

- Extreme UHP hose
- Flexible alternative to steel tube
- Multiple connections available

CONSTRUCTION

Core tube: Polyoxymethylene.
Pressure reinforcement: Eight spiral layers of maximum tensile steel wire.
Cover: Polyamide.
Colour: Red.

TEMPERATURE RANGE

-10°C up to +70°C.

FITTINGS

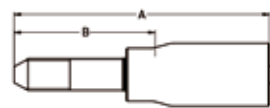
High pressure tube nipple UNF – LH thread: Nipple: very high strength stainless steel.
 Shell: high strength carbon steel, zinc plated.

#						A	B		
	DN	size	mm	inch				bar	psi
6Y4WX-9-5C-55	8	-05	7.9	5/16	9/16 - 18 UNF-LH	130.0	63.0	4000	58,000



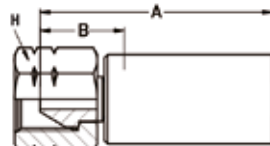
High pressure tube nipple metric – LH thread: Nipple: very high strength stainless steel.
 Shell: high strength carbon steel, zinc plated.

#						A	B		
	DN	size	mm	inch				bar	psi
6YMWX-6-5C-55	8	-05	7.9	5/16	M14 x 1.5-LH	130.0	63.0	4000	58,000



Type “M” female swivel: Nipple: very high strength stainless steel.
 Shell and nut: high strength carbon steel, zinc plated.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
6AYWX-10-5C-55	8	-05	7.9	5/16	7/8 - 14	113.0	45.0	32.0	3800	55.000



For UHP accessories. Refer to page 92.



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.

POLYFLEX-LOK

PARKER POLYFLEX HOSE CONNECTOR

Innovative design

Polyflex-Lok has been developed by Parker Polyflex to meet the requirements of today's water jetting applications. It uses the latest technology to provide a "state of the art" hose safety system. The hose connector as well as the pump / gun connector are now equipped with an improved design, based on the reliable quality of the former generation of Polyflex-Lok. The Polyflex-Lok hose assemblies are now also available without protective cover, and hose types with an additional outer cover for extra abrasion resistance and security are also available.

What is it?

Efficient and hassle free assembly – Quick connect and release hose connection system which also provides hose burst protection, while ranging in size from DN 5 (3/16") up to DN 12 (1/2"). One major benefit of the system is that it will only operate when full protection of the user is guaranteed. In addition, the Polyflex-Lok system is compliant with requirements determined in DIN EN 1829-2.

Product features

- Wide range of hose types available from 1,000 up to 3,200 bar working pressure
- Hose sizes available from DN 5 up to DN 12
- Certified according to DIN EN 1829-2
- Easy, fast, comfortable and safe system
- Only 2 working parts needed
- Integrated safety system
- No spanners required
- Incorrect assembly and use impossible
- Safety factor 2.5 times (burst pressure)
- Mechanical safety factor 4 times (hose connection breaking load)
- Same parts can be used to connect different hose series (e.g. DN 3 and DN 5)
- Swivel function when system is not under pressure (rotary joints)

Major benefits

- Operator protection guaranteed – priceless
- Hose twisting eliminated – longer hose life
- Faster assembly / disassembly of hoses – more valuable working time
- Less wear on components – fewer part replacements necessary
- Less operator fatigue due to easy handling and compact design – increases efficiency
- In one word: **SAFETY!**



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.

POLYFLEX-LOK

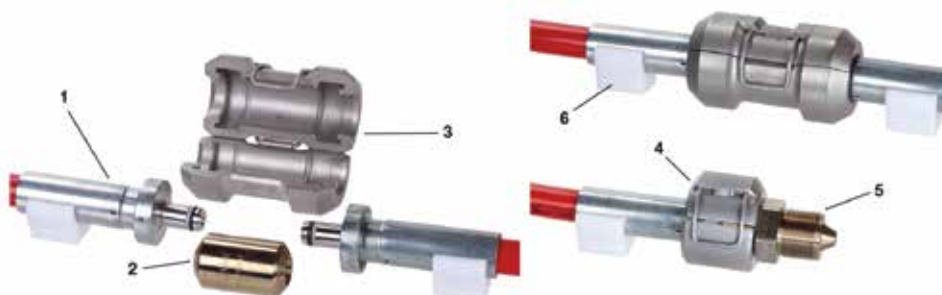
PARKER POLYFLEX HOSE CONNECTOR

AVAILABLE HOSE TYPES

Size	Hose types	Size	Hose types	Size	Hose types
-03	2640D-03VXX	-05	2380N-05VXXW	-08	2388N-08VXX
-03	2740D-03VXX	-05	2640D-05VXX	-08	2580N-08VXX
-03	2749D-03VXX	-05	2740D-05VXX	-08	2740D-08VXX
-03	2840D-03VXX	-05	2748D-05VX	-08	2748D-08VXX
		-05	2840D-05VXX	-08	2840D-08VXX
		-05	2848D-05VXX	-08	2848D-08VXX
		-05	2741D-05VXX/XX		
		-05	2748D-05VXX/X		
		-05	2749D-05VXX		
		-05	2841D-05VXX/XX		

COMPONENTS

Reference	Part Number	Description
1	1TM2X-8-03-HPK	Fitting for DN 5 hoses including caps
1	1TM2X-8-05-HPK	Fitting for DN 8 hoses including caps
1	1TMKY-8-05-HPK	Fitting for DN 8 hoses including caps
1	1TMBL-9-08-HPK	Fitting for DN 12 hoses including caps
1	1TMBS-9-08-HPK	Fitting for DN 12 hoses including caps
2	TFTF-8-8	Hose connector bushing
2	TFTF-8-9	Hose connector bushing
2	TFTF-9-9	Hose connector bushing
3	HPK-HS-8	Hose connector
4	HPK-HSP-8	Pump/gun connector
5	YTTF-6-8	Adaptor M20 x 1.5
5	YTTF-9-8	Adaptor M26 x 1.5
5	YTTF-9-9	Adaptor M26 x 1.5
5	YTTF-10-8	Adaptor M30 x 2
5	YTTF-10-9	Adaptor M30 x 2
5	YTTF-12-8	Adaptor M42 x 2
5	YTTF-12-9	Adaptor M42 x 2-6g
5	Y6TF-6-8	Adaptor 3/4 - 16UNF
5	Y6TF-9-8	Adaptor 1 1/8 - 12UNF
6	TMCAP-8	Cap
6	TMCAP-9	Cap



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.

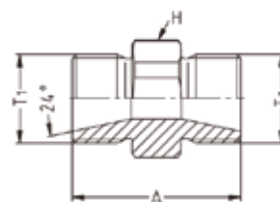
ADAPTORS

WATER JETTING ACCESSORIES

METRIC ADAPTOR

24° Flare

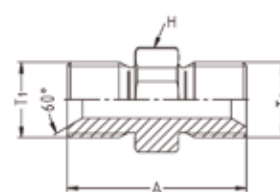
#			A			
	T1	T2	mm	mm	bar	psi
D2D2-16-16W	M24 x 1.5	M24 x 1.5	50.0	27.0	1800	26,100
D2D2-16-25W	M24 x 1.5	M36 x 2	60.5	41.0	1400	20,300
D2D2-25-25W	M36 x 2	M36 x 2	65.0	41.0	1400	20,300
D2D2-30-30W	M42 x 2	M42 x 2	75.0	46.0	1200	17,400



BSP ADAPTOR

60° Flare

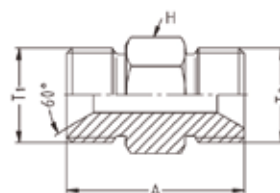
#			A			
	T1	T2	mm	mm	bar	psi
D9D9-8-8W	G 1/2	G 1/2	50.0	27.0	1800	26,100
D9D9-12-12W	G 3/4	G 3/4	65.0	41.0	1400	20,300
D9D9-16-16W	G 1	G 1	65.0	41.0	1200	17,400



TYPE "M" ADAPTOR

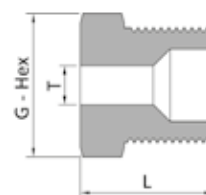
UNF 60° Flare

#			A			
	T1	T2	mm	mm	bar	psi
AZAZ-6-6W	9/16 - 18 UNF	9/16 - 18 UNF	36.0	24.0	2800	40,600
AZAZ-8-8W	3/4 - 16 UNF	3/4 - 16 UNF	44.0	24.0	2500	36,250
AZAZ-16-16W	1-12 UNF	1-12 UNF	48.0	27.0	1800	26,100
ZAZA-16-16W	1 5/16 - 12 UNF	1 5/16 - 12 UNF	54.0	41.0	1400	20,300



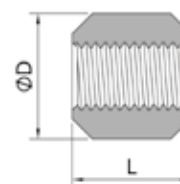
GLANDS

T-Tube O.D.	#	Dimensions - in. (mm)	
		G	L
1/4"	SS-G-6FH4	0.63 (15.9)	0.82 (20.8)
3/8"	SS-G-6FH6	0.81 (20.6)	1.13 (28.7)
9/16"	SS-G-6FH9	1.19 (30.2)	1.50 (38.1)
M14 x 1.5	SS-G-M14	1.06 (27.0)	1.10 (27.9)



COLLARS

T-Tube O.D.	#	Dimensions - in. (mm)	
		D	L
1/4"	SS-CO-6FH4	0.38 (9.6)	0.38 (9.6)
3/8"	SS-CO-6FH6	0.50 (12.7)	0.54 (13.7)
9/16"	SS-CO-6FH9	0.81 (20.6)	0.62 (15.8)
M14 x 1.5	SS-CO-M14	0.75 (18.95)	0.55 (14.0)



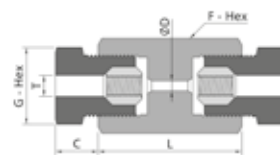
Please Note: Dimensions and pressures may vary.

ADAPTORS

WATER JETTING ACCESSORIES

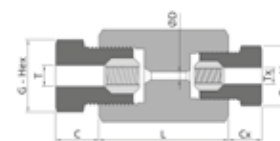
UNION COUPLINGS

T-Tube O.D.	#	Dimensions - in. (mm)				
		L	C	D	G	F
1/4"	SS-U-6FH4	1.38 (34.9)	0.50 (12.7)	0.09 (2.3)	0.63 (15.9)	0.75 (19.1)
3/8"	SS-U-6FH6	1.75 (44.5)	0.53 (13.5)	0.13 (3.3)	0.81 (20.6)	1.00 (25.4)
9/16"	SS-U-6FH9	2.19 (55.6)	0.81 (20.6)	0.19 (4.8)	1.19 (30.2)	1.38 (34.9)
M14 x 1.5	SS-U-M14	1.81 (46.0)	0.57 (14.5)	0.19 (4.8)	1.06 (27.0)	1.26 (32.0)



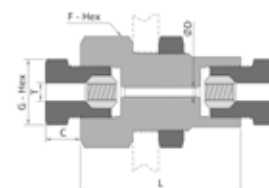
REDUCING UNION COUPLINGS

T-Tube O.D. (in)	Tx -Tube O.D. (in)	#	Dimensions - in. (mm)					
			L	C	Cx	D	G	Gx
3/8	1/4	SS-U-6FH6-6FH4	1.63 (41.3)	0.53 (13.5)	0.50 (12.7)	0.09 (2.3)	0.81 (20.6)	0.63 (15.9)
9/16	1/4	SS-U-6FH9-6FH4	1.75 (44.5)	0.81 (20.6)	0.50 (12.7)	0.09 (2.3)	1.19 (30.2)	0.63 (15.9)
9/16	3/8	SS-U-6FH9-6FH6	2.00 (50.8)	0.81 (20.6)	0.53 (13.5)	0.13 (3.3)	1.19 (30.2)	0.81 (20.6)



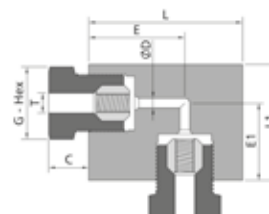
BULKHEAD COUPLINGS

T-Tube O.D. (in)	#	Dimensions - in. (mm)						
		L	C	D	G	F	Panel hole size	Max. panel thickness
1/4	SS-BU-6FH4	1.88 (47.8)	0.50 (12.7)	0.09 (2.3)	0.63 (15.9)	1.06 (27.0)	0.94 (23.9)	0.38 (9.7)
3/8	SS-BU-6FH6	2.38 (60.5)	0.53 (13.5)	0.13 (3.3)	0.81 (20.6)	1.38 (34.9)	1.13 (28.6)	0.38 (9.7)
9/16	SS-BU-6FH9	2.75 (69.9)	0.81 (20.6)	0.19 (4.8)	1.19 (30.2)	1.88 (47.6)	1.69 (42.9)	0.38 (9.7)



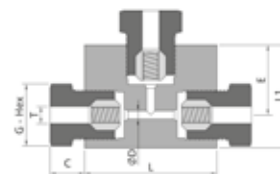
ELBOWS

T-Tube O.D. (in)	#	Dimensions - in. (mm)						
		C	D	G	L	E	L1	E1
1/4	SS-LU-6FH4	0.50 (12.7)	0.09 (2.3)	0.63 (15.9)	1.50 (38.1)	0.88 (22.4)	1.00 (25.4)	0.62 (15.7)
3/8	SS-LU-6FH6	0.53 (13.5)	0.13 (3.3)	0.81 (20.6)	2.00 (50.8)	1.25 (31.8)	1.50 (38.1)	1.00 (25.4)
9/16	SS-LU-6FH9	0.81 (20.6)	0.19 (4.8)	1.19 (30.2)	2.62 (66.5)	1.88 (47.8)	1.88 (47.8)	1.12 (28.4)



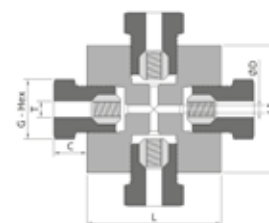
TEES

T-Tube O.D. (in)	#	Dimensions - in. (mm)						Thickness
		C	D	G	L	L1	E	
1/4	SS-TTT-6FH4	0.50 (12.7)	0.09 (2.3)	0.63 (15.9)	2.00 (50.8)	1.25 (31.8)	0.88 (22.4)	0.75 (19.1)
3/8	SS-TTT-6FH6	0.53 (13.5)	0.13 (3.3)	0.81 (20.6)	2.00 (50.8)	1.56 (38.6)	1.06 (26.9)	1.00 (25.4)
9/16	SS-TTT-6FH9	0.81 (20.6)	0.19 (4.8)	1.19 (30.2)	2.62 (66.5)	2.12 (53.8)	1.38 (35.0)	1.50 (38.1)



CROSSES

T-Tube O.D. (in)	#	Dimensions - in. (mm)					Thickness
		C	D	G	L	L1	
1/4	SS-C-6FH4	0.50 (12.7)	0.09 (2.3)	0.63 (15.9)	2.00 (50.8)	1.25 (31.8)	0.75 (19.1)
3/8	SS-C-6FH6	0.53 (13.5)	0.13 (3.3)	0.81 (20.6)	2.00 (50.8)	2.12 (53.8)	1.00 (25.4)
9/16	SS-C-6FH9	0.81 (20.6)	0.19 (4.8)	1.19 (30.2)	2.62 (66.5)	2.75 (69.9)	1.50 (38.1)



Please Note: Dimensions and pressures may vary.



OIL & GAS

OIL & GAS HOSE

The oil and gas sector demands the very best in reliability, durability and consistent high-performance. Abdex provides everything needed to meet those demands. Abdex is a specialist Polyflex (Parker) distributor and together offers the widest range of specialist thermoplastic hoses available. Sizes range from 2 mm to 3 inch, with working pressures from 6 bar (87 psi) to 4,000 bar (58,000 psi). Abdex is proud to be certified to manufacture the Black Eagle range of multi-spiral wire-reinforced thermoplastic hoses specially designed for oil industry applications. The Black Eagle product range has bore sizes up to 3" and pressure ranges from 345 bar (5,000 psi) up to 1,035 bar (15,000 psi). Abdex also offers a complete range of Eaton Synflex thermoplastic hose used in HFL's and Parker rubber hose specifically designed for high flow / pressure cementing.

ADVANTAGES

Abdex thermoplastic hose is chemically inert for most commonly used fluids and gases, meaning no interaction with the media, and it's resistant against many acids and alkalines. Its outer covers and inner cores withstand abrasion, which means extended service life. The UV / ozone and saltwater resistance of thermoplastic hose makes it ideal for work in the oil and gas industry, onshore and offshore. It's designed for use in harsh and exposed installations, so that unforgiving environmental conditions have minimal effect on hose life. Thermoplastic hose is clean, too. With less friction and contamination inside the hose, there's less build-up of residues, meaning extended lifetimes for filters, valves and hydraulic systems. The permeation resistance of thermoplastic hose is high. With low gas permeation and reduced ingress the risk of media contamination is cut. Polyflex thermoplastic hose can handle pressures up to 4,000 bar (58,000 psi) – but is up to 50% lighter than equivalent rubber products.

APPLICATIONS

With such a range of physical qualities, The Abdex range of oil and gas hose makes easy work of any number of tasks in the oil and gas sector. From fluid injection to high pressure surface preparation, through torqueing, tensioning and jacking, to testing and well intervention, Abdex shrugs off harsh conditions and makes light work of heavy tasks.



IN THIS SECTION

Black Eagle Features	96
Well Intervention	99
Chemical Injection	111 118
Cementing	114
BOP and Hot Line	123
Umbilicals and Jumpers	125

BLACK EAGLE FEATURES



Polyflex Black Eagle hoses are designed for oilfield applications. For each application different demands need to be considered:

- Composition of fluids
- Temperatures and pressures
- Short term pressure fluctuations
- Static and dynamic loads
- Safety requirements and standards

To be able to cover these requirements the construction of Black Eagle hose has the following functionality:

Thermoplastic core tube

The essential requirement for a hose is to contain and transmit a fluid or gas. The core tube of a thermoplastic hose is therefore in direct contact with that medium. The selection of the core tube material depends on fluid compatibility, service temperature, and diffusion rate under operating conditions. The available materials are:

- Polyamide (PA11): It is used in high-performance applications for oil and gas, flexible pipes and control fluid umbilicals. It can operate within a wide range of working temperatures (-40°C up to +70°C), has a high dimensional stability and is low in density.
- Fluoropolymer: It is designed for use in chemical injection systems at high temperature levels. The tubing has low permeation rates and excellent chemical resistance. Proven to handle methanol at 100°C and up to 15,000 psi working pressure.

Thermoplastic core tubes are manufactured with an extremely smooth and clean inner surface. This provides minimum flow resistance and minimum pressure drop in service.

Spiralised wire reinforcement

Our reinforcement allows flexibility in service without compromising fluid transfer. Various layers of high tensile strength steel wires are used to achieve the best combination of pressure resistance, flexibility, and volumetric expansion. The basic function of the cover is to protect the wire reinforcement from the external environment.

ColorGard™ cover

ColorGard™ is an extra thick dual layer Polyurethane sheath: a red inner layer and a black or golden outer layer. It offers both an abrasion resistant extra thick cover for long service life and acts as an additional safety feature. This concept is a visual early warning system for detection of excessive abrasion. This feature avoids possible injuries and reduction of downtime by anticipating failure.

Black Eagle Light

#												Collapse pressure	Max length
	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m	bar	mtr
2240N-32V10	50	-32	51.0	2	68.5	207	3,000	825	12,000	500	4.40	-	1,000
2248N-32V10	50	-32	51.0	2	68.5	345	5,000	862	12,500	500	4.40	-	1,000

Black Eagle

#												Collapse pressure	Max length
	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m	bar	mtr
2448N-20V80	32	-20	32.2	1 1/4	55.5	690	10,000	1725	25,000	400.0	3.80	57	1,500
2640N-24V80	40	-24	38.0	1 1/2	70.5	690	10,000	2300	33,350	500.0	7.20	65	1,000
2640N-24V80-15K	40	-24	38.0	1 1/2	66.0	1035	15,000	2330	33,750	500.0	6.50	66	1,000
2448N-32V80	50	-32	50.5	2	80.5	345	5,000	1380	20,000	500.0	8.50	49	1,000
2580N-32V80	50	-32	50.5	2	84.5	690	10,000	1725	25,000	800.0	9.40	57	1,000
2648N-32V80	50	-32	50.5	2	86.0	1035	15,000	2330	33,750	800.0	12.10	60	800
2240N-48V80	78	-48	75.0	3	114.0	345	5,000	862	12,500	1000.0	11.50	-	350
2440N-48V80	78	-48	75.0	3	122.0	690	10,000	1380	20,000	1100.0	18.70	66	300
2640N-48V80	78	-48	75.0	3	130.0	1035	15,000	2330	33,750	1200.0	27.50	80	250

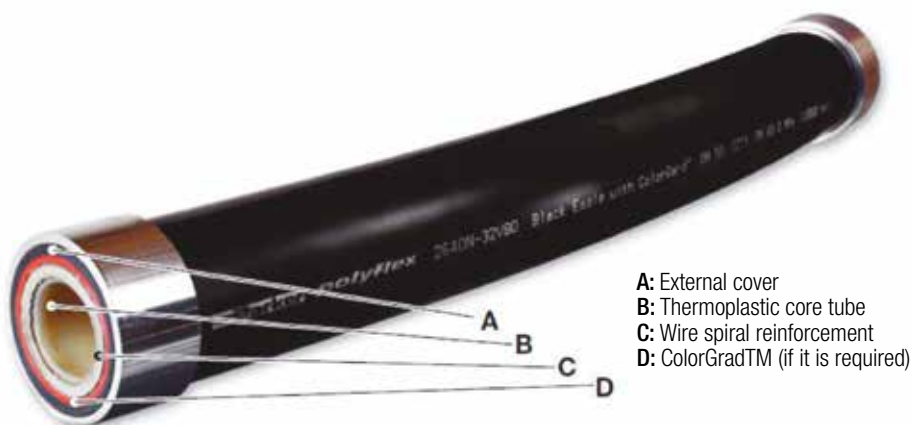
Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.

BLACK EAGLE FEATURES



Golden Eagle

#												Collapse pressure	Max length
	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m	bar	mtr
2640M-24V88	40	-24	38.0	1 1/2	70.5	690	10,000	2300	33,350	500.0	7.20	65	600
2448M-32V88	50	-32	51.0	2	82.0	345	5,000	1380	20,000	500.0	8.50	49	600
2580M-32V88	50	-32	51.0	2	84.5	690	10,000	1725	25,000	800.0	9.40	57	600



- A: External cover
- B: Thermoplastic core tube
- C: Wire spiral reinforcement
- D: ColorGradTM (if it is required)



ACCESSORIES



Support grips
Black Eagle accessories available in
the accessories section from page 205.



Containment grip
Black Eagle accessories
available in the accessories
section from page 205.



Reel and winch systems



1502 Hammer Unions



API 6A Flanges

Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.

BLACK EAGLE

TENSILE LOADING & WEIGHTS

Data for tensile loading and weights of Polyflex hoses

Note that all below values of tensile forces include the own weight of the hoses.

Pressurised hoses can take higher tensile load, it will elongate less. All values below have been confirmed by testing. In all cases the hoses will not elongate more than 10%.

2448N-32V80	Pressure (bar)	0	100 and above		
	Max. tensile force (kN)	15	20		
2580N-32V80	Pressure (bar)	0	100	200	300 and above
	Max. tensile force (kN)	25	30	35	40
2240N-48V80	Pressure (bar)	0	100 and above		
	Max. tensile force (kN)	15	20		
2440N-48V80	Pressure (bar)	0	100	200 and above	
	Max. tensile force (kN)	30	40	50	
2640N-48V80	Pressure (bar)	0	100	200	350 and above
	Max. tensile force (kN)	30	40	50	100

The below table includes information on hose weights.

#			Hose weight in air empty	Hose weight in air, full of water	Hose weight in water empty	Hose weight in water full of water
	mm	mm	kg/m	kg/m	kg/m	kg/m
2448N-32V80	50.5	80.5	8.5	10.5	3.3	5.3
2580N-32V80	50.5	84.5	9.4	11.5	3.7	5.7
2240N-48V80	75.0	114.0	11.5	16.0	1.1	5.6
2440N-48V80	75.0	122.0	18.7	23.2	6.7	11.3
2640N-48V80	75.0	130.0	27.5	32.0	14.0	18.4

1st example: No pressure. 300m length of 2240N-48V80 shall be deployed. Hose weight in water, full of water, $5.6 \text{ kg/m} \times 300\text{m} = 1680\text{kg}$. Max tensile force is 15kN, therefore a 300m length is too heavy to deploy in these conditions.

2nd example: Pressure 100 bar. 300m length of 2240N-48V80 shall be deployed. Hose weight in water, full of water, $5.6 \text{ kg/m} \times 300\text{m} = 1680\text{kg}$ max. tensile force is 20kN, so a 300m length of 2240N-48V80 is OK to deploy when pressurized at 100bar, and an additional weight of $2000-1680 = 320\text{kg}$ may be added.

Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.



2240N-32V10

2" - 3,000 PSI BLACK EAGLE LIGHT

Hose applications

#									Test pressure			Collapse pressure	Max length
	mm	inch	mm	inch	bar	psi	bar	psi	bar	mm	kg/m	bar	mtr
2240N-32V10	51	2	68.5	2.70	207	3,000	827	12,000	311	500.0	4.4	38	1,000

APPLICATIONS

Cementing operations, acidizing, mud circulation, general fluid and gas injection.

FEATURES

- PA11 core tube with inner ColorGard™
- Significantly higher abrasion resistance than common elastomer materials
- Longer service life and less contamination in cement slurry
- Easy visualization of core tube erosion - more efficient product inspection and reduced unscheduled downtime
- Lighter weight and smaller O.D. than common 4-layer constructions - faster and easier deployment
- DNV Type approval to API 7K

CONSTRUCTION

Core tube: PA11 with inner ColorGard™.
Pressure reinforcement: 2 layers of high tensile steel wire.
Cover: Extra thick TPU sheath.
Colour: Black.

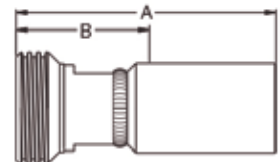
TEMPERATURE RANGE

-40°C up to +100°C / -40°F up to 212°F.

FITTINGS

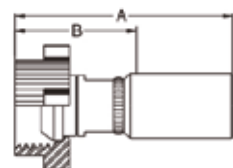
Hammerlug union female - Onshore: Special steel materials.

#		A	B	
		mm	mm	bar
1HNS6-32-32	4 1/8 - 3 ACME	190.0	94.4	1035



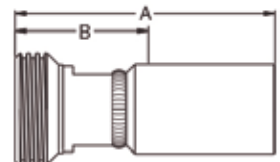
Hammerlug union male - Onshore: Special steel materials.

#		A	B	
		mm	mm	bar
1HES6-32-32-FLAT	4 1/8 - 3 ACME	207.0	113.0	1035



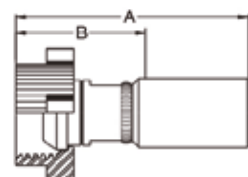
Hammerlug union female - Offshore: Special steel and stainless steel materials.

#		A	B	
		mm	mm	bar
1HNS6-32-32-SC	4 1/8 - 3 ACME	190.0	94.4	1035



Hammerlug union male - Offshore: Special steel and stainless steel materials.

#		A	B	
		mm	mm	bar
1HES6-32-32-FLAT-SC	4 1/8 - 3 ACME	207.0	113.0	1035



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.

2248N-32V10

2" - 5,000 PSI BLACK EAGLE LIGHT



Hose applications

#									Test pressure			Collapse pressure	Max length
	mm	inch	mm	inch	bar	psi	bar	psi	bar	mm	kg/m	bar	mtr
2248N-32V10	51	2	68.5	2.70	345	5,000	862	12,500	518	500.0	4.4	38	1,000

APPLICATIONS

Cementing operations, acidizing, mud circulation, general fluid and gas injection.

FEATURES

- PA11 core tube with inner ColorGard™
- Significantly higher abrasion resistance than common elastomer materials
- Longer service life and less contamination in cement slurry
- Easy visualization of core tube erosion - more efficient product inspection and reduced unscheduled downtime
- Lighter weight and smaller O.D. than common 4-layer constructions - faster and easier deployment
- DNV Type approval to API 7K

CONSTRUCTION

Core tube: PA11 with inner ColorGard™.
Pressure reinforcement: 6 spiral layers of high tensile steel wire.
Cover: Extra thick TPU sheath.
Colour: Black.

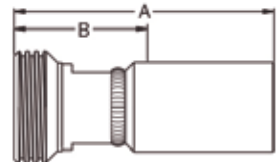
TEMPERATURE RANGE

-40°C up to +100°C / -40°F up to 212°F.

FITTINGS

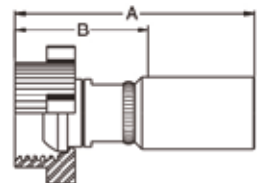
Hammerlug union female - Onshore: Special steel materials.

#		A	B	
		mm	mm	bar
1HNS6-32-32	4 1/8 - 3 ACME	190.0	94.4	1035



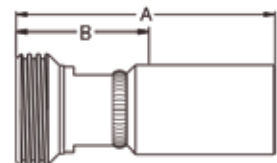
Hammerlug union male - Onshore: Special steel materials.

#		A	B	
		mm	mm	bar
1HES6-32-32-FLAT	4 1/8 - 3 ACME	207.0	113.0	1035



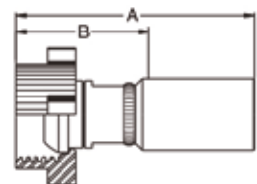
Hammerlug union female - Offshore: Special steel and stainless steel materials.

#		A	B	
		mm	mm	bar
1HNS6-32-32-SC	4 1/8 - 3 ACME	190.0	94.4	1035



Hammerlug union male - Offshore: Special steel and stainless steel materials.

#		A	B	
		mm	mm	bar
1HES6-32-32-FLAT-SC	4 1/8 - 3 ACME	207.0	113.0	1035



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.



2448N-32V80

2" - 5,000 PSI BLACK EAGLE

Offshore applications

#									Test pressure			Collapse pressure	Max length
	mm	inch	mm	inch	bar	psi	bar	psi	bar	mm	kg/m	bar	mtr
2448N-32V80	50.5	2	80.5	3.17	345	5,000	1380	20,000	518	500.0	8.50	49	1,000

APPLICATIONS

Designed for use in acidising, cementing, methanol injection, well stimulation and control fluids. Used as an alternative to steel pipe, flexible pipe and rubber hose. Can be utilised onshore or offshore.

FEATURES

- ColorGard, visual early warning system
- Nylon 11 core tube offers high cleanliness
- Available in long continuous lengths
- Smaller OD than flexible pipe allows more hose per reel
- Excellent chemical resistance providing long service life
- More efficient deployment and recovery
- DNV Type Approval (API 7K and API 17J)

CONSTRUCTION

Core tube: PA11, methanol washed.
Pressure reinforcement: 4 layers of high tensile steel wire.
Cover: Extra thick dual layer TPU sheath.
Colour: ColorGard™ – red inner sheath and black outer sheath.

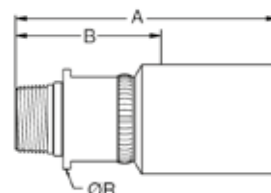
TEMPERATURE RANGE

-40°C up to +70°C / -40°F up to 158°F.

FITTINGS

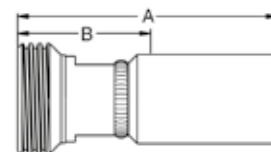
NPT Male fitting: Special steel and stainless steel materials.

#		A	B	ØR	
		mm	mm	mm	bar
101BL-32-32	2 NPT	275.0	129.0	83.0	690
6015X-32-32	2 NPT	244.0	107.0	82.5	690



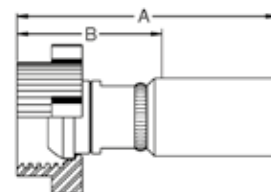
1502 Hammerlug union female

#		A	B	
		mm	mm	bar
1HNBL-32-32	4 1/8 - 3 ACME	263.0	117.0	1035
6HN5X-32-32-TC	4 1/8 - 3 ACME	243.0	106.0	1035



1502 Hammerlug union male

#		A	B	
		mm	mm	bar
1HEBL-32-32-FLAT	4 1/8 - 3 ACME	278.3	132.3	1035
6HE5X-32-32-FLATTC	4 1/8 - 3 ACME	292.0	155.0	1035



Note: DNV Type approval (API 7K and API 17J) with fitting series BL.



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.

2240N-48V80

3" - 5,000 PSI BLACK EAGLE



Offshore applications

#									Test pressure			Collapse pressure	Max length
	mm	inch	mm	inch	bar	psi	bar	psi	bar	mm	kg/m	bar	mtr
2240N-48V80	75.0	3	114.0	4.49	345	5,000	862	12,500	518	1000.0	11.50	20	500

APPLICATIONS

Designed for use in acidising, cementing, methanol injection, well stimulation and control fluids. Used as an alternative to steel pipe, flexible pipe and rubber hose. Can be used onshore or offshore.

FEATURES

- ColorGard, visual early warning system
- Nylon 11 core tube offers high cleanliness
- Available in long continuous lengths
- Smaller OD than flexible pipe allows more hose per reel
- Excellent chemical resistance providing long service life
- More efficient deployment and recovery
- DNV Type Approval (API 7K and API 17J)

CONSTRUCTION

Core tube: PA11, methanol washed.
Pressure reinforcement: 2 layers of high tensile steel wire.
Cover: Extra thick dual layer TPU sheath.
Colour: ColorGard™ – red inner sheath and black outer sheath.

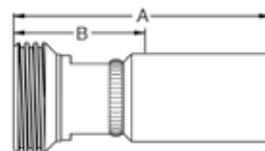
TEMPERATURE RANGE

-40°C up to +70°C / -40°F up to 158°F.

FITTINGS

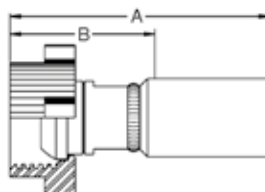
1502 Hammerlug union female

#		A	B	
		mm	mm	bar
1HNTX-48-48	5 3/8 - 3 1/2 ACME	350.0	184.0	1035



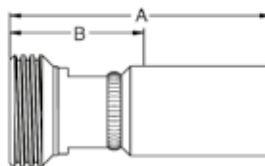
1502 Hammerlug union male

#		A	B	
		mm	mm	bar
1HETX-48-48-FLAT	5 3/8 - 3 1/2 ACME	378.0	212.0	1035



602 Hammerlug union female

#		A	B	
		mm	mm	bar
1HNTX-48-48-602	5 3/8 - 3 ACME	350.0	184.0	345



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.

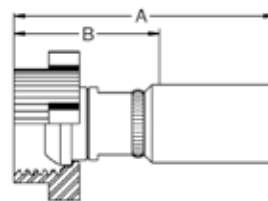


2240N-48V80

3" - 5,000 PSI BLACK EAGLE

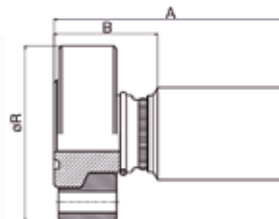
602 Hammerlug union male

#		A	B	
1HETX-48-48-FLAT-602	5 3/8 - 3 ACME	mm 372.0	mm 206.0	bar 345



API flange, swivel

#		A	B	ØR	Seal	
18KTX-65-48-API17DSV-10K-L	4 1/16 10,000 psi	mm 427.0	mm 261.0	mm 315.0	BX155	bar 690



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.

2640N-24V80
1 1/2" - 10,000 PSI BLACK EAGLE



Offshore applications

#									Test pressure			Collapse pressure	Max length
	mm	inch	mm	inch	bar	psi	bar	psi	bar	mm	kg/m	bar	mtr
2640N-24V80	38.0	1 1/2	70.5	2.78	690	10,000	2300	33,350	1035	500.0	7.20	65	1,000

APPLICATIONS

Designed for use in acidising, cementing, methanol injection, well stimulation and control fluids. Used as an alternative to steel pipe, flexible pipe and rubber hose. Can be utilised onshore or offshore.

FEATURES

- ColorGard, visual early warning system
- Nylon 11 core tube offers high cleanliness
- Available in long continuous lengths
- Smaller OD than flexible pipe allows more hose per reel
- Excellent chemical resistance providing long service life
- More efficient deployment and recovery

CONSTRUCTION

Core tube:	PA11, methanol washed.
Pressure reinforcement:	6 layers of high tensile steel wire.
Cover:	Extra thick dual layer TPU sheath.
Colour:	ColorGard™ – red inner sheath and black outer sheath.

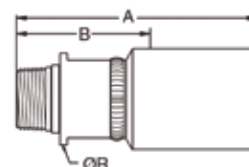
TEMPERATURE RANGE

TEMPERATURE RANGE
-40°C up to +70°C / -40°F up to 158°F.

FITTINGS

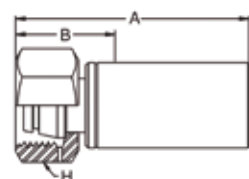
NPT Male fitting

#		A mm	B mm	ØR mm	 bar
6015X-32-24-TC	2 NPT	231.0	107.0	85.0	690



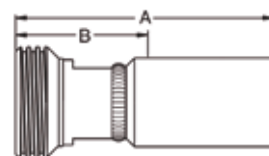
Metric swivel fitting with O-ring

#		A mm	B mm	 H mm	 bar
1C95X-38-24C0SK-TC	M52 x 2	143.0	50.0	65.0	1035



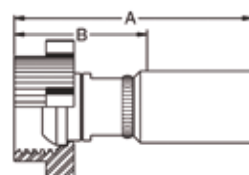
1502 Hammerlug union female

#		A mm	B mm	 bar
1HN5X-32-24C4462-TC	4 1/8 - 3 ACME	245.1	108.0	1035



1502 Hammerlug union male

#		A mm	B mm	 bar
1HE5X-32-24C4462-FLATTC	4 1/8 - 3 ACME	232.0	108.0	1035



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.



2580N-32V80

2" - 10,000 PSI BLACK EAGLE

Offshore applications

#									Test pressure			Collapse pressure	Max length
	mm	inch	mm	inch	bar	psi	bar	psi	bar	mm	kg/m	bar	mtr
2580N-32V80	50.5	2	84.5	3.33	690	10,000	1725	25,000	1035	800.0	9.40	57	1,000

APPLICATIONS

Designed for use in acidising, cementing, methanol injection, well stimulation and control fluids. Used as an alternative to steel pipe, flexible pipe and rubber hose. Can be utilised onshore or offshore.

FEATURES

- ColorGard, visual early warning system
- Nylon 11 core tube offers high cleanliness
- Available in long continuous lengths
- Smaller OD than flexible pipe allows more hose per reel
- Excellent chemical resistance providing long service life
- More efficient deployment and recovery
- DNV Type approval (API 7K and API 17J)
- ABS Product Design Assessment (PDA) Certificate 13-HS1036876-PDA

CONSTRUCTION

Core tube: PA11, methanol washed.
Pressure reinforcement: 6 layers of high tensile steel wire.
Cover: Extra thick dual layer TPU sheath.
Colour: ColorGard™ – red inner sheath and black outer sheath.

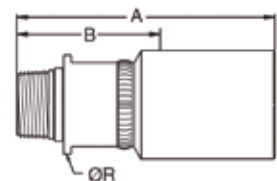
TEMPERATURE RANGE

-40°C up to +70°C / -40°F up to 158°F.

FITTINGS

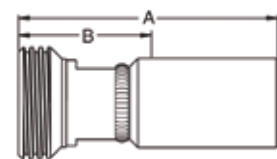
NPT Male fitting

#		A	B	ØR	
		mm	mm	mm	bar
101BL-32-32	2 NPT	275.0	129.0	83.0	690
6015X-32-32	2 NPT	244.0	107.0	82.5	690



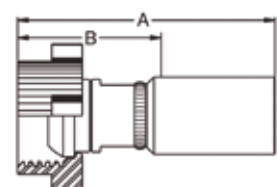
1502 Hammerlug union female

#		A	B	
		mm	mm	bar
1HNBL-32-32	4 1/8 - 3 ACME	263.0	117.0	1035
6HN5X-32-32-TC	4 1/8 - 3 ACME	243.0	106.0	1035



1502 Hammerlug union male

#		A	B	
		mm	mm	bar
1HEBL-32-32-FLAT	4 1/8 - 3 ACME	278.3	132.3	1035
6HE5X-32-32-FLATTC	4 1/8 - 3 ACME	292.0	155.0	1035



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.

2440N-48V80

3" - 10,000 PSI BLACK EAGLE



Offshore applications

#									Test pressure			Collapse pressure	Max length
	mm	inch	mm	inch	bar	psi	bar	psi	bar	mm	kg/m	bar	mtr
2440N-48V80	75.0	3	122.0	4.80	690	10,000	1725	25,000	1035	1100.0	18.70	66	450

APPLICATIONS

Designed for use in acidising, cementing, methanol injection, well stimulation and control fluids. Used as an alternative to steel pipe, flexible pipe and rubber hose. Can be utilised onshore or offshore.

FEATURES

- ColorGard, visual early warning system
- Nylon 11 core tube offers high cleanliness
- Available in long continuous lengths
- Smaller OD than flexible pipe allows more hose per reel
- Excellent chemical resistance providing long service life
- More efficient deployment and recovery
- DNV Type approval (API7K and API 17J)

CONSTRUCTION

Core tube: PA11, methanol washed.
Pressure reinforcement: 6 layers of high tensile steel wire.
Cover: Extra thick dual layer TPU sheath.
Colour: ColorGard™ – red inner sheath and black outer sheath.

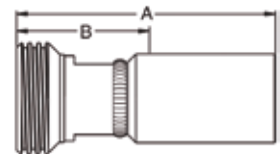
TEMPERATURE RANGE

-40°C up to +70°C / -40°F up to 158°F.

FITTINGS

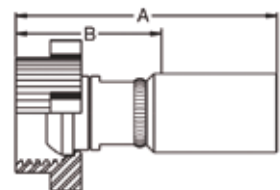
1502 Hammerlug union female

#		A	B	
		mm	mm	bar
1HNLX-48-48	5 3/8 - 3 1/2 ACME	405.0	194.0	1035



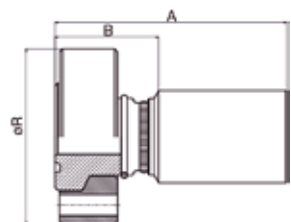
1502 Hammerlug union male

#		A	B	
		mm	mm	bar
1HELX-48-48-FLAT	5 3/8 - 3 1/2 ACME	395.0	184.0	1035



API flange, swivel

#	API size	A	B	ØR	Seal	
		mm	mm	mm		bar
18KLX-49-48-API17DSV-10K	3 1/16 10,000 psi	455.0	244.0	270.0	BX154	690
18KLX-65-48-API17DSV-10K	4 1/16 10,000 psi	482.0	246.0	315.0	BX155	690



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.



2640N-24V80-15K

1 1/2" - 15,000 PSI BLACK EAGLE

Offshore applications

#									Test pressure			Collapse pressure	Max length
	mm	inch	mm	inch	bar	psi	bar	psi	bar	mm	kg/m	bar	mtr
2640N-24V80-15K	38.0	1 1/2	66.0	2.60	1035	15,000	2330	33,750	1553	500.0	6.5	66	1,500

APPLICATIONS

Designed for use in acidising, cementing, methanol injection, well stimulation and control fluids. Used as an alternative to steel pipe, flexible pipe and rubber hose. Can be utilised onshore or offshore.

FEATURES

- ColorGard, visual early warning system
- Nylon 11 core tube offers high cleanliness
- Available in long continuous lengths
- Smaller OD than flexible pipe allows more hose per reel
- Excellent chemical resistance providing long service life
- Lightweight when compared to competing products
- More efficient deployment and recovery

CONSTRUCTION

Core tube: PA11, methanol washed.
Pressure reinforcement: 6 layers of high tensile steel wire.
Cover: Extra thick dual layer TPU sheath.
Colour: ColorGard™ – red inner sheath and black outer sheath.

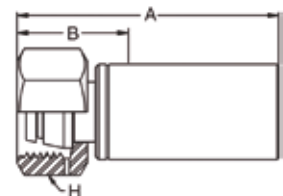
TEMPERATURE RANGE

-40°C up to +70°C / -40°F up to 158°F.

FITTINGS

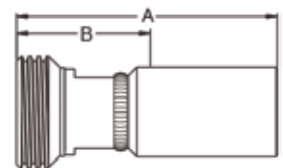
Metric swivel fitting with O-ring

#		A	B		
		mm	mm	mm	bar
1C95X-38-24C0SK-KOP2	M52 x 2	143.0	50.0	65.0	1035



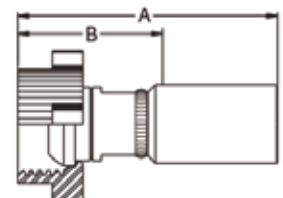
1502 Hammerlug union female: Special steel and stainless steel materials.

#		A	B	
		mm	mm	bar
1HN5X-32-24C4462-KOP2	4 1/8 - 3 ACME	245.1	108.0	1035



1502 Hammerlug union male: Special steel and stainless steel materials.

#		A	B	
		mm	mm	bar
1HE5X-32-24C4462-KOP2	4 1/8 - 3 ACME	232.0	108.0	1035



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.

2648N-32V80

2" - 15,000 PSI BLACK EAGLE



Offshore applications

#									Test pressure			Collapse pressure	Max length
	mm	inch	mm	inch	bar	psi	bar	psi	bar	mm	kg/m	bar	mtr
2648N-32V80	50.5	2	86.0	3.39	1035	15,000	2330	33,750	1553	800.0	12.1	60	800

APPLICATIONS

Designed for use in acidising, cementing, methanol injection, well stimulation and control fluids. Used as an alternative to steel pipe, flexible pipe and rubber hose. Can be utilised onshore or offshore.

FEATURES

- ColorGard, visual early warning system
- Nylon 11 core tube offers high cleanliness
- Available in long continuous lengths
- Smaller OD than flexible pipe allows more hose per reel
- Excellent chemical resistance providing long service life
- More efficient deployment and recovery

CONSTRUCTION

Core tube: PA11, methanol washed.
Pressure reinforcement: 6 layers of high tensile steel wire.
Cover: Extra thick dual layer TPU sheath.
Colour: ColorGard™ – red inner sheath and black outer sheath.

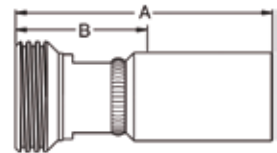
TEMPERATURE RANGE

-40°C up to +70°C / -40°F up to 158°F.

FITTINGS

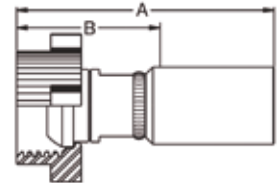
1502 Hammerlug union female

#		A	B	
		mm	mm	bar
1HNCX-32-32	4 1/8 - 3 ACME	284.0	118.0	1035



1502 Hammerlug union male

#		A	B	
		mm	mm	bar
1HECX-32-32-FLAT	4 1/8 - 3 ACME	298.0	132.0	1035



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.



2640N-48V80

3" - 15,000 PSI BLACK EAGLE

Offshore applications

#									Test pressure			Collapse pressure	Max length
	mm	inch	mm	inch	bar	psi	bar	psi	bar	mm	kg/m	bar	mtr
2640N-48V80	75.0	3	130.0	5.12	1035	15,000	2330	33,750	1553	1200.0	27.50	80	250

APPLICATIONS

Designed for use in acidising, cementing, methanol injection, well stimulation and control fluids. Used as an alternative to steel pipe, flexible pipe and rubber hose. Can be utilised onshore or offshore.

FEATURES

- ColorGard, visual early warning system
- Nylon 11 core tube offers high cleanliness
- Available in long continuous lengths
- Smaller OD than flexible pipe allows more hose per reel
- Excellent chemical resistance providing long service life
- Lightweight when compared to competing products
- More efficient deployment and recovery
- DNV Type approval (API 7K and API 17J)

CONSTRUCTION

Core tube: PA11, methanol washed.
Pressure reinforcement: 6 layers of high tensile steel wire.
Cover: Extra thick dual layer TPU sheath.
Colour: ColorGard™ – red inner sheath and black outer sheath.

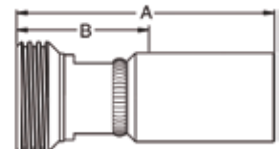
TEMPERATURE RANGE

-40°C up to +70°C / -40°F up to 158°F.

FITTINGS

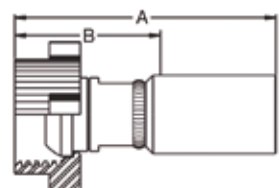
1502 Hammerlug union female

#		A	B	
		mm	mm	bar
1HN5X-48-48	5 3/8 - 3 1/2 ACME	405.0	194.0	1035



1502 Hammerlug union male

#		A	B	
		mm	mm	bar
1HE5X-48-48-FLAT	5 3/8 - 3 1/2 ACME	395.0	184.0	1035



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.





2448M-32V88

2" - 5,000 PSI GOLDEN EAGLE

Chemical applications

#									Test pressure			Collapse pressure	Max length
	mm	inch	mm	inch	bar	psi	bar	psi	bar	mm	kg/m	bar	mtr
2448M-32V88	50.5	2	82.0	3.23	345	5,000	1380	20,000	518	500.0	8.50	49	600

APPLICATIONS

Suitable for use in cementing, acidizing and water / chemical injection applications. Increased chemical resistance and temperature rating when compared to standard Black Eagle.

FEATURES

- Short term use to +100°C
- Suitable for use with aggressive chemicals such as hydrochloric acid
- ColorGard, visual early warning system
- Long continuous lengths available

CONSTRUCTION

Core tube: Fluoropolymer based inner core.
Pressure reinforcement: 4 layers of high tensile steel wire.
Cover: Extra thick dual layer TPU sheath.
Colour: ColorGard™ – red inner sheath and golden outer sheath.

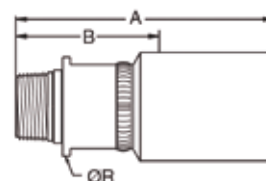
TEMPERATURE RANGE

-40°C up to +70°C / -40°F up to 158°F.

FITTINGS

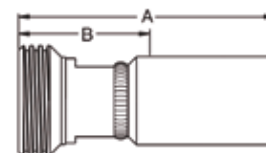
NPT Male fitting

#		A	B	ØR	
		mm	mm	mm	bar
101BL-32-32	2 NPT	275.0	129.0	83.0	690



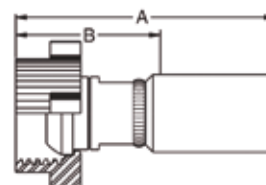
1502 Hammerlug union female

#		A	B	
		mm	mm	bar
1HNBL-32-32	4 1/8 - 3 ACME	263.0	117.0	1035



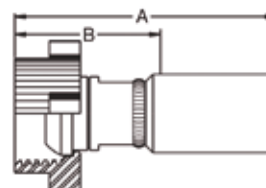
1502 Hammerlug union male

#		A	B	
		mm	mm	bar
1HEBL-32-32-FLAT	4 1/8 - 3 ACME	278.3	132.3	1035



1502 Hammerlug union male, segmented

#		A	B	
		mm	mm	bar
1HEBL-32-32-SEG	4 1/8 - 3 ACME	278.3	132.3	1035



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.

2640M-24V88

1 1/2" - 10,000 PSI GOLDEN EAGLE



Chemical applications

#									Test pressure			Collapse pressure	Max length
	mm	inch	mm	inch	bar	psi	bar	psi	bar	mm	kg/m	bar	mtr
2640M-24V88	38.0	1 1/2	70.5	2.78	690	10,000	2300	33,350	1035	500.0	7.20	65	600

APPLICATIONS

Suitable for use in cementing, acidizing and water / chemical injection applications. Increased chemical resistance and temperature rating when compared to standard Black Eagle.

FEATURES

- Short term use to +100°C
- Suitable for use with aggressive chemicals such as hydrochloric acid
- ColorGard, visual early warning system
- Long continuous lengths available
- Fluoropolymer based

CONSTRUCTION

Core tube: Fluoropolymer based inner core.
Pressure reinforcement: 4 layers of high tensile steel wire.
Cover: Extra thick dual layer TPU sheath.
Colour: ColorGard™ – red inner sheath and golden outer sheath.

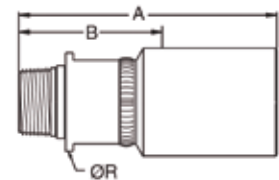
TEMPERATURE RANGE

-40°C up to +70°C / -40°F up to 158°F.

FITTINGS

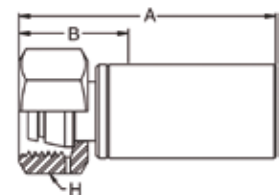
NPT Male fitting

#		A	B	ØR	
		mm	mm	mm	bar
6015X-32-24-TC	2 NPT	231.0	107.0	85.0	690



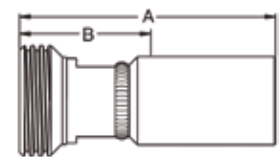
Metric swivel fitting with O-ring

#		A	B	H	
		mm	mm	mm	bar
1C95X-38-24C0SK-TC	M52 x 2	143.0	50.0	65.0	1035



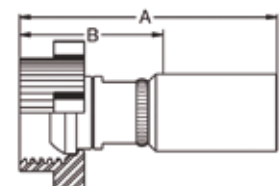
1502 Hammerlug union female

#		A	B	
		mm	mm	bar
1HN5X-32-24C4462-TC	4 1/8 - 3 ACME	245.1	108.0	1035



1502 Hammerlug union male

#		A	B	
		mm	mm	bar
1HE5X-32-24C4462-FLATTC	4 1/8 - 3 ACME	232.0	108.0	1035



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.



2580M-32V88

2" - 10,000 PSI GOLDEN EAGLE

Chemical applications

#									Test pressure			Collapse pressure	Max length
	mm	inch	mm	inch	bar	psi	bar	psi	bar	mm	kg/m	bar	mtr
2580M-32V88	50.5	2	84.5	3.33	690	10,000	1725	25,000	1075	800.0	9.40	57	600

APPLICATIONS

Suitable for use in cementing, acidizing and water / chemical injection applications. Increased chemical resistance and temperature rating when compared to standard Black Eagle.

FEATURES

- Short term use to +100°C
- Suitable for use with aggressive chemicals such as hydrochloric acid
- Colorgard, visual early warning system
- Long continuous lengths available
- Fluoropolymer based

CONSTRUCTION

Core tube: Fluoropolymer based inner core.
Pressure reinforcement: 4 layers of high tensile steel wire.
Cover: Extra thick dual layer TPU sheath.
Colour: ColorGard™ – red inner sheath and golden outer sheath.

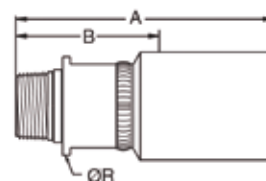
TEMPERATURE RANGE

-40°C up to +70°C / -40°F up to 158°F.

FITTINGS

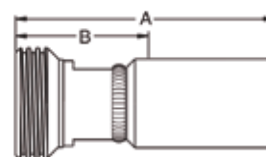
NPT Male fitting

#		A	B	ØR	
		mm	mm	mm	bar
101BL-32-32	2 NPT	275.0	129.0	83.0	690



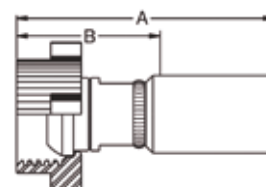
1502 Hammerlug union female

#		A	B	
		mm	mm	bar
1HNBL-32-32	4 1/8 - 3 ACME	263.0	117.0	1035



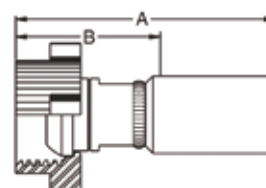
1502 Hammerlug union male

#		A	B	
		mm	mm	bar
1HEBL-32-32-FLAT	4 1/8 - 3 ACME	278.3	132.3	1035



1502 Hammerlug union male, segmented

#		A	B	
		mm	mm	bar
1HEBL-32-32-SEG	4 1/8 - 3 ACME	278.3	132.3	1035



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.

P35-32

2" - 5,000 PSI OIL FIELD HOSE



Hydraulic and cementing applications

#									
	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
P35-32	50.8	2	71.0	350	5,000	1400	20,000	630.0	7.48

APPLICATIONS

General high pressure large flow hydraulic applications (construction, injection moulding, mining, oil drilling), as well as cementing and mud circulation. Suitable for use with Petroleum based hydraulic fluids and lubricating oils.

FEATURES

- Meets SAE 100R13, ISO 3861-1 Type R13 and EN 856 Type R13
- High abrasion MSHA rated cover
- Long lengths available, up to 45m
- Integral hammer unions available

CONSTRUCTION

Core tube: Synthetic rubber.
Pressure reinforcement: Four or six spiral steel wire.
Cover: Synthetic rubber, MSHA accepted.
Inner Tube: Synthetic rubber.

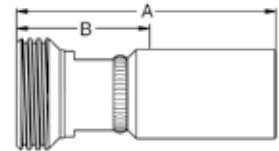
TEMPERATURE RANGE

-40°C to +125°C.

FITTINGS

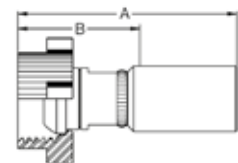
1502 Hammerlug union female

#		A	B	
		mm	mm	bar
1HNS6-32-32	4 1/8 - 3 ACME	190.0	94.4	1035



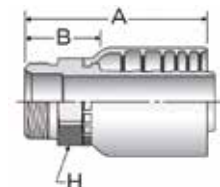
1502 Hammerlug union male

#		A	B	
		mm	mm	bar
1HES6-32-32-FLAT	4 1/8 - 3 ACME	207.0	113.0	1035



Male NPTF pipe - rigid

#			A	B	
	inch		mm	mm	inch
101S6-32-32	2	2 x 11 - 1/2	150.0	62.0	2 1/2



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.

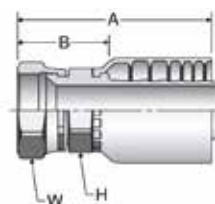


P35-32

2" - 5,000 PSI OIL FIELD HOSE

Female JIC 37° - swivel

#			A	B	
	inch		mm	inch	inch
106S6-32-32	2	2 1/2 x 12	166.0	2 7/8	2 1/2



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.

P5675

2" - 8,000 PSI OIL FIELD HOSE



Drilling and cementing applications

#												
	mm	inch	mm	bar	psi	bar	psi	mm	kg/m			
P5675	51	2	75.0	552	8,000	1400	20,000	630.0	7.89			

APPLICATIONS

Oil and weather resistant, abrasion resistant MSHA cover. General high pressure large flow hydraulic applications (construction, injection moulding, mining, oil drilling), as well as cementing and mud circulation. Suitable for use with Petroleum based hydraulic fluids and lubricating oils.

FEATURES

- Ultra Abrasion resistant wrapped cover
- Twice the abrasion resistance of standard rubber
- Integral Hammer Union Fittings available
- Long lengths available, up to 45m

CONSTRUCTION

Core tube: Synthetic rubber.
Pressure reinforcement: 6 spiral plies of high tensile steel wire.
Cover: Oil and weather resistant, black, synthetic rubber and heavy UHMWPE abrasion resistant MSHA cover.
Inner Tube: Synthetic rubber.

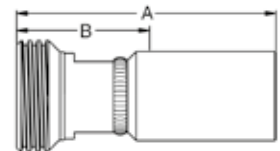
TEMPERATURE RANGE

-40°C to +70°C.

FITTINGS

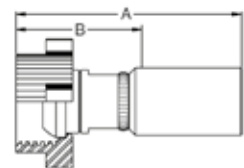
1502 Hammerlug union female

#		A	B	
		mm	mm	bar
1HNS6-32-32	4 1/8 - 3 ACME	190.0	94.4	1035



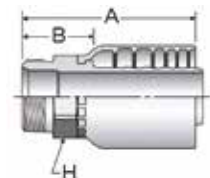
1502 Hammerlug union male

#		A	B	
		mm	mm	bar
1HES6-32-32-FLAT	4 1/8 - 3 ACME	270.0	113.0	1035



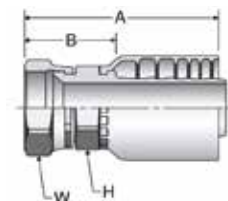
Male NPTF pipe - rigid

#			A	B	
	inch		mm	mm	inch
101S6-32-32	2	2 x 11 - 1/2	150.0	62.0	2 1/2



Female JIC 37° - swivel

#			A	B	
	inch		mm	mm	inch
106S6-32-32	2	2 1/2 x 12	166.0	78.0	2 1/2



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.



57CR SEA WOLF

DEEP SEA COLLAPSE RESISTANT HOSE

Offshore applications

#														Collapse pressure	Max length
	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m	bar			
57CR-8-BLU	12	-08	12.7	1/2	30.0	345	5,000	1380	20,000	159.0	0.87	230	200		
57CR-16-BLU	25	-16	25.4	1	50.8	345	5,000	1380	20,000	273.0	1.97	210	200		

APPLICATIONS

For use in offshore oil exploration requiring internal pressure resistance and external pressure support at extreme depths.

FEATURES

- Suitable for use in a marine environment
- Smooth bore for improved flow rate and low pressure drop
- Conforms to ISO 13628-5 "Specification for Subsea Production Control Umbilicals"
- Sea Wolf is suitable for use in extreme depths
- ABS Product Design Assessment (PDA) Certificate 13-HS930315-1-PDA

CONSTRUCTION

Core tube: Polyamide with stainless steel helix support (pat. pend.).

Pressure reinforcement: High tensile aramid fibre.

Cover: Polyurethane.

Colour: Standard: blue, Safety identification: yellow.

TEMPERATURE RANGE

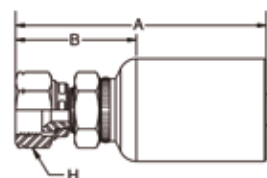
-40°C up to +60°C.

-40°F up to +140°F.

FITTINGS

JIC Female swivel fitting: Stainless steel (AISI 316), other materials on request.

#						A	B			
	DN	size	mm	inch					bar	psi
606CR-8-8C	12	-08	12.7	1/2	3/4 - 16 UTF	98.6	54.1	25.0	345	5,000
606CR-16-16C	25	-16	25.4	1	1 5/16 - 12 UTF	137.0	67.0	41.0	345	5,000



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.

2380M CHEMJEC

CHEMICAL & TEMPERATURE RESISTANT



Oil and Gas applications

#															Collapse pressure	Max length
	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m	bar	mtr			
2380M-04V38	6	-04	6.4	1/4	13.4	690	10,000	2800	40,000	230.0	0.27	400	3,000			
2380M-05V38	8	-05	8.2	5/16	15.7	600	8,700	2400	34,800	90.0	0.35	167	2,000			

APPLICATIONS

High pressure, high temperature, applications for use with aggressive chemicals. Long length subsea umbilical hose. Available in long continuous length up to 3,000 m.

FEATURES

- Withstands high pressure cycles with no signs of stress cracking
- High collapse resistance (HCR) and also providing longer service life
- Meets or exceeds the performance requirements of ISO 13628-5 / API 17E
- Coextruded fluoropolymer core tube for extreme chemical resistance
- Excellent chemical resistance

NOT recommended for gas application.

CONSTRUCTION

Core tube: Coextruded core tube with fluoropolymer inside.
Pressure reinforcement: High strength wire, synthetic fibre.
Cover: PA12.
Colour: Gold.

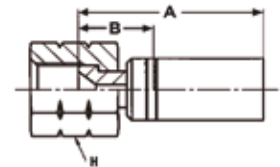
TEMPERATURE RANGE

-40°C up to +100°C, short term 125°C.
 -40°F up to +212°F, short term 257°F.

FITTINGS

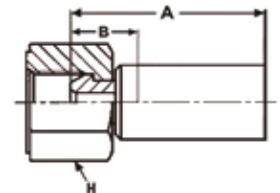
JIC Female swivel fitting: Stainless steel (AISI 316), other materials on request.

#	DN	size	mm	inch		A	B	J	bar	psi
1068X-4-04C	6	-04	6.4	1/4	7/16 - 20 UNF	68.5	35.5	19.0	690	10,000
1068X-6-04C	6	-04	6.4	1/4	9/16 - 18 UNF	66.0	33.0	19.0	1035	15,000
106LX-6-05C	8	-05	8.2	5/16	9/16 - 18 UNF	78.0	33.0	19.0	690	10,000



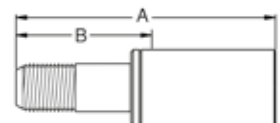
BSP Female swivel fitting: Stainless steel (AISI 316), other materials on request.

#	DN	size	mm	inch		A	B	J	bar	psi
1928X-4-04C	6	-04	6.4	1/4	G 1/4	56.0	32.0	19.0	690	10,000
192LX-6-05C	8	-05	8.2	5/16	G 3/8	69.0	35.0	27.0	690	10,000



Medium pressure tube nipple: Stainless steel (AISI 316), other materials on request.

#	DN	size	mm	inch		A	B		bar	psi
1Y28X-6-04C	6	-04	6.4	1/4	3/8 - 24 LH	120.0	87.0		1380	20,000



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.



2390M CHEMJEC

CHEMICAL & TEMPERATURE RESISTANT

Hose applications

#	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m	Collapse pressure	Max length
2390M-12V38	20	-12	20.0	3/4	29.0	345	5000	1380	20,000	250.0	0.90	75	3,200
2390M-16V38	25	-16	25.4	1	35.0	280	4060	1120	16,240	280.0	1.19	35	4,000

APPLICATIONS

Low volumetric expansion hose. Used in subsea umbilicals, hydraulic controls and as long length methanol injection hose. Can be used with BOP systems. For use with aggressive chemicals.

FEATURES

- Low dimensional change under pressure which results in excellent response times
- Smooth bore for low pressure drop
- Offshore safety factor standard (4:1 SF)
- Meets or exceeds the performance requirements of ISO 13628-5 / API 17E
- Coextruded fluoropolymer core tube for extreme chemical resistance

CONSTRUCTION

Core tube: Coextruded core tube with fluoropolymer inside.
Pressure reinforcement: High strength wire, synthetic fibre.
Cover: PA12.
Colour: Gold.

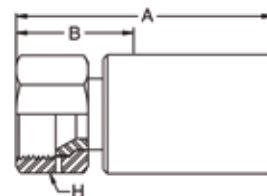
TEMPERATURE RANGE

-40°C up to +100°C, short term 125°C, 720 hrs.
 -40°F up to +212°F, short term 257°F.

FITTINGS

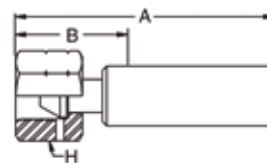
JIC Female swivel fitting: Stainless steel (AISI 316), other materials on request.

#	DN	size	mm	inch		A	B	H	bar	psi
1069X-12-12C	20	-12	19.0	3/4	1 1/16 - 12 UNF	96.0	43.0	36.0	345	5,000
1069X-16-16C	25	-16	25.4	1	1 5/16 - 12 UNF	102.5	47.5	41.0	345	5,000



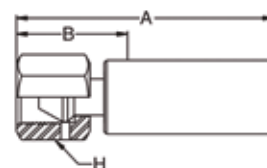
BSP Female swivel fitting: Stainless steel (AISI 316), other materials on request.

#	DN	size	mm	inch		A	B	H	bar	psi
1929X-12-12C	20	-12	19.0	3/4	G 3/4	96.0	43.0	36.0	345	5,000
1929X-16-16C	25	-16	25.4	1	G 1	93.5	40.5	41.0	345	5,000



Type "M" female swivel fitting: Stainless steel (AISI 316), other materials on request.

#	DN	size	mm	inch		A	B	H	bar	psi
1AY9X-16-12C	20	-12	19.0	3/4	1 5/16 - 12 UNF	105.0	39.0	38.0	560	8,100



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.

2440M CHEMJEC

CHEMICAL & TEMPERATURE RESISTANT



Offshore applications

#												Collapse pressure	Max length
	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m	bar	mtr
2440M-04V38	6	-04	6.4	1/4	13.1	865	12,500	3450	50,000	150.0	0.31	295	3,000
2440M-05V38	8	-05	8.3	5/16	16.2	690	10,000	2760	40,000	175.0	0.49	260	2,500
2440M-06V38	10	-06	9.9	3/8	19.5	690	10,000	2760	40,000	190.0	0.73	370	5,000
2440M-08V38	12	-08	12.9	1/2	22.7	690	10,000	2760	40,000	200.0	0.94	252	5,000
2440M-12V38	20	-12	19.8	3/4	30.2	690	10,000	2500	36,250	250.0	1.46	110	2,500
2440M-16V38-5K	25	-16	25.2	1	37.2	345	5,000	2250	32,625	300.0	2.05	65	4,000

APPLICATIONS

High pressure, high temperature, low volumetric expansion hose. Long length subsea umbilical hose. Applications for use with aggressive chemicals such as hydrochloric acid.

FEATURES

- Withstands high pressure cycles with no signs of stress cracking
 - High collapse resistance (HCR) while also providing longer service life
 - Meets or exceeds the performance requirements of ISO 13628-5 / API 17E
 - Coextruded fluoropolymer core tube for extreme chemical resistance
 - Excellent chemical resistance
- NOT recommended for gas applications.

CONSTRUCTION

Core tube: Coextruded core tube with fluoropolymer inside.
Pressure reinforcement: High strength wire.
Cover: PA12.
Colour: Gold.

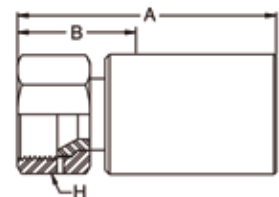
TEMPERATURE RANGE

-40°C up to +100°C, short term 125°C.
 -40°F up to +212°F, short term 257°F.

FITTINGS

JIC Female swivel fitting: Special stainless steel materials.

#						A	B			
	DN	size	mm	inch					mm	mm
1068X-6-04C	6	-04	6.4	1/4	9/16 - 18 UNF	66.0	33.0	19.0	1035	15,000
106LX-6-06C-M-Subsea	10	-06	9.5	3/8	9/16 - 18 UNF	87.0	34.0	19.0	690	10,000
106LX-6-06C-M-Subsea	10	-06	9.5	3/8	3/4 - 16 UNF	87.0	34.0	24.0	690	10,000
106LX-8-08C-M-Subsea	12	-08	12.7	1/2	3/4 - 16 UNF	100.0	35.0	24.0	690	10,000
106LX-16-12C4462	20	-12	19.0	3/4	1 5/16 - 12 UNF	99.0	43.0	41.0	690	10,000
106LX-16-16C4462	25	-16	25.4	1	1 5/16 - 12 UNF	77.0	25.5	41.0	345	5,000



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.



2448M CHEMJEC

CHEMICAL & TEMPERATURE RESISTANT

Hose applications

#												Collapse pressure	Max length
	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m	bar	mtr
2448M-04V38	6	-04	6.5	1/4	13.7	1035	15,000	4140	60,000	230.0	0.38	378	3,000
2448M-05V38	8	-05	8.2	5/16	16.3	1035	15,000	4140	60,000	230.0	0.52	385	2,500
2448M-06V38	10	-06	9.9	3/8	20.1	1035	15,000	4140	60,000	200.0	0.83	390	3,000

APPLICATIONS

Long length subsea umbilical hose. High pressure, high temperature, applications for use with aggressive chemicals. Long length subsea umbilical hose.

FEATURES

- Withstands high pressure cycles with no signs of stress cracking. High collapse resistance (HCR) while also providing long service life
 - Meets or exceeds the performance requirements of ISO 13628-5 / API 17E
 - Coextruded fluoropolymer core tube for extreme chemical resistance
 - Excellent chemical resistance
- NOT recommended for gas applications.

CONSTRUCTION

Core tube: Coextruded core tube with fluoropolymer inside.
Pressure reinforcement: High strength wire.
Cover: PA12.
Colour: Gold.

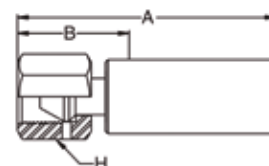
TEMPERATURE RANGE

-40°C up to +100°C, short term 125°C.
 -40°F up to +212°F, short term 257°F.

FITTINGS

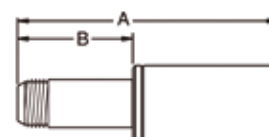
Type "M" female swivel fitting: Special stainless steel materials.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
1AYUX-6-04C	6	-04	6.4	1/4	9/16 - 18 UNF	86.0	34.0	19.0	1035	15,000
1AYUX-8-05C	8	-05	7.9	5/19	3/4 - 16 UNF	100.0	35.0	27.0	1035	15,000
1AYUX-8-06C	10	-06	9.5	3/8	3/4 - 16 UNF	93.5	38.5	27.0	1035	15,000



Medium pressure tube nipple: Special stainless steel materials.

#						A	B		
	DN	size	mm	inch				bar	psi
1Y2UX-6-04C	6	-04	6.4	1/4	3/8 - 24 UNF-LH	131.5	63.5	1380	20,000
1Y2UX-6-05-INC625	8	-05	7.9	5/16	3/8 - 24 UNF-LH	125.4	63.5	1380	20,000
1Y2UX-9-06C	10	-06	9.5	3/8	9/16 - 18 UNF-LH	151.0	72.0	1380	20,000



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.

2640M CHEMJEC

CHEMICAL & TEMPERATURE RESISTANT



Hose applications

#																
	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m	bar	collapse pressure	bar	Max length	mtr
2640M-08V38	12	-08	12.9	1/2	24.7	1035	15,000	4140	60,000	200.0	0.86	60			4,000	

APPLICATIONS

Medium pressure, high temperature, applications for use with aggressive chemicals such as hydrochloric acid. Long length subsea umbilical hose.

FEATURES

- Withstands high pressure cycles with no signs of stress cracking
 - Proven to handle methanol
 - High collapse resistance (HCR) and also providing longer service life
 - Meets or exceeds the performance requirements of ISO 13628-5 / API 17E
 - Excellent chemical resistance
- NOT recommended for gas application.

CONSTRUCTION

Core tube: Coextruded core tube with fluoropolymer inside.
Pressure reinforcement: High strength wire, synthetic fibre.
Cover: PA12.
Colour: Gold.

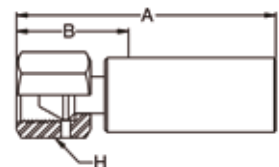
TEMPERATURE RANGE

-40°C up to +100°C, short term 125°C.
 -40°F up to +212°F, short term 257°F.

FITTINGS

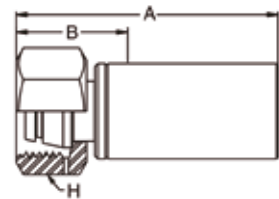
Type "M" female swivel fitting: Special stainless steel materials.

#										
	DN	size	mm	inch		A	B	H	bar	psi
1AY5X-11-08C-M-Subsea	12	-08	12.7	1/2	1 - 12 UNF-2B	111.0	56.0	32.0	1035	15,000



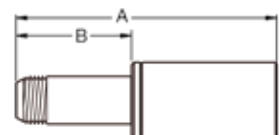
Metric swivel with O-ring heavy series: Special stainless steel materials.

#										
	DN	size	mm	inch		A	B	H	bar	psi
1C95X-16-08C-M-Subsea	12	-08	12.7	1/2	M24 x 1.5	88.0	34.0	32.0	1030	15,000



Medium pressure tube nipple: Special stainless steel materials.

#										
	DN	size	mm	inch		A	B		bar	psi
1Y25X-9-08C-M-Subsea	12	-08	12.7	1/2	9/16 - 18 UNF- LH	164.2	72.0		1035	15,000
1Y25X-12-08C-M-Subsea	12	-08	12.7	1/2	3/4 - 16 UNF- LH	174.2	84.0		1035	15,000



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.



2390N BOP & HOT LINE

Oil and Gas applications

#	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m	Collapse pressure bar	Max length mtr
2390N-04VXY	6	-04	6.4	1/4	13.4	490	7,105	1950	28,420	160.0	0.25	-	3,500
2390N-06VXY	10	-06	9.8	3/8	18.1	445	6,450	1780	25,800	120.0	0.41	150	3,500
2390N-08VXY	12	-08	12.9	1/2	21.2	415	6,020	1660	24,080	150.0	0.57	78	3,500
2390N-12VXY	20	-12	19.4	3/4	28.8	350	5,075	1400	20,300	300.0	0.90	53	3,200
2390N-16VXY	25	-16	25.2	1	35.0	280	4,060	1120	16,240	280.0	1.17	39	4,200

APPLICATIONS

Can be used with portable crimper for onsite offshore assembly. Low volumetric expansion hose. Used for subsea hydraulic controls long length hot-line hose for BOP systems.

FEATURES

- 4:1 offshore safety standard

CONSTRUCTION

Core tube: Polyamide.
Pressure reinforcement: High strength wire.
Cover: Polyurethane.
Colour: V10: Black; V12: Blue; V16: Yellow; V13: Green.

TEMPERATURE RANGE

-40°C up to +100°C, max. 70°C for water or methanol based fluids.
 -40°F up to +212°F, max. 158°F for water or methanol based fluids.

FITTINGS

JIC Female swivel fitting: Stainless steel (AISI 316), other materials on request.

#	DN	size	mm	inch		A	B	H	bar	psi
E206JCC3	6	-04	6.4	1/4	7/16 - 20 UNF	54.0	30.0	16.0	690	10,000
E206JEC3	6	-04	6.4	1/4	9/16 - 18 UNF	56.0	28.0	19.0	690	10,000
1069X-8-06C	10	-06	9.5	3/8	3/4 - 16 UNF	74.0	31.0	24.0	690	10,000
1069X-8-08C	12	-08	12.7	1/2	3/4 - 16 UNF	81.0	38.0	27.0	690	10,000
E213JFC4*	12	-08	12.7	1/2	3/4 - 16 UNF	85.0	41.0	24.0	690	10,000
1069X-12-12C	20	-12	19.0	3/4	1 1/16 - 12 UNF	96.0	43.0	36.0	345	5,000
1069X-16-16C	25	-16	25.4	1	1 5/16 - 12 UNF	102.5	47.5	41.0	345	5,000
E225JIC3*	25	-16	25.4	1	1 5/16 - 12 UNF	109.0	53.0	41.0	450	6,530

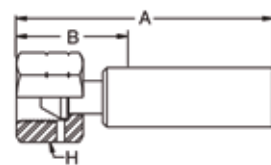
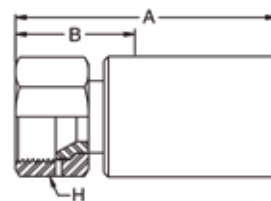
* SubSea fittings.

BSP Female swivel fitting: Stainless steel (AISI 316), other materials on request.

#	DN	size	mm	inch		A	B	H	bar	psi
1928X-4-04C	6	-04	6.4	1/4	G 1/4	56.0	25.0	19.0	690	10,000
1929X-6-06C	10	-06	9.5	3/8	G 3/8	74.0	19.0	22.0	690	10,000
1929X-8-08C	12	-08	12.7	1/2	G 1/2	70.0	27.0	27.0	690	10,000
1929X-12-12C	20	-12	19.0	3/4	G 3/4	77.0	26.0	32.0	345	5,000
1929X-16-16C	25	-16	25.4	1	G 1	93.5	40.5	41.0	345	5,000



Please Note: We reserve the right to make technical changes without notice.





UMBILICALS & JUMPERS HOSE ASSEMBLIES

APPLICATIONS

Abdex umbilicals are designed for use in the offshore industry to offer a combination of long service life, chemical resistance, flexibility, and lightweight construction. As Abdex is an independent supplier we can use products to suit specific customer requirements.

Customers can customise products with high resistant core tube materials capable to withstand aggressive fluids and gases often encountered in offshore applications.

The hose umbilicals can be supplied with different materials according to requirements of working pressure and weight. This is achieved by combining multiple layers of reinforcement material which can include aramid fibre or steel wire.

Abdex can design, manufacture, and test a large range of bespoke umbilical and jumper hoses specifically made to customer requirements. Umbilical re-termination and re-testing can also be offered.

CONSTRUCTION

Aramid fibre reinforced hose is extremely light and flexible with pressure capabilities up to 10,000 psi. Wire reinforced hose can be made in very long lengths, has low volumetric expansion and excellent tensile strength. In some cases they can be deployed unsupported.



Please Note: We reserve the right to make technical changes without notice.

HOSE UMBILICALS

FEATURES & BENEFITS

APPLICATIONS

Umbilicals take many forms and may contain hoses of different types, sizes and pressure ratings. This can include:

- High collapse resistant (HCR) lines for chemical injection
- Umbilicals can be static or dynamic or a combination of both. Lengths may vary from short, in the case of hydraulic flying leads (HFL) to the long, in the case of Workover and control umbilicals (WOCS).

Well control operations demand engineered solutions to maintain control over Blowout Preventers (BOP). Umbilicals and Jumper Bundles are part of the BOP hydraulic system which can be exposed to aggressive conditions and mechanical hazards. Specific cover materials and wire spiral reinforcement give excellent resistance to stress cracking at high pressures and give extremely low volumetric expansion which improves response times.

Chemical injection solutions are used to improve oil recovery through well stimulation, clean blocked perforations and aid flow issues. Polyflex chemical injection umbilicals are multiline hoses with low permeability and chemical resistance combined with the advantage of high working temperatures. Hydraulic control lines and chemical injection lines are available in several sizes to suit all applications.

FEATURES

- Long continuous lengths offered on short lead times (up to 3000m)
- High collapse resistance
- Meet or exceed the requirements of ISO13628-5 / API17E (Specification for Subsea Umbilicals)
- Can be supplied with a variety of covers including spiral guard, textile sleeve and extruded covers
- Withstands high pressure cycle tests (1380 bar, 20,000psi) with no signs of stress cracking
- Proven to handle methanol at 100°C (212°F) and 1035 bar (15,000 psi) working pressure
- Maintains a high percentage of minimum burst when tested at 125°C
- Low volumetric expansion for fast response time
- Weather and ultra high abrasion resistant. The hose is designed for offshore and subsea environments

BENEFITS

- In house design and manufacture
- Very short lead times can be offered
- Specifically designed offshore / subsea umbilicals and jumpers with manufacturer matched end fittings



Please Note: We reserve the right to make technical changes without notice.



2022N-5K

OFFSHORE ARAMID BRAIDED HOSE

Oil and Gas applications

#	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m	Collapse pressure	Max length
2022N-04V91-5K	6	-04	6.4	1/4	12.7	345	5,000	1380	20,000	51.0	0.12	40	3,000
2022N-06V91-5K	10	-06	9.7	3/8	16.1	345	5,000	1380	20,000	76.0	0.15	14	3,000
2022N-08V91-5K	12	-08	12.9	1/2	22.9	345	5,000	1380	20,000	102.0	0.17	<10	1,500

APPLICATIONS

Long length hose and hose umbilicals requiring lightweight construction. High pressure hydraulics, pneumatics and lubricating oils, high pressure tools, test apparatus, oilfield pressure control devices and offshore oil applications. 5,000 psi, offshore product.

FEATURES

- Aramid reinforcement results in a hose with low weight and high flexibility
- Smooth bore for improved flow rate and low pressure drop
- Fully compliant with ISO 13628-5 "Specification for Subsea Production Control Umbilicals"
- Methanol washed bore suitable for MEG use

CONSTRUCTION

Core tube: Polyamide 11, methanol washed.
Pressure reinforcement: High tensile aramid fibre braids.
Cover: Polyurethane.
Colour: Black.

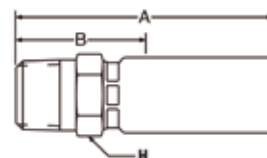
TEMPERATURE RANGE

-40°C up to +55°C.
 -40°F up to +131°F.

FITTINGS

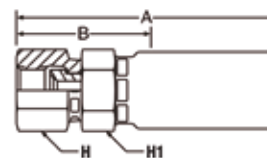
NPT Male 60° cone: Stainless steel (AISI 316), other materials on request.

#	DN	size	mm	inch		A	B	H	bar	psi
10155-4-4C	6	-04	6.4	1/4	1/4 - 18 NPTF	59.0	30.0	18.0	345	5,000
10155-6-6C	10	-06	9.5	3/8	3/8 - 18 NPTF	68.0	33.0	19.0	345	5,000
10155-8-8C	12	-08	12.7	1/2	1/2 - 14 NPTF	78.0	40.0	24.0	345	5,000



JIC Female swivel fitting: Stainless steel (AISI 316), other materials on request.

#	DN	size	mm	inch		A	B	H	H1	bar	psi
10655-4-4C	6	-04	6.4	1/4	7/16 - 20 UNF	60.0	31.0	16.0	14.0	345	5,000
10655-6-6C	10	-06	9.5	3/8	9/16 - 18 UNF	68.6	33.0	17.0	17.0	345	5,000
10655-8-8C	12	-08	12.7	1/2	3/4 - 16 UNF	78.1	38.0	22.0	22.0	345	5,000



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.

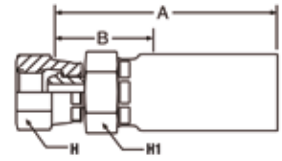
2022N-5K

OFFSHORE ARAMID BRAIDED HOSE



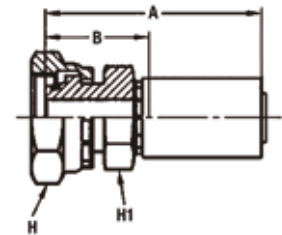
BSP Female swivel fitting: Stainless steel (AISI 316), other materials on request.

#						A	B				
	DN	size	mm	inch		mm	mm	mm	mm	bar	psi
19255-4-4C	6	-04	6.4	1/4	G 1/4	55.9	27.0	19.0	17.0	345	5,000
19255-6-6C	10	-06	9.5	3/8	G 3/8	62.0	27.0	22.0	19.0	345	5,000
19255-8-8C	12	-08	12.7	1/2	G 1/2	70.6	31.0	27.0	24.0	345	5,000



Metric swivel with O-ring heavy series: Stainless steel (AISI 316), other materials on request.

#						A	B				
	DN	size	mm	inch		mm	mm	mm	mm	bar	psi
1C955-8-4C	6	-04	6.4	1/4	M16 x 1.5	70.0	38.0	19.0	17.0	345	5,000
1C955-10-4C	6	-04	6.4	1/4	M18 x 1.5	67.0	36.0	22.0	19.0	345	5,000
1C955-12-4C	6	-04	6.4	1/4	M20 x 1.5	64.0	32.0	24.0	19.0	345	5,000
1C955-12-6C	10	-06	9.5	3/8	M20 x 1.5	68.0	32.0	24.0	19.0	345	5,000
1C955-16-8C	12	-08	12.7	1/2	M24 x 1.5	77.0	36.0	30.0	24.0	345	5,000



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.



2240N

WIRE REINFORCED OFFSHORE HOSE

Oil and Gas applications

#	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m	Collapse pressure	Max length
2240N-04V91	6	-04	6.5	1/4	11.6	430	6,250	1725	25,000	70.0	0.17	100	3,500

APPLICATIONS

Small OD, low volumetric expansion hose. Long length subsea umbilical hose.

FEATURES

- Low dimensional change under pressure which results in excellent response times
- Smooth bore for low pressure drop
- Offshore safety factor standard (4:1 SF)
- Meets or exceeds the performance requirements of ISO 13628-5
- Methanol washed Nylon PA11 core tube

CONSTRUCTION

Core tube: Methanol washed PA11.
Pressure reinforcement: High strength wire.
Cover: PA12.
Colour: Black.

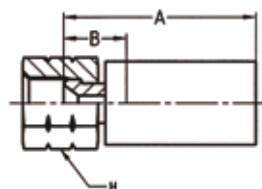
TEMPERATURE RANGE

-40°C up to +100°C, max. 70°C for water or methanol based fluids.
 -40°F up to +212°F, max. 158°F for water or methanol based fluids.

FITTINGS

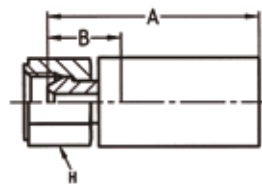
JIC Female swivel fitting: Stainless steel (AISI 316), other materials on request.

#	DN	size	mm	inch		A	B	H	bar	psi
106RX-4-04C	6	-04	6.4	1/4	7/16 - 20 UNF	52.0	23.0	17.0	430	6,250
106RX-6-04C	6	-04	6.4	1/4	9/16 - 18 UNF	53.5	24.5	19.0	430	6,250



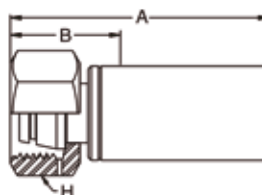
BSP Female swivel fitting: Stainless steel (AISI 316), other materials on request.

#	DN	size	mm	inch		A	B	H	bar	psi
192RX-4-04C	6	-04	6.4	1/4	G 1/4	50.5	22.0	17.0	430	6,250



Metric swivel fitting with O-ring heavy series: Stainless steel (AISI 316), other materials on request.

#	DN	size	mm	inch		A	B	H	bar	psi
1C9RX-8-04C	6	-04	6.4	1/4	M16 x 1.5	59.0	27.0	19.0	430	6,250
1C9RX-10-04C	6	-04	6.4	1/4	M18 x 1.5	65.0	33.0	22.0	430	6,250



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.

575X-12

OFFSHORE ARAMID BRAIDED



Oil and Gas applications

#	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m	Collapse pressure	Max length
575X-12	20	-12	19.0	3/4	29.0	345	5,000	1380	20,000	203.0	0.36	-	760

APPLICATIONS

Long length hose and hose umbilicals requiring lightweight construction. High pressure hydraulics, pneumatics and lubricating oils, high pressure tools, test apparatus, oilfield pressure control devices and offshore oil applications. 5,000 psi, offshore product.

FEATURES

- Aramid reinforcement results in a hose with low weight and high flexibility
- Smooth bore for improved flow rate and low pressure drop
- Conforms to ISO 13628-5 "Specification for Subsea Production Control Umbilicals"

CONSTRUCTION

Core tube: Polyamide.
Pressure reinforcement: High tensile aramid fibre braids.
Cover: Polyurethane.
Colour: Black.

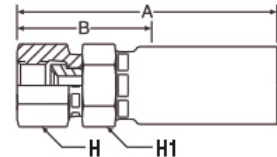
TEMPERATURE RANGE

-40°C up to +100°C.
 -40°F up to +212°F.

FITTINGS

JIC Female swivel fitting: AISI 316 / 316Ti.

#		A	B	H	H1	bar	psi
10658H-12-12C	1-1/16-12UNF	105.0	46.0	34.0	32.0	345	5,000



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.



2370N

WIRE REINFORCED OFFSHORE HOSE

Oil and Gas applications

#	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m	Collapse pressure	Max length
2370N-06V91	10	-06	9.7	3/8	16.5	430	6,250	1725	25,200	120.0	0.33	94	4,000

APPLICATIONS

Medium pressure, low volumetric expansion hose. Long length subsea umbilical hose. Available in long continuous lengths.

FEATURES

- Low dimensional change under pressure and results in excellent response times
- Smooth bore for low pressure drop
- Offshore safety factor standard (4:1 SF)
- Meets or exceeds the performance requirements of ISO 13628-5 / API 17E
- Methanol washed Nylon PA11 core tube

CONSTRUCTION

Core tube: Methanol washed PA11.
Pressure reinforcement: High strength wire, synthetic fibre.
Cover: PA12.
Colour: Black.

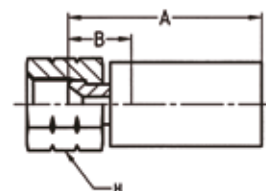
TEMPERATURE RANGE

-40°C up to +100°C, max. 70°C for water or methanol based fluids.
 -40°F up to +212°F, max. 158°F for water or methanol based fluids.

FITTINGS

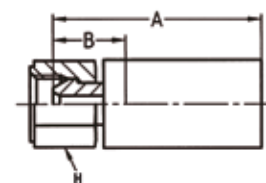
JIC Female swivel fitting: Stainless steel (AISI 316), other materials on request.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
106RX-6-06	10	-06	9.5	3/8	9/16 - 18UNF	58.0	28.0	19.0	430	6,250



BSP Female swivel fitting: Stainless steel (AISI 316), other materials on request.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
192RX-6-06C	10	-06	9.5	3/8	G3/8	55.0	25.0	22.0	430	6,250



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.

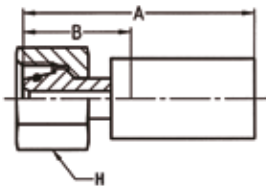
2370N

WIRE REINFORCED OFFSHORE HOSE



Metric swivel fitting with O-ring heavy series: Stainless steel (AISI 316), other materials on request.

#	DN	size	mm	inch		A	B	H	bar	psi
1C9RX-12-06C	10	-06	9.5	3/8	M20 x 1.5	56.0	28.0	24.0	430	6,250



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.



2390N

WIRE REINFORCED OFFSHORE HOSE

Oil and Gas applications

#	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m	Collapse pressure	Max length
2390N-06V91	10	-06	9.8	3/8	18.1	445	6,450	1780	25,800	120.0	0.41	150	3,500
2390N-08V91	12	-08	12.9	1/2	21.2	415	6,015	1660	24,070	150.0	0.57	78	5,000
2390N-12V91	20	-12	19.4	3/4	28.8	350	5,075	1400	20,300	300.0	0.90	75	3,200
2390N-16V91	25	-16	25.2	1	35.0	280	4,060	1120	16,240	280.0	1.17	39	5,000

APPLICATIONS

Low volumetric expansion hose. Used in subsea umbilicals, hydraulic controls and as long length methanol injection hose. Also used as a BOP hose.

FEATURES

- Low dimensional change under pressure and results in excellent response times
- Smooth bore for low pressure drop
- Offshore safety factor standard (4:1 SF)
- Meets or exceeds the performance requirements of ISO 13628-5 / API 17E
- Methanol washed Nylon PA11 core tube

CONSTRUCTION

Core tube: Methanol washed PA11.
Pressure reinforcement: High strength wire.
Cover: PA12.
Colour: Black.

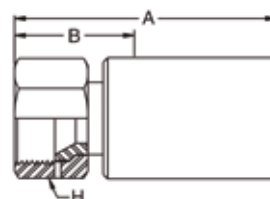
TEMPERATURE RANGE

-40°C up to +100°C, max. 70°C for water or methanol based fluids.
 -40°F up to +212°F, max. 158°F for water or methanol based fluids.

FITTINGS

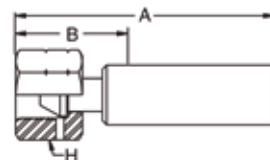
JIC Female swivel fitting: Stainless steel (AISI 316), other materials on request.

#	DN	size	mm	inch		A	B	H	bar	psi
1069X-8-06C	10	-06	9.5	3/8	3/4 - 16 UNF	74.0	31.0	24.0	690	10,000
1069X-8-08C	12	-08	12.7	1/2	3/4 - 16 UNF	81.0	38.0	27.0	690	10,000
1069X-12-12C	20	-12	19.0	3/4	1 1/16 - 12 UNF	96.0	43.0	36.0	345	5,000
1069X-16-16C	25	-16	25.4	1	1 5/16 - 12 UNF	102.5	47.5	41.0	345	5,000



BSP Female swivel fitting: Stainless steel (AISI 316), other materials on request.

#	DN	size	mm	inch		A	B	H	bar	psi
1929X-6-06C	10	-06	9.5	3/8	G 3/8	63.5	24.5	22.0	690	10,000
1929X-8-08C	12	-08	12.7	1/2	G 1/2	70.0	27.0	27.0	690	10,000
1929X-12-12C	20	-12	19.0	3/4	G 3/4	77.0	26.0	32.0	345	5,000
1929X-16-16C	25	-16	25.4	1	G 1	93.5	40.5	41.0	345	5,000



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.

2340N - 10,000 PSI

WIRE REINFORCED OFFSHORE HOSE



Oil and Gas applications

#												Collapse pressure	Max length
	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m	bar	mtr
2340N-04V91	6	-04	6.4	1/4	12.5	690	10,000	2760	40,000	70.0	0.23	154	3,500

APPLICATIONS

High pressure hose used in HFL's, jumpers, long length umbilicals, 10,000 psi tooling and testing.

FEATURES

- Low dimensional change under pressure
- Smooth bore for low pressure drop
- Offshore safety factor standard (4:1 SF)
- Meets or exceeds the performance requirements of ISO 13628-5 / API 17E
- Methanol washed Nylon PA11 core tube
- Long length subsea umbilical hose
- Available in long continuous length up to 3,500m

CONSTRUCTION

Core tube: Methanol washed PA11.
Pressure reinforcement: High strength wire.
Cover: PA12.
Colour: Black.

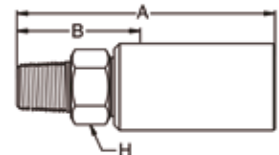
TEMPERATURE RANGE

-40°C up to +100°C, max. 70°C for water or methanol based fluids.
 -40°F up to +212°F, max. 158°F for water or methanol based fluids.

FITTINGS

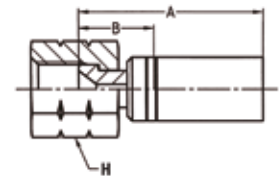
NPT Male: Stainless steel (AISI 316), other materials on request.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
1018X-4-04C	6	-04	6.4	1/4	1/4 NPT	60.0	28.0	16.0	1100	16,000



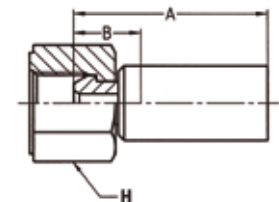
JIC Female swivel fitting: Stainless steel (AISI 316), other materials on request.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
1068X-4-04C	6	-04	6.4	1/4	7/16 - 20 UNF	68.5	35.5	19.0	690	10,000
1068X-6-04C	6	-04	6.4	1/4	9/16 - 18 UNF	66.0	33.0	19.0	1035	15,000



BSP Female swivel fitting: Stainless steel (AISI 316), other materials on request.

#						A	B			
	DN	size	mm	inch					bar	psi
1928X-4-04C	6	-04	6.4	1/4	G 1/4	56.0	32.0	19.0	690	10.000



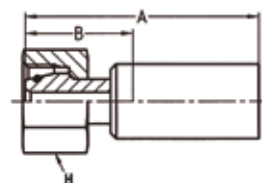
Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.



2340N - 10,000 PSI WIRE REINFORCED OFFSHORE HOSE

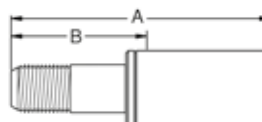
Metric swivel nut with O-ring Heavy series: Stainless steel (AISI 316), other materials on request.

#	DN	size	mm	inch		A	B	H	bar	psi
1C98X-8-04C	6	-04	6.4	1/4	M16 x 1.5	59.0	27.0	19.0	690	10,000
1C98X-10-04C	6	-04	6.4	1/4	M18 x 1.5	65.0	33.0	22.0	690	10,000



Medium pressure tube nipple: Stainless steel (AISI 316), other materials on request.

#	DN	size	mm	inch		A	B	bar	psi
1Y28X-6-04C	6	-04	6.4	1/4	3/8 - 24 LH	120.0	87.0	1380	20,000



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.

2380N

WIRE SPIRAL OFFSHORE HOSE



Oil and Gas applications

#												Collapse	Max
	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m	bar	length
2380N-04V91	6	-04	6.4	1/4	13.4	690	10,000	2760	40,000	70.0	0.27	224	3,200
2380N-06V91	10	-06	9.8	3/8	17.9	517	7,500	2070	30,000	120.0	0.44	125	3,500
2380N-08V91	12	-08	12.9	1/2	22.9	517	7,500	2070	30,000	150.0	0.68	164	3,000

APPLICATIONS

Small diameter, low volumetric expansion hose used in jumpers and umbilicals as hydraulic control lines and gas injection. Long length subsea umbilical hose commonly used offshore.

FEATURES

- Low dimensional change under pressure which results in excellent response times
- Smooth bore for low pressure drop
- Offshore safety factor standard (4:1 SF)
- Meets or exceeds the performance requirements of ISO 13628-5 / API 17
- Methanol washed Nylon PA11 core tube

CONSTRUCTION

Core tube: Methanol washed PA11.
Pressure reinforcement: High strength wire.
Cover: PA12.
Colour: Black.

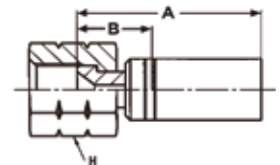
TEMPERATURE RANGE

-40°C up to +100°C, max. 70°C for water or methanol based fluids.
 -40°F up to +212°F, max. 158°F for water or methanol based fluids.

FITTINGS

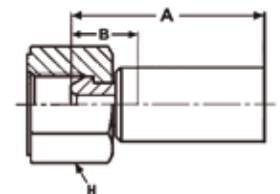
JIC Female swivel fitting: Stainless steel (AISI 316), other materials on request.

#						A	B	H		
	DN	size	mm	inch		mm	mm	mm	bar	psi
1068X-6-04C	6	-04	6.4	1/4	9/16 - 18 UNF	66.0	33.0	19.0	690	10,000
1068X-8-06C	10	-06	9.5	3/8	3/4 - 16 UNF	69.5	30.5	24.0	690	10,000
1068X-4-04C	6	-04	6.4	1/4	7/16 - 20UNF	57.0	26.0	19.0	690	10,000
106LX-8-08C	12	-08	12.9	1/2	3/4 - 16UNF	94.0	39.4	27.0	690	10,000



BSP Female swivel fitting: Stainless steel (AISI 316), other materials on request.

#						A	B	H		
	DN	size	mm	inch		mm	mm	mm	bar	psi
1928X-4-04C	6	-04	6.4	1/4	G 1/4	56.0	32.0	19.0	690	10,000
1928X-6-06C	10	-06	9.5	3/8	G 3/8	57.5	18.5	22.0	690	10,000
192NX-24-20C	32	-20	31.8	1 1/4	G 1 1/4	91.9	30.0	60.0	275	4,000



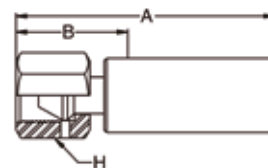
Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.



2380N WIRE SPIRAL OFFSHORE HOSE

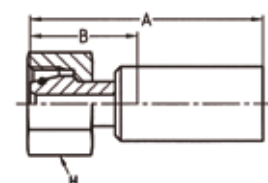
Type "M" female swivel fitting: Stainless steel (AISI 316), other materials on request.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
1AY8X-6-04C	6	-04	6.4	1/4	9/16 - 18 UNF	66.0	33.0	19.0	1035	15,000
1AY8X-8-06C	10	-06	9.5	3/8	3/4 - 16 UNF	75.0	32.0	25.0	1035	15,000



Metric swivel nut with O-ring heavy series: Stainless steel (AISI 316), other materials on request.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
1C98X-8-04C	6	-04	6.4	1/4	M16 x 1.5	59.0	27.0	19.0	690	10,000
1C98X-10-04C	6	-04	6.4	1/4	M18 x 1.5	65.0	33.0	22.0	690	10,000
1C93X-14-06C	10	-06	9.5	3/8	M22 x 1.5	75.0	30.0	30.0	690	10,000
1C93X-16-06C	10	-06	9.5	3/8	M24 x 1.5	88.0	34.0	30.0	690	10,000
1C9LX-16-08C	12	-08	12.7	1/2	M24 x 1.5	88.0	34.0	30.0	690	10,000
1C9NX-38-20C	32	-20	31.8	1 1/4	M52 x 2	113.0	52.0	60.0	275	4,000



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.

2022N-10K

ARAMID BRAIDED OFFSHORE HOSE



Oil and Gas applications

#	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m	bar	mtr
2022N-04V91-10K	6	-04	6.4	1/4	13.8	690	10,000	2760	40,000	100.0	0.14	59	3,100
2022N-06V91-10K	10	-06	9.7	3/8	19.0	690	10,000	2760	40,000	100.0	0.24	35	1,950
2022N-08V91-10K	12	-08	12.8	1/2	23.1	690	10,000	2760	40,000	100.0	0.34	16.1	1,000

APPLICATIONS

Long length hose and hose umbilicals requiring lightweight construction. High pressure hydraulics, pneumatics and lubricating oils, high pressure tools, test apparatus, oilfield pressure control devices and offshore oil applications. 10,000 psi offshore equipment.

FEATURES

- Aramid reinforcement results in a hose with low weight and high flexibility
- Smooth bore for improved flow rate and low pressure drop
- Fully compliant to ISO 13628-5 / API 17E "Specification for Subsea Production Control Umbilicals"
- Methanol washed bore suitable for MEG use

CONSTRUCTION

Core tube: Polyamide 11, methanol washed.
Pressure reinforcement: High tensile aramid fibre braids.
Cover: Polyurethane.
Colour: Black.

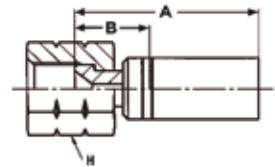
TEMPERATURE RANGE

-40°C up to +55°C.
-40°F up to +131°F.

FITTINGS

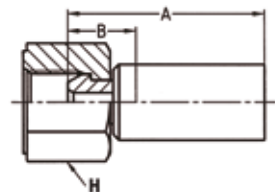
JIC Female swivel fitting: Stainless steel (AISI 316), other materials on request.

#	DN	size	mm	inch		A	B	H	bar	psi
1068X-4-04C	6	-04	9.5	3/8	7/16 - 20 UNF	69.0	33.0	22.0	690	10,000
1068X-6-04C	6	-04	6.4	1/4	9/16 - 18 UNF	55.0	24.0	19.0	690	10,000
1063X-6-06C	10	-06	9.5	3/8	9/16 - 18 UNF	74.5	27.5	22.0	690	10,000
106LX-8-08C	12	-08	12.7	1/2	3/4 - 16 UNF	94.0	39.4	27.0	690	10,000



BSP Female swivel fitting: Stainless steel (AISI 316), other materials on request.

#	DN	size	mm	inch		A	B	H	bar	psi
1928X-4-04C	6	-04	6.4	1/4	G 1/4	56.0	32.0	19.0	690	10,000
1923X-8-06C	10	-06	9.5	3/8	G 1/2	67.0	21.5	30.0	690	10,000
192LX-8-08C	12	-08	12.7	1/2	G 1/2	76.0	21.0	30.0	690	10,000



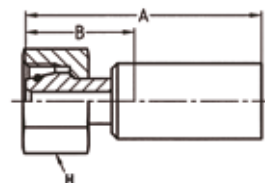
Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.



2022N-10K ARAMID BRAIDED OFFSHORE HOSE

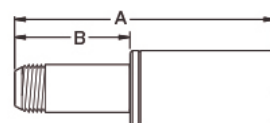
Metric swivel nut with O-ring heavy series: Stainless steel (AISI 316), other materials on request.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
1C98X-8-04C	6	-04	6.4	1/4	M16 x 1.5	59.0	27.0	19.0	690	10,000
1C98X-10-04C	6	-04	6.4	1/4	M18 x 1.5	65.0	33.0	22.0	690	10,000
1C93X-14-06C	10	-06	9.5	3/8	M22 x 1.5	75.0	30.0	30.0	690	10,000
1C93X-16-06C	10	-06	9.5	3/8	M24 x 1.5	88.0	34.0	30.0	690	10,000
1C9LX-16-08C	12	-08	12.7	1/2	M24 x 1.5	88.0	34.0	30.0	690	10,000

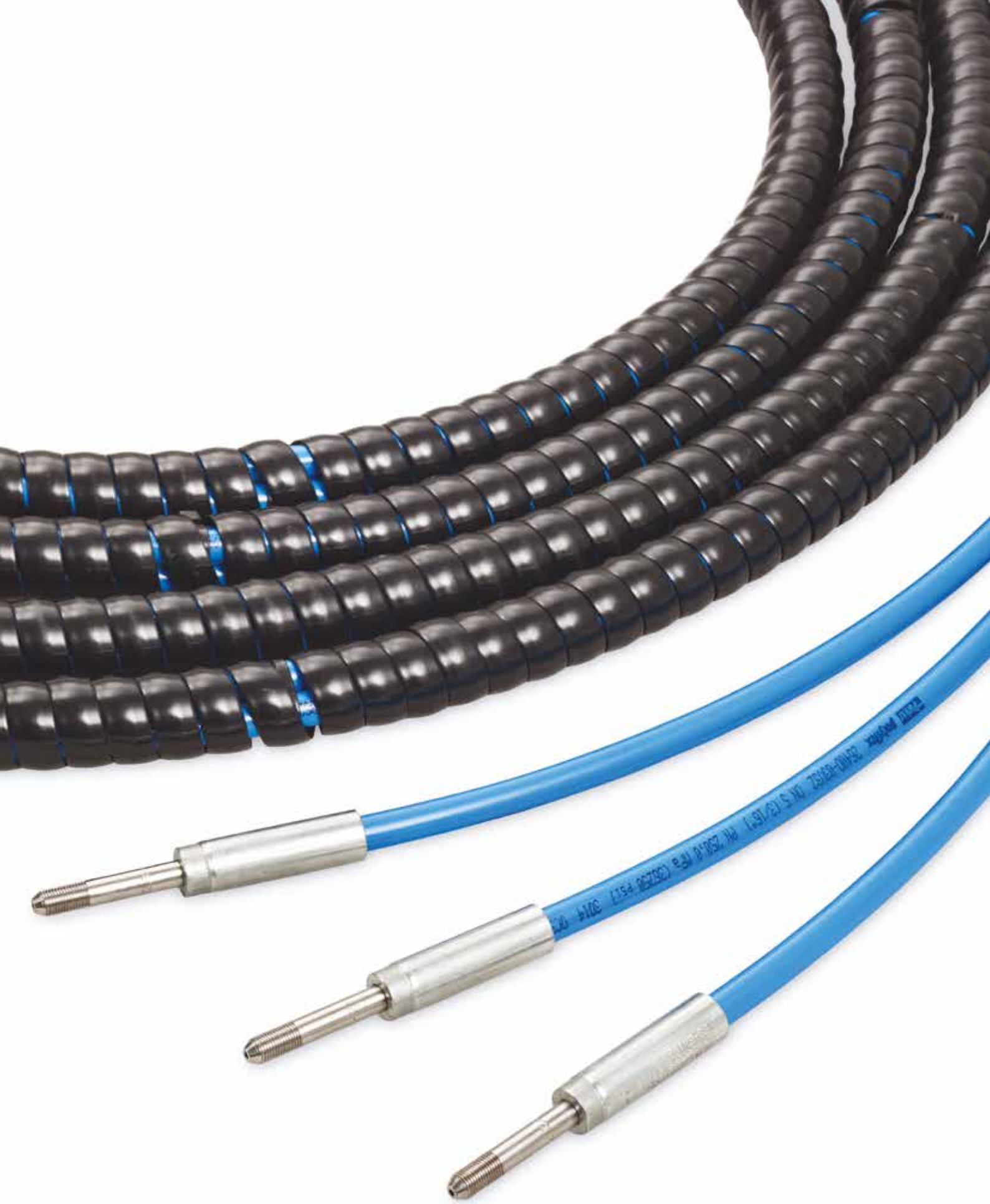


Medium pressure tube nipple: Stainless steel AISI 316 / 316Ti.

#		A	B		
		mm	mm	bar	psi
1Y2LX-12-08C	3/4 - 16 UNF-LH	157.5	103.5	1380	20,000



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.





2440N WIRE SPIRAL OFFSHORE HOSE

Oil and Gas applications

#	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m	Collapse pressure bar	Max length mtr
2440N-04V91	6	-04	6.4	1/4	13.1	865	12,500	3450	50,000	150.0	0.31	247	3,000
2440N-06V91	10	-06	9.8	3/8	19.5	865	12,500	3450	50,000	190.0	0.73	322	5,000
2440N-08V91	12	-08	12.7	1/2	22.7	810	11,750	3250	46,980	200.0	0.94	198	5,000
2440N-12V91	20	-12	19.8	3/4	30.2	690	10,000	2500	36,250	250.0	1.46	105	4,000
2440N-16V91	25	-16	25.2	1	37.2	560	8,120	2250	32,625	300.0	2.0	60	4,000

APPLICATIONS

Long length subsea umbilical hose suitable in deep sea applications. Used for MEG and gas injection when high pressures are required.

FEATURES

- Low dimensional change under pressure which results in excellent response times
- Smooth bore for low pressure drop
- Offshore safety factor standard (4:1 SF)
- Meets or exceeds the performance requirements of ISO 13628-5 / API 17E
- Methanol washed Nylon PA11 core tube

CONSTRUCTION

Core tube: Methanol washed PA11.
Pressure reinforcement: High strength wire.
Cover: PA12.
Colour: Black.

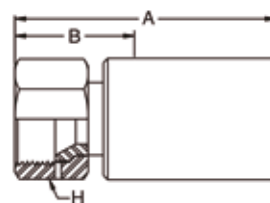
TEMPERATURE RANGE

-40°C up to +100°C, max. 70°C for water or methanol based fluids.
 -40°F up to +212°F, max. 158°F for water or methanol based fluids.

FITTINGS

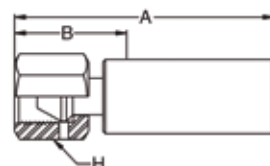
JIC Female swivel fitting: Stainless steel (AISI 316), other materials on request.

#	DN	size	mm	inch		A	B	H	bar	psi
106LX-6-04C	6	-04	6.4	1/4	9/16 - 18 UNF	77.0	32.0	19.0	1035	15,000
106LX-6-06C	10	-06	9.5	3/8	9/16 - 18 UNF	74.5	29.0	22.0	690	10,000
106LX-8-06C	10	-06	9.5	3/8	3/4 - 16 UNF	78.0	32.5	24.0	365	12,500
106LX-8-08C	12	-08	12.7	1/2	3/4 - 16 UNF	94.0	40.0	27.0	810	11,700
106LX-16-12C	20	-12	19.0	3/4	1 5/16 - 12 UNF	109.0	43.0	41.0	690	10,000
606LX-16-16C	25	-16	25.4	1	1 5/16 - 12 UNF	96.0	42.0	38.0	690	10,000



Type "M" female swivel fitting: Stainless steel (AISI 316), other materials on request.

#	DN	size	mm	inch		A	B	H	bar	psi
1AYLX-6-04C	6	-04	6.4	1/4	9/16 - 18 UNF	79.0	34.0	22.0	1035	15,000
1AYLX-8-06C	10	-06	9.5	3/8	3/4 - 16 UNF	78.0	32.0	27.0	1035	15,000
1AYLX-11-08C	12	-08	12.7	1/2	1 - 12 UNF	90.0	36.5	32.0	1035	15,000
1AYLX-16-12C	20	-12	19.0	3/4	1 5/16 - 12 UNF	92.0	38.0	41.0	1035	15,000



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.

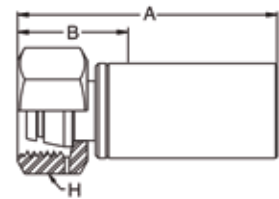
2440N

WIRE SPIRAL OFFSHORE HOSE



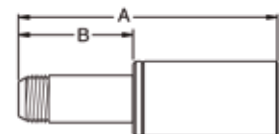
Metric swivel with O-ring heavy series: Stainless steel (AISI 316), other materials on request.

#						A	B			
	DN	size	mm	inch		mm	mm		bar	psi
1C9LX-10-04C	6	-04	6.4	1/4	M18 x 1.5	70.0	33.0	22.0	140	20,300
1C9LX-14-06C	10	-06	9.5	3/8	M22 x 1.5	76.0	30.0	30.0	865	12,500
1C9LX-16-08C	12	-08	12.7	1/2	M24 x 1.5	88.0	34.0	32.0	810	11,700
1C9LX-25-12C	20	-12	19.0	3/4	M36 x 2	108.0	40.0	46.0	630	9,100



Medium pressure tube nipple: Stainless steel (AISI), other materials on request.

#						A	B		
	DN	size	mm	inch		mm	mm	bar	psi
1Y2LX-3-04C*	6	-04	6.4	1/4	3/8 - 24 UNF-LH	109.0	64.0	1380	20,000
1Y2LX-12-08C	12	-08	12.7	1/2	3/4 - 16 UNF-LH	157.5	103.5	1380	20,000



*Nipple made from super duplex, shell stainless steel (AISI316).



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.



2440N-16V91-10K

V91 OFFSHORE

Oil and Gas applications

#	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m	Collapse pressure	Max length
2440N-16V91-10K	25	-16	25.2	1	37.2	690	32,625	2250	32,625	300.0	2.00	600	870

APPLICATIONS

Long length subsea umbilical hose suitable in deep sea applications. Used for MEG and chemical injection. 10,000 psi tooling.

FEATURES

- Low dimensional change under pressure which results in excellent response times
- Smooth bore for low pressure drop
- Meets or exceeds the performance requirements of ISO 13628-5 / API 17E
- Methanol washed Nylon PA11 core tube

CONSTRUCTION

Core tube: Methanol washed PA11.
Pressure reinforcement: High strength wire.
Cover: PA12.
Colour: Black.

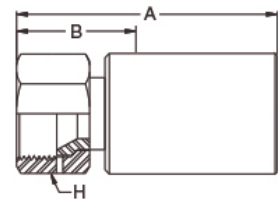
TEMPERATURE RANGE

-40°C up to +100°C, max. 70°C for water or methanol based fluids.
 -40°F up to +212°F, max. 158°F for water or methanol based fluids.

FITTINGS

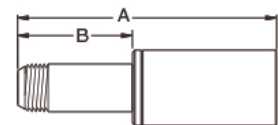
JIC Female swivel fitting: Special stainless steel materials.

#		A	B	H	bar	psi
606LX-16-16C	1 5/16 - 12UNF	96.0	42.0	38.0	690	10,000



Medium pressure tube nipple: Special stainless steel materials.

#		A	B	bar	psi
1Y2LX-16-16C4462	1-14 UNS - LH	181.0	127.0	1380	20,000



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.

2448N

WIRE SPIRAL OFFSHORE HOSE



Oil and Gas applications

#	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m	Collapse pressure	Max length
2448N-04V91	6	-04	6.4	1/4	13.7	1035	15,000	4140	60,000	150.0	0.38	448	2,750

APPLICATIONS

Long length subsea umbilical hose suitable in deep sea applications.

FEATURES

- Low dimensional change under pressure which results in excellent response times.
- Smooth bore for low pressure drop
- Offshore safety factor standard (4:1 SF)
- Meets or exceeds the performance requirements of ISO 13628-5 / API 17E
- Methanol washed Nylon PA11 core tube

CONSTRUCTION

Core tube: Methanol washed PA11.
Pressure reinforcement: High strength wire.
Cover: PA12.
Colour: Black.

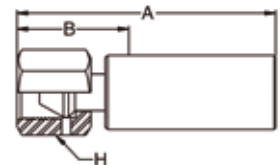
TEMPERATURE RANGE

-40°C up to +100°C, max. 70°C for water or methanol based fluids.
 -40°F up to +212°F, max. 158°F for water or methanol based fluids.

FITTINGS

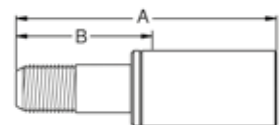
Type "M" female swivel fitting: Stainless steel (AISI 316), other materials on request.

#						A	B			
	DN	size	mm	inch		mm	mm	mm	bar	psi
1AY8X-6-04C	6	-04	6.4	1/4	9/16 - 18 UNF	66.0	33.0	19.0	1035	15,000



Medium pressure tube nipple: Stainless steel (AISI 316), other materials on request.

#						A	B		
	DN	size	mm	inch				bar	psi
1Y28X-6-04C	6	-04	6.4	1/4	3/8 - 24 LH	120.0	87.0	1380	20,000



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.



2640N WIRE SPIRAL OFFSHORE HOSE

Oil and Gas applications

#	DN	size	mm	inch	mm	bar	psi	bar	psi	mm	kg/m	Collapse pressure	Max length
2640N-12V91	20	-12	19.8	3/4	33.2	865	12,500	3500	50,800	350.0	2.16	120	3,500

APPLICATIONS

Long length subsea umbilical hose suitable in deep sea applications for very high pressure.

FEATURES

- Low dimensional change under pressure which results in excellent response times
- Smooth bore for low pressure drop
- Offshore safety factor standard (4:1 SF)
- Meets or exceeds the performance requirements of ISO 13628-8 / API 17E
- Methanol washed Nylon PA11 core tube

CONSTRUCTION

Core tube: Methanol washed PA11.
Pressure reinforcement: High strength wire.
Cover: PA12.
Colour: Black.

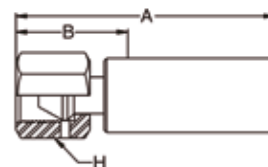
TEMPERATURE RANGE

-40°C up to +100°C, max. 70°C for water or methanol based fluids.
 -40°F up to +212°F, max. 158°F for water or methanol based fluids.

FITTINGS

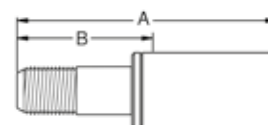
Type "M" female swivel fitting: Special stainless steel material.

#	DN	size	mm	inch	A	B	H	bar	psi
6AY5X-16-12C	20	-12	19.0	3/4	1 5/16 - 12UNF	108.0	40.6	38.0	1035 15,000



Medium pressure tube nipple: Special stainless steel material.

#	DN	size	mm	inch	A	B	bar	psi
6Y25X-16-12C	20	-12	19.0	3/4	1 - 1/4 LH	182.2	100.0	1380 20,000



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.

HOSE UMBILICALS

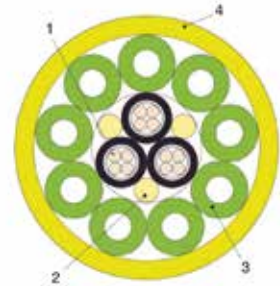
TYPICAL BUNDLE CONFIGURATIONS

Description

1. Light weight Aramid reinforced hoses of 5,000 psi working pressure.
2. Incorporated electrical cables.
3. Wellhead testing umbilical, 850 meters continuous length.

OD = 70 mm

4	1x	PU cover, yellow
3	9x	Polyflex hose 2022N-04V91
2	3x	PA rope
1	3x	Electric cable

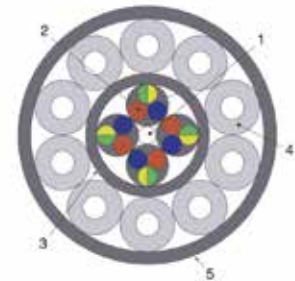


Description

1. Light weight Aramid reinforced hoses of 5,000 psi working pressure.
2. Incorporated electrical cable with SS wire as tensile strength member.
3. Low pressure umbilical for hydraulic / electrical power, 500 meters continuous length.

OD = 52 mm

5	1x	Polyurethane sheath
4	10x	Hydraulic hose 550H-3
3	1x	Electric cable outer sheath - Polyurethane
2	4x	Electric cable RADOX 125, black, 3X0, 75 mm² + SCR
1	1x	SS Wire + plastic sheath

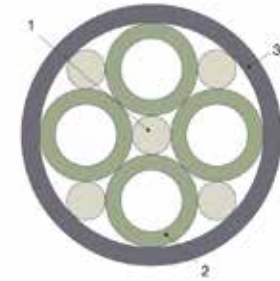


Description

1. Wire reinforced hoses of 15,000 psi working pressure.
2. Hydraulic control umbilical, 400 meters continuous length.

OD = 90 mm

3	1x	TPU outer jacket
2	4x	Polyflex hose 2440N-12V91
1	5x	PA rope filler

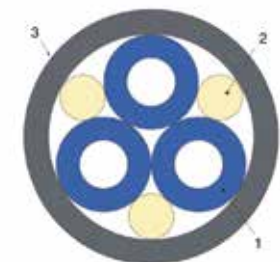


Description

1. Wire reinforced hoses of 15,000 psi working pressure.
2. Wellhead testing umbilical, 2,000 meters continuous length.

OD = 33 mm

3	1x	PUR outer jacket
2	3x	Filler
1	3x	High pressure hose 2440N-03V32



Please Note: We reserve the right to make technical changes without notice.

HOSE UMBILICALS

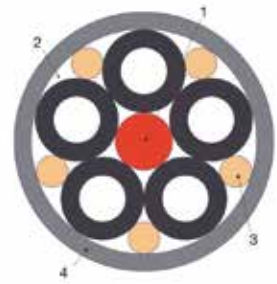
TYPICAL BUNDLE CONFIGURATIONS

Description

1. Wire reinforced hoses of 15,000 psi working pressure.
2. Hydraulic control umbilical, 500 meters continuous length.

OD = 72 mm

4	1x	TPU outer jacket
3	5x	Filler
2	5x	High pressure hose 2440N-08V91
1	1x	PA rope

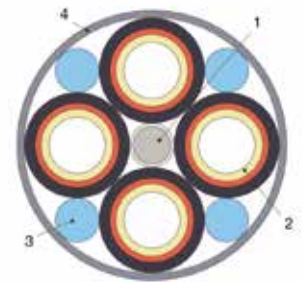


Description

1. Wire reinforced hoses of 15,000 psi working pressure.
2. Choke and kill umbilical, 110 meters continuous length.

OD = 160 mm

4	1x	Heavy duty polyester braid
3	5x	PA rope filler
2	5x	Polyflex hose 2640N-24V80
1	1x	Steel rope, nylon coated (ca. 15 tons)



Please Note: We reserve the right to make technical changes without notice.



RUBBER

RUBBER HOSE

Not every application calls for specialised materials and fittings. Abdex has been manufacturing a wide range of rubber hose assemblies for over 40 years. Today our hoses are used in countless sectors, in oil and gas, waterblasting, automotive, mining and agriculture. Our partners in rubber hose include every major name: Parker Hannifin, Manuli Hydraulics, Contitech, and Eaton.

ADVANTAGES

There's an Abdex rubber hose assembly to suit every application. A wide range of fittings including, BSP, metric, JIC, NPT, flanges, SAE and hammer unions are all available from stock. Every Abdex rubber hose assembly can be pressure tested and certified to international standards. We also offer a full hose management service and can individually trace each assembly produced.

APPLICATIONS

Abdex offers a complete range of hose assemblies to cover many applications including: hydraulic fluid lines, water jetting and blasting, high flow / pressure mud and cement delivery, 10,000 psi jacking and many more. However tall your order, from 1/4in 700 bar (10,000 psi) to 2in 550 bar (8,000 psi) working pressure, you'll get what you need from Abdex, from stock.

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Transportation applications

#									
	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
206-4	5.0	3/16	13.2	207	3,000	830	12,000	75.0	0.22
206-5	6.3	1/4	14.8	207	3,000	860	12,000	85.0	0.27
206-6	8.0	5/16	17.1	155	2,250	620	9,000	90.0	0.34
206-8	10.0	13/32	19.5	138	2,000	550	8,000	90.0	0.40
206-10	12.5	1/2	23.4	122	1,750	480	7,000	100.0	0.55
206-12	16.0	5/8	27.4	103	1,500	410	6,000	100.0	0.60
206-16	22.0	7/8	31.4	55	800	220	3,200	100.0	0.68
206-20	29.0	1 1/8	38.1	43	625	170	2,500	140.0	0.76
206-24	35.0	1 3/8	44.5	35	500	140	2,000	190.0	1.01
206-32	46.0	1 13/16	56.4	24	350	100	1,400	335.0	1.32

APPLICATIONS

Petroleum based hydraulic fluids and lubricating oils, diesel fuels and anti-freeze solutions.

FEATURES

- Available with field attachable fittings
- Can also be used on vacuum type applications
- DOT air brake certification

CONSTRUCTION

Core tube: PKR - elastomer tube.
Pressure reinforcement: One fibre braid and one steel braid.
Cover: Fibre braid, blue.

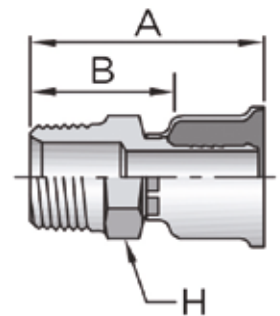
TEMPERATURE RANGE

-48°C to +150°C.

FITTINGS

Male NPTF pipe - rigid

#			A	B		Additional Material
	inch		mm	mm	inch	Brass
10126-2-4	3/16	1/8 x 27	42.0	20.0	0.78	-
10126-4-4	3/16	1/4 x 18	48.0	26.0	1.01	-
10126-4-5	1/4	1/4 x 18	48.0	26.0	1.01	-
10126-4-6	5/16	1/4 x 18	48.0	26.0	1.02	✓
10126-6-6	5/16	3/8 x 18	48.0	26.0	1.03	✓
10126-6-8	13/32	3/8 x 18	48.0	26.0	1.03	✓
10126-8-8	13/32	1/2 x 14	54.0	33.0	1.28	✓
10126-8-10	1/2	1/2 x 14	57.0	33.0	1.30	✓
10126-12-12	5/8	3/4 x 14	59.0	35.0	1.37	✓
10126-16-16	7/8	1 x 11 - 1/2	66.0	40.0	1.57	-
10126-20-20	1 1/8	1 1/4 x 11 - 1/2	72.0	45.0	1.77	-
10126-24-24	1 3/8	1 1/2 x 11 - 1/2	76.0	49.0	1.93	-
10126-32-32	1 13/16	2 x 11 - 1/2	87.0	55.0	2.18	-



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.



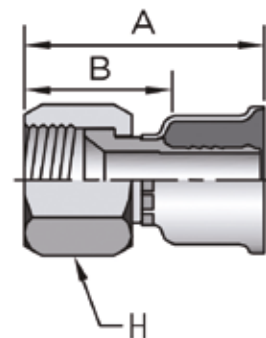
206

WIRE BRAID TEXTILE R5 HOSE

RUBBER HOSE - HYDRAULIC

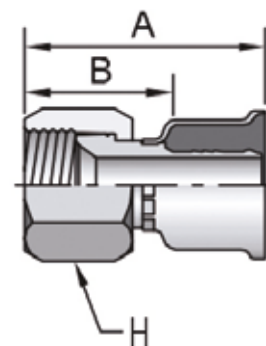
Female JIC 37° - swivel

#			A	B		Additional Material
	inch		mm	mm	inch	Brass
10626-6-6	5/16	9/16 x 18	45.0	23.0	1 1/16	✓
10626-6-8	13/32	9/16 x 18	52.0	30.0	1 1/16	✓
10626-12-12	5/8	1 1/16 x 12	58.0	34.0	1 1/4	✓
10626-16-16	7/8	1 5/16 x 12	64.0	38.0	1 1/2	✓
10626-20-20	1 1/8	1 5/8 x 12	65.0	38.0	2	✓
10626-24-24	1 1/2	1 7/8 x 12	70.0	43.0	2 1/4	-
10626-32-32	1 13/16	2 1/2 x 12	84.0	52.0	2 7/8	-



Female JIC 37° / SAE 45° - dual flare - swivel

#			A	B		Additional Material
	inch		mm	mm	inch	Brass
16826-4-4	3/16	7/16 x 20	42.0	20.0	9/16	✓
16826-4-5	1/4	7/16 x 20	48.0	26.0	9/16	-
16826-4-6	5/16	7/16 x 20	39.0	17.0	9/16	-
16826-5-5	1/4	1/2 x 20	45.0	23.0	5/8	-
16826-8-6	5/16	3/4 x 16	56.0	34.0	7/8	-
16826-8-8	13/32	3/4 x 16	49.0	27.0	7/8	-
16826-8-10	1/2	3/4 x 16	60.0	36.0	7/8	✓
16826-10-10	1/2	7/8 x 14	55.0	31.0	1	✓
16826-10-12	5/8	7/8 x 14	61.0	37.0	1	-



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.

R6

TEXTILE BRAID RUBBER HOSE



Hydraulic applications

#									
	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
611-4	6.0	1/4	13.0	28	400	112	1,600	65.0	0.10
611-6	10.0	3/8	16.0	28	400	112	1,600	75.0	0.16
611-8	13.0	1/2	20.0	28	400	112	1,600	100.0	0.27
611-10	16.0	5/8	23.0	24	350	96	1,400	130.0	0.28
611HT-12	19.0	3/4	26.0	21	300	84	1,200	150.0	0.36

APPLICATIONS

Petroleum based hydraulic fluids and lubricating oils.

FEATURES

- Available with field attachable fittings
- High Temperature service
- SAE J517 / R6 Certification

CONSTRUCTION

Core tube: Synthetic rubber.
Pressure reinforcement: Single textile fibre braid.
Cover: Synthetic rubber, MSHA accepted.

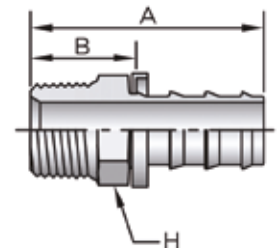
TEMPERATURE RANGE

-40°C to +125°C.

FITTINGS

Male NPTF pipe - rigid

#			A	B		Additional Material	
	inch		mm	mm	inch	Brass	Stainless Steel
30182-2-4	1/4	1/8 x 27	35.0	16.0	7/16	✓	✓
30182-4-4	1/4	1/4 x 18	40.0	21.0	9/16	✓	✓
30182-4-6	3/8	1/4 x 18	45.0	22.0	9/16	✓	✓
30182-4-8	1/2	1/4 x 18	49.0	22.0	5/8	✓	-
30182-6-6	3/8	3/8 x 18	45.0	22.0	1 1/16	✓	✓
30182-6-8	1/2	3/8 x 18	49.0	22.0	1 1/16	✓	-
30182-8-6	3/8	1/2 x 14	52.0	29.0	7/8	✓	✓
30182-8-8	1/2	1/2 x 14	55.0	29.0	7/8	✓	✓
30182-8-10	5/8	1/2 x 14	66.0	29.0	7/8	✓	-
30182-8-12	3/4	1/2 x 14	66.0	29.0	7/8	✓	-
30182-12-8	1/2	3/4 x 14	56.0	29.0	3/4	✓	-
30182-12-10	5/8	3/4 x 14	66.0	29.0	1 1/16	✓	-
30182-12-12	3/4	3/4 x 14	66.0	29.0	1 1/16	✓	✓
30182-16-16	1	1 x 11 - 1/2	78.0	41.0	1 3/8	✓	✓



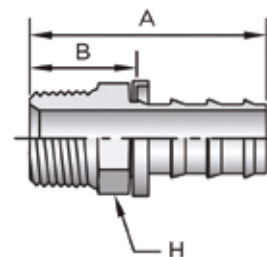
Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.



R6 TEXTILE BRAID RUBBER HOSE

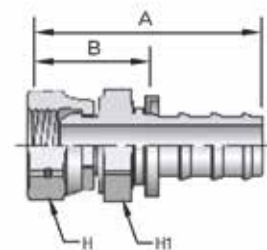
Male BSP taper - rigid - (60° cone)

#			A	B		Additional Material
	inch		mm	mm	mm	Stainless Steel
39182-2-4-AU	1/4	1/8 x 28	38.0	17.0	12.0	-
39182-4-4-AU	1/4	1/4 x 19	43.0	22.0	14.0	✓
39182-6-4-AU	1/4	3/8 x 19	44.0	23.0	19.0	-
39182-4-5-AU	5/16	1/4 x 19	43.0	22.0	14.0	-
39182-6-5-AU	5/16	3/8 x 19	44.0	23.0	19.0	-
39182-4-6-AU	3/8	1/4 x 19	46.0	22.0	14.0	✓
39182-6-6-AU	3/8	3/8 x 19	47.0	23.0	19.0	✓
39182-8-6-AU	3/8	1/2 x 14	53.0	29.0	22.0	-
39182-6-8-AU	1/2	3/8 x 19	51.0	23.0	19.0	✓
39182-8-8-AU	1/2	1/2 x 14	57.0	29.0	22.0	✓
39182-12-8-AU	1/2	3/4 x 14	59.0	31.0	30.0	-
39182-12-10-AU	5/8	3/4 x 14	69.0	31.0	30.0	-
39182-8-12-AU	3/4	1/2 x 14	67.0	29.0	22.0	✓
39182-12-12-AU	3/4	3/4 x 14	69.0	31.0	30.0	✓



Female BSP parallel pipe - swivel - (60° cone)

#			A	B			Additional Material
	inch		mm	mm	mm	mm	Stainless Steel
39282-2-4-AU	1/4	1/8 x 28	37.0	17.0	10.0	10.0	-
39282-4-4-AU	1/4	1/4 x 19	38.0	18.0	14.0	14.0	-
39282-6-4-AU	1/4	3/8 x 19	40.0	20.0	17.0	17.0	-
39282-4-5-AU	5/16	1/4 x 19	38.0	18.0	14.0	14.0	-
39282-6-5-AU	5/16	3/8 x 19	40.0	20.0	17.0	17.0	-
39282-4-6-AU	3/8	1/4 x 19	42.0	18.0	14.0	14.0	-
39282-6-6-AU	3/8	3/8 x 19	44.0	20.0	17.0	17.0	-
39282-8-6-AU	3/8	1/2 x 14	48.0	23.0	22.0	22.0	-
39282-6-8-AU	1/2	3/8 x 19	48.0	20.0	17.0	17.0	-
39282-8-8-AU	1/2	1/2 x 14	51.0	23.0	22.0	22.0	-
39282-8-10-AU	5/8	1/2 x 14	62.0	23.0	22.0	22.0	-
39282-10-10-AU	5/8	5/8 x 14	61.0	23.0	22.0	22.0	-
39282-12-12-AU	3/4	3/4 x 14	63.0	25.0	27.0	27.0	✓



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.

1SN / R1AT

ONE WIRE RUBBER HOSE



Hydraulic applications

#												
	mm	inch	mm		bar	psi	bar	psi	mm		kg/m	
1SN-4	6.3	1/4	13.0		225	3,250	900	13,000	100.0		0.24	
1SN-6	10.0	3/8	17.0		180	3,000	720	10,400	130.0		0.34	
1SN-8	12.5	1/2	21.0		160	2,500	640	9,300	180.0		0.43	
1SN-12	19.0	3/4	28.0		105	1,750	420	7,500	240.0		0.63	
1SN-16	25.0	1	36.0		88	1,275	350	5,075	300.0		0.94	
1SN-20	31.0	1 1/4	49.0		63	900	252	3,600	420.0		1.19	
1SN-24	38.0	1 1/2	51.0		50	725	200	2,900	500.0		1.49	
1SN-32	51.0	2	65.0		40	575	160	2,300	630.0		2.23	

APPLICATIONS

Low-medium pressure hydraulics. Used with petroleum based hydraulic fluids and lubricating oils. Specific installations with high abrasion conditions, marine applications, underground and open pit mining.

FEATURES

- High abrasion resistance
- High ozone and weather resistance flame resistance to a wide range of spec
- Applicable specifications: Exceeds EN 853 1SN - SAE 100 R1AT - ISO 1436 1SN / R1AT

CONSTRUCTION

Core tube: Nitrile or neoprene synthetic rubber.
Pressure reinforcement: One braid steel wire.
Cover: Synthetic rubber, MSHA accepted.

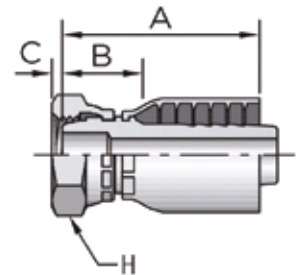
TEMPERATURE RANGE

-40°C to +100°C.

FITTINGS

Female metric L - swivel - (Ball nose)

		A	B	C	H
inch		mm	mm	mm	mm
1/4	M12 x 1.5	44.0	29.0	2.0	14
1/4	M14 x 1.5	45.0	29.0	3.0	17
5/16	M16 x 1.5	51.0	30.0	2.0	19
3/8	M16 x 1.5	52.0	28.0	2.0	19
5/16	M18 x 1.5	47.0	18.0	3.0	22
3/8	M18 x 1.5	57.0	30.0	3.0	22
3/8	M22 x 1.5	47.0	18.0	4.0	27
1/2	M22 x 1.5	61.0	33.0	4.0	27
5/8	M26 x 1.5	67.0	31.0	3.0	32
3/4	M26 x 1.5	71.0	35.0	3.0	32
3/4	M30 x 2	73.0	36.0	5.0	36
1	M36 x 2	85.0	45.0	6.0	46



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.

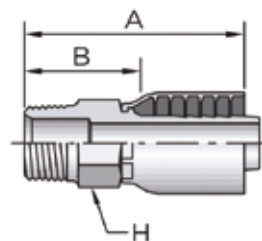


1SN / R1AT

ONE WIRE RUBBER HOSE

Male NPTF pipe - rigid

		A	B		Stainless Steel (C)
inch		mm	mm	inch	
1/4	1/8 x 27	46.0	27.0	9/16	-
1/4	1/4 x 18	51.0	22.0	9/16	✓
5/16	1/4 x 18	49.0	30.0	11/16	-
3/8	1/4 x 18	58.0	32.0	3/4	-
1/4	3/8 x 18	47.0	28.0	11/16	-
5/16	3/8 x 18	49.0	30.0	11/16	-
3/8	3/8 x 18	60.0	34.0	3/4	✓
1/2	3/8 x 18	66.0	34.0	7/8	-
5/8	3/8 x 18	66.0	30.0	15/16	-
1/4	1/2 x 14	54.0	35.0	7/8	-
3/8	1/2 x 14	61.0	35.0	7/8	-
1/2	1/2 x 14	72.0	40.0	7/8	✓
5/8	1/2 x 14	77.0	40.0	15/16	-
3/4	1/2 x 14	77.0	41.0	1 1/16	-
1/2	3/4 x 14	68.0	36.0	1 1/16	-
5/8	3/4 x 14	73.0	36.0	1 1/16	-
3/4	3/4 x 14	78.0	42.0	1 1/16	✓
1	3/4 x 14	86.0	45.0	1 3/8	-
3/4	1 x 11-1/2	78.0	42.0	1 3/8	-
1	1 x 11-1/2	66.0	50.0	1 3/8	✓
1-1/4	1 1/4 x 11-1/2	104.0	61.0	1 3/4	✓
1-1/2	1 1/2 x 11-1/2	89.0	54.0	2	-
2	2 x 11-1/2	103.0	58.0	2 1/2	-



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
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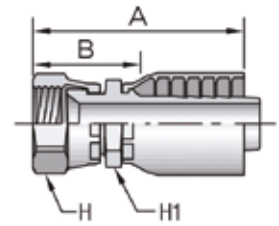
1SN / R1AT

ONE WIRE RUBBER HOSE



Female JIC 37° - swivel

		A	B			Stainless Steel (C)
inch		mm	mm	inch	inch	
1/4	7/16 x 20	49.0	30.0	9/16	9/16	✓
3/8	7/16 x 20	56.0	30.0	11/16	9/16	-
1/4	1/2 x 20	52.0	33.0	9/16	5/8	-
5/16	1/2 x 20	53.0	34.0	11/16	5/8	-
3/8	1/2 x 20	57.0	31.0	11/16	5/8	-
1/4	9/16 x 18	52.0	33.0	9/16	11/16	-
5/16	9/16 x 18	53.0	34.0	11/16	11/16	-
3/8	9/16 x 18	58.0	32.0	11/16	11/16	✓
1/2	9/16 x 18	64.0	32.0	13/16	11/16	-
1/2	3/4 x 16	63.0	37.0	7/8	11/16	✓
1/2	3/4 x 16	67.0	35.0	7/8	13/16	✓
5/8	3/4 x 16	72.0	35.0	7/8	15/16	-
3/4	3/4 x 16	72.0	35.0	7/8	1 1/16	-
3/8	7/8 x 14	64.0	38.0	1	7/8	-
1/2	7/8 x 14	72.0	40.0	1	7/8	-
5/8	7/8 x 14	74.0	38.0	1	15/16	✓
3/4	7/8 x 14	74.0	38.0	1	1 1/16	-
1/2	1 1/16 x 12	71.0	39.0	1 1/14	1 1/16	-
5/8	1 1/16 x 12	79.0	42.0	1 1/14	1 1/16	-
3/4	1 1/16 x 12	81.0	44.0	1 1/14	1 1/16	✓
1	1 1/16 x 12	84.0	42.0	1 1/4	1 3/8	-
3/4	1 3/16 x 12	81.0	44.0	1 3/8	1 1/4	-
3/4	1 5/16 x 12	84.0	47.0	1 1/2	1 1/4	-
1	1 5/16 x 12	92.0	51.0	1 1/2	1 3/8	✓
1	1 5/8 x 12	97.0	56.0	2	1 5/8	-
1-1/4	1 5/8 x 12	100.0	57.0	2	1 7/8	✓
1-1/2	1 7/8 x 12	98.0	63.0	2 1/4	2 1/8	-
2	2 1/2 x 12	120.0	75.0	2 7/8	2 1/2	-



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.

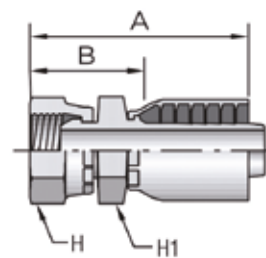


1SN / R1AT

ONE WIRE RUBBER HOSE

Female BSP parallel pipe - swivel - (60° cone)

		A	B			Stainless Steel (C)
inch		mm	mm	mm	mm	
1/4	1/8 x 28	49.0	24.0	12.0	12.0	✓
1/4	1/4 x 19	53.0	28.0	14.0	14.0	✓
1/4	3/8 x 19	56.0	31.0	18.0	18.0	✓
1/4	1/2 x 14	61.0	35.0	22.0	22.0	-
5/16	3/8 x 19	58.0	31.0	17.0	17.0	-
3/8	1/4 x 19	62.0	31.0	17.0	17.0	-
3/8	3/8 x 19	64.0	32.0	17.0	17.0	✓
3/8	1/2 x 14	67.0	36.0	22.0	22.0	✓
1/2	3/8 x 19	70.0	34.0	22.0	22.0	-
1/2	1/2 x 14	73.0	36.0	22.0	22.0	✓
1/2	5/8 x 14	75.0	38.0	24.0	24.0	-
1/2	3/4 x 14	76.0	27.0	39.0	39.0	-
5/8	1/2 x 14	80.0	38.0	24.0	24.0	-
5/8	5/8 x 14	82.0	38.0	24.0	24.0	-
3/4	3/4 x 14	84.0	42.0	27.0	27.0	✓
3/4	1 x 11	88.0	47.0	32.0	32.0	-
1	1 x 11	100.0	50.0	35.0	35.0	✓
1 1/4	1 1/4 x 11	112.0	59.0	46.0	46.0	✓
1 1/2	1 1/2 x 11	112.0	66.0	50.0	50.0	✓
2	2 x 11	128.0	71.0	60.0	60.0	✓



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.

2SN / R2AT

TWO WIRE RUBBER HOSE



Hydraulic applications

#									
	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
2SN-4	6.3	1/4	15.0	400	5,800	1600	23,200	100.0	0.39
2SN-5	8.0	5/16	17.0	360	5,250	1400	20,300	115.0	0.42
2SN-6	10.0	3/8	19.0	330	4,790	1320	19,100	130.0	0.55
2SN-8	12.5	1/2	22.0	275	3,990	1100	16,000	180.0	0.67
2SN-10	16.0	5/8	25.0	250	3,625	1000	14,500	200.0	0.77
2SN-12	19.0	3/4	29.0	215	3,120	850	12,400	240.0	1.00
2SN-16	25.0	1	38.0	165	2,395	650	9,600	300.0	0.67
2SN-20	31.0	1 1/4	48.0	125	1,800	500	7,200	420.0	1.73
2SN-24	38.0	1 1/2	55.0	90	1,300	360	5,200	500.0	2.14
2SN-32	51.0	2	67.0	80	1,150	320	4,600	630.0	2.96

APPLICATIONS

Medium-high pressure hydraulics. Used with petroleum based hydraulic fluids and lubricating oils. Specific installations with high abrasion conditions, marine applications, underground and open pit mining.

FEATURES

- High abrasion resistance
- High ozone and weather resistance flame resistance to a wide range of spec
- Applicable specifications: Exceeds EN 853 2SN - SAE 100 R2AT - ISO 1436 2SN / R2AT

CONSTRUCTION

Core tube: Nitrile or Neoprene Synthetic Rubber.
Pressure reinforcement: Two braids steel wire.
Cover: Synthetic rubber, MSHA accepted.

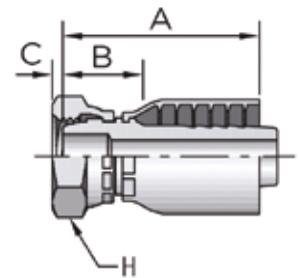
TEMPERATURE RANGE

-40°C to +100°C.

FITTINGS

Female metric L - swivel - (ball nose)

		A	B	C	H
inch		mm	mm	mm	mm
1/4	M12 x 1.5	44.0	29.0	2.0	14.0
1/4	M14 x 1.5	45.0	29.0	3.0	17.0
5/16	M16 x 1.5	51.0	30.0	2.0	19.0
3/8	M16 x 1.5	52.0	28.0	2.0	19.0
5/16	M18 x 1.5	47.0	18.0	3.0	22.0
3/8	M18 x 1.5	57.0	30.0	3.0	22.0
3/8	M22 x 1.5	47.0	18.0	4.0	27.0
1/2	M22 x 1.5	61.0	33.0	4.0	27.0
5/8	M26 x 1.5	67.0	31.0	3.0	32.0
3/4	M26 x 1.5	71.0	35.0	3.0	32.0
3/4	M30 x 2	73.0	36.0	5.0	36.0
1	M36 x 2	85.0	45.0	6.0	46.0



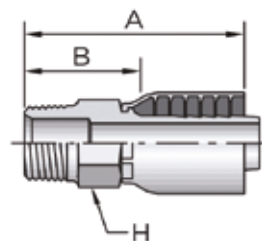
Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.



2SN / R2AT TWO WIRE RUBBER HOSE

Male NPTF pipe - rigid

		A	B		Stainless Steel (C)
inch		mm	mm	inch	
1/4	1/8 x 27	46.0	27.0	9/16	-
1/4	1/4 x 18	51.0	22.0	9/16	✓
5/16	1/4 x 18	49.0	30.0	11/16	-
3/8	1/4 x 18	58.0	32.0	3/4	-
1/4	3/8 x 18	47.0	28.0	11/16	-
5/16	3/8 x 18	49.0	30.0	11/16	-
3/8	3/8 x 18	60.0	34.0	3/4	✓
1/2	3/8 x 18	66.0	34.0	7/8	-
5/8	3/8 x 18	66.0	30.0	15/16	-
1/4	1/2 x 14	54.0	35.0	7/8	-
3/8	1/2 x 14	61.0	35.0	7/8	-
1/2	1/2 x 14	72.0	40.0	7/8	✓
5/8	1/2 x 14	77.0	40.0	15/16	-
3/4	1/2 x 14	77.0	41.0	1 1/16	-
1/2	3/4 x 14	68.0	36.0	1 1/16	-
5/8	3/4 x 14	73.0	36.0	1 1/16	-
3/4	3/4 x 14	78.0	42.0	1 1/16	✓
1	3/4 x 14	86.0	45.0	1 3/8	-
3/4	1 x 11-1/2	78.0	42.0	1 3/8	-
1	1 x 11-1/2	66.0	50.0	1 3/8	✓
1-1/4	1 1/4 x 11-1/2	104.0	61.0	1 3/4	✓
1-1/2	1 1/2 x 11-1/2	89.0	54.0	2	-
2	2 x 11-1/2	103.0	58.0	2-1/2	-



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
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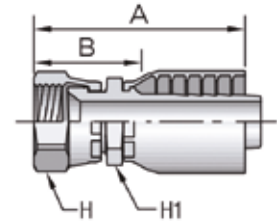
2SN / R2AT

TWO WIRE RUBBER HOSE



Female JIC 37° - swivel

		A	B			Stainless Steel (C)
inch		mm	mm	inch	inch	
1/4	7/16 x 20	49.0	30.0	9/16	9/16	✓
3/8	7/16 x 20	56.0	30.0	11/16	9/16	-
1/4	1/2 x 20	52.0	33.0	5/8	9/16	-
5/16	1/2 x 20	53.0	34.0	5/8	11/16	-
3/8	1/2 x 20	57.0	31.0	5/8	11/16	-
1/4	9/16 x 18	52.0	33.0	11/16	9/16	-
5/16	9/16 x 18	53.0	34.0	11/16	11/16	-
3/8	9/16 x 18	58.0	32.0	11/16	11/16	✓
1/2	9/16 x 18	64.0	32.0	11/16	13/16	-
1/2	3/4 x 16	63.0	37.0	7/8	11/16	✓
1/2	3/4 x 16	67.0	35.0	7/8	13/16	✓
5/8	3/4 x 16	72.0	35.0	7/8	15/16	-
3/4	3/4 x 16	72.0	35.0	7/8	1 1/16	-
3/8	7/8 x 14	64.0	38.0	1	7/8	-
1/2	7/8 x 14	72.0	40.0	1	7/8	-
5/8	7/8 x 14	74.0	38.0	1	1 5/16	✓
3/4	7/8 x 14	74.0	38.0	1	1 1/16	-
1/2	1 1/16 x 12	71.0	39.0	1 1/14	1 1/16	-
5/8	1 1/16 x 12	79.0	42.0	1 1/14	1 1/16	-
3/4	1 1/16 x 12	81.0	44.0	1 1/14	1 1/16	✓
1	1 1/16 x 12	84.0	42.0	1 1/4	1 3/8	-
3/4	1 3/16 x 12	81.0	44.0	1 3/8	1 1/4	-
3/4	1 5/16 x 12	84.0	47.0	1 1/2	1 1/4	-
1	1 5/16 x 12	92.0	51.0	1 1/2	1 3/8	✓
1	1 5/8 x 12	97.0	56.0	2	1 5/8	-
1-1/4	1 5/8 x 12	100.0	57.0	2	1 7/8	✓
1-1/2	1 7/8 x 12	98.0	63.0	2 1/4	2 1/8	-
2	2 1/2 x 12	120.0	75.0	2 7/8	2 1/2	-



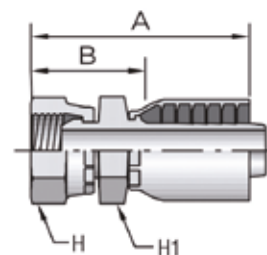
Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.



2SN / R2AT TWO WIRE RUBBER HOSE

Female BSP parallel pipe - swivel - (60° cone)

		A	B		Stainless Steel (C)
inch		mm	mm	mm	
1/4	1/8 x 28	49.0	24.0	12.0	✓
1/4	1/4 x 19	53.0	28.0	14.0	✓
1/4	3/8 x 19	56.0	31.0	18.0	✓
1/4	1/2 x 14	61.0	35.0	22.0	-
5/16	3/8 x 19	58.0	31.0	17.0	-
3/8	1/4 x 19	62.0	31.0	17.0	-
3/8	3/8 x 19	64.0	32.0	17.0	✓
3/8	1/2 x 14	67.0	36.0	22.0	✓
1/2	3/8 x 19	70.0	34.0	22.0	-
1/2	1/2 x 14	73.0	36.0	22.0	✓
1/2	5/8 x 14	75.0	38.0	24.0	-
1/2	3/4 x 14	76.0	27.0	39.0	-
5/8	1/2 x 14	80.0	38.0	24.0	-
5/8	5/8 x 14	82.0	38.0	24.0	-
3/4	3/4 x 14	84.0	42.0	27.0	✓
3/4	1 x 11	88.0	47.0	32.0	-
1	1 x 11	100.0	50.0	35.0	✓
1 1/4	1 1/4 x 11	112.0	59.0	46.0	✓
1 1/2	1 1/2 x 11	112.0	66.0	50.0	✓
2	2 x 11	128.0	71.0	60.0	✓



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.





JACKING HOSE

TWO WIRE RUBBER JACKING HOSE

Hydraulic - Jacking hose

#												
	mm	inch	mm		bar	psi	bar	psi	mm		kg/m	
JK-4	6.3	1/4	15.0		724	10,500	1448	21,000	100.0		0.39	
JK-6	10.0	3/8	22.0		700	10,000	1400	20,000	125.0		0.55	

APPLICATIONS

Hydraulic Jacking systems where a reduced safety factor is acceptable. Suitable for use close to welding applications.

FEATURES

- High static pressure. Tested / approved for specific jacking applications
- High flexibility
- Applicable specifications: IJ100 hydraulic jack spec
- This product has a 2:1 Safety Factor

CONSTRUCTION

Core tube: Nitrile or neoprene synthetic rubber.
Pressure reinforcement: Two braids steel wire.
Cover: Synthetic rubber, MSHA accepted.

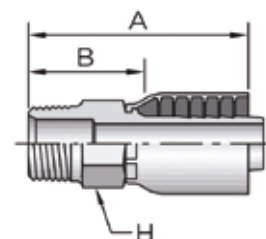
TEMPERATURE RANGE

-40°C to +100°C.

FITTINGS

Male NPTF pipe - rigid

#			A	B		Stainless Steel (C)
	inch		mm	mm	inch	
10143-2-4	1/4	1/8 x 27	46.0	27.0	9/16	-
10143-4-4	1/4	1/4 x 18	51.0	22.0	9/16	✓
10143-6-4	1/4	3/8 x 18	47.0	28.0	11/16	-
10143-4-6	3/8	1/4 x 18	58.0	32.0	3/4	-
10143-6-6	3/8	3/8 x 18	60.0	34.0	3/4	✓



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.

4SP

FOUR SPIRAL WIRE RUBBER HOSE



Hydraulic applications

#											
	mm	inch	mm	bar	psi	bar	psi	mm	kg/m		
4SP-6	10.0	3/8	21.0	450	6,500	1800	26,000	180.0	0.78		
4SP-8	12.5	1/2	25.0	415	6,000	1660	24,000	230.0	0.93		
4SP-10	16.0	5/8	28.0	350	5,000	1400	20,000	250.0	1.15		
4SP-12	19.0	3/4	32.0	350	5,000	1400	20,000	300.0	1.58		
4SP-16	25.0	1	40.0	280	4,000	1120	16,000	340.0	2.04		

APPLICATIONS

High pressure hydraulics in high flow applications. Used with petroleum based hydraulic fluids and lubricating oils. Specific installations with high abrasion conditions, marine applications, underground and open pit mining.

FEATURES

- Approved at 1,000,000 impulse cycles
- High abrasion resistance
- High ozone and weather resistance
- Flame resistance to a wide range of specification
- Upgraded temperature resistance
- Biological and mineral oils compatibility
- Applicable specs.: Exceed EN 856 4SP - ISO 3862 4SP

CONSTRUCTION

Core tube: Synthetic rubber.
Pressure reinforcement: Four spiral steel wire.
Cover: Synthetic rubber, MSHA accepted.

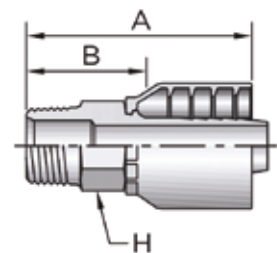
TEMPERATURE RANGE

-40°C to +100°C.

FITTINGS

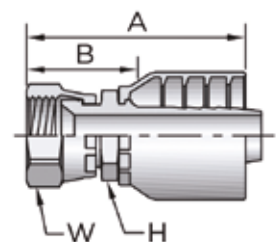
Male NPTF pipe - rigid

		A	B	H
inch		mm	mm	mm
3/8	3/8 x 18	60.0	31.0	19.0
1/2	1/2 x 14	72.0	36.0	24.0
5/8	3/4 x 14	71.0	43.0	27.0
3/4	3/4 x 14	79.0	39.0	27.0
1	1 x 11 1/2	93.0	46.0	36.0



Female JIC 37° - swivel

		A	B	H	H1
inch		mm	mm	mm	mm
3/8	9/16 x 18	58.0	29.0	19.0	17.0
1/2	3/4 x 16	67.0	32.0	22.0	22.0
5/8	7/8 x 14	75.0	35.0	27.0	24.0
3/4	1 1/16 - 12	80.0	41.0	32.0	27.0
1	1 5/16 x 12	94.0	47.0	41.0	36.0



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.

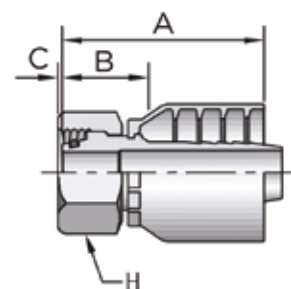


4SP

FOUR SPIRAL WIRE RUBBER HOSE

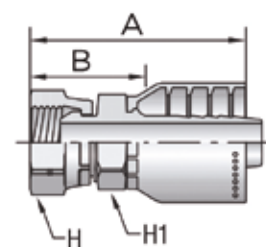
Female metric S - swivel - (24° cone with O-ring)

		A	B	C	
inch		mm	mm	mm	mm
3/8	M20 x 1,5	52.0	29.0	1.0	24.0
1/2	M24 x 1,5	59.0	58.0	2.0	30.0
5/8	M30 x 2	64.0	32.0	1.0	36.0



Female BSP parallel pipe - swivel - (60° cone)

		A	B		
inch		mm	mm	mm	mm
3/8	3/8 x 19	59.0	37.0	17.0	22.0
1/2	1/2 x 14	68.0	28.0	22.0	27.0



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.

4SH

FOUR SPIRAL WIRE RUBBER HOSE



Hydraulic applications

#									
	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
4SH-12	19.0	3/4	32.0	420	6,000	1680	24,000	280.0	1.72
4SH-16	25.0	1	39.0	380	5,500	1520	22,000	340.0	2.14
4SH-20	31.0	1 1/4	45.0	325	4,700	1300	18,800	460.0	2.96
4SH-24	38.0	1 1/2	53.0	290	4,200	1160	16,800	560.0	3.20
4SH-32	51.0	2	68.0	250	3,600	1000	14,400	700.0	5.30

APPLICATIONS

High pressure hydraulics in high flow applications. Used with petroleum based hydraulic fluids and lubricating oils. Specific installations with high abrasion conditions, marine applications, underground and open pit mining.

FEATURES

- Approved at 1,000,000 flexing impulse cycles
- Superior abrasion resistance
- High ozone and weather resistance
- Flame resistance to a wide range of spec
- Biological and mineral oils compatibility
- Applicable specs.: Exceed EN 856 4SH -ISO 3862 4SH

CONSTRUCTION

Core tube: Synthetic rubber.
Pressure reinforcement: Four spiral steel wire.
Cover: Synthetic rubber, MSHA accepted.

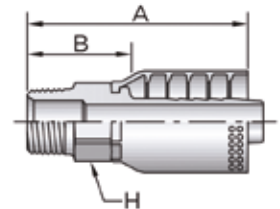
TEMPERATURE RANGE

-40°C to +100°C.

FITTINGS

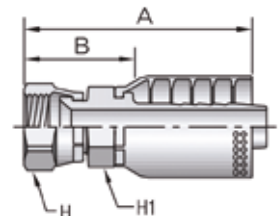
Male NPTF pipe - rigid

		A	B	
inch		mm	mm	inch
3/4	3/4 x 14	90.0	44.0	1 1/8
1	1 x 11-1/2	100.0	51.0	1 3/8
1 1/4	1 1/4 x 11-1/2	125.0	62.0	1 3/4
1 1/2	1 1/2 x 11-1/2	124.0	65.0	2
2	2 x 11-1/2	141.0	73.0	2 1/2



Female JIC 37° - swivel

		A	B		
inch		mm	mm	inch	inch
3/4	1 1/16 x 12	93.0	47.0	1 1/4	1 1/8
3/4	1 5/16 x 12	99.0	53.0	1 1/2	1 3/8
1	1 5/16 x 12	102.0	53.0	1 1/2	1 3/8
1 1/4	1 5/16 x 12	125.0	62.0	2	1 3/4
1 1/2	1 7/8 x 12	128.0	69.0	2 1/4	2
2	2 1/2 x 12	150.0	82.0	2 7/8	2 1/2



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.



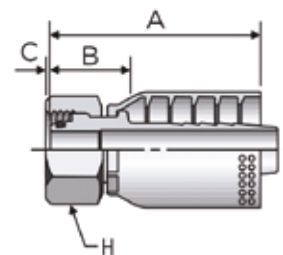
4SH

FOUR SPIRAL WIRE RUBBER HOSE

RUBBER HOSE - HYDRAULIC

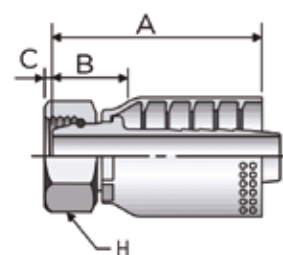
Female metric S - swivel - (24° cone with O-ring)

		A	B	C	
inch		mm	mm	mm	mm
3/4	M30 x 2	81.0	33.0	1.3	36.0
3/4	M36 x 2	80.0	32.0	2.3	46.0
1	M36 x 2	87.0	63.0	2.3	46.0
1	M42 x 2	87.0	36.0	4.8	50.0
1 1/4	M42 x 2	106.0	42.0	4.8	50.0
1 1/4	M52 x 2	102.0	35.0	5.8	60.0



Female BSP parallel pipe - swivel - (60° cone)

		A	B	C	
inch		mm	mm	mm	mm
3/4	3/4 x 14	77.0	29.0	11.7	32.0
1	1 x 11	89.0	38.0	11.2	41.0
1 1/4	1 1/4 x 11	101.0	37.0	13.2	50.0



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.

R12

FOUR SPIRAL WIRE RUBBER HOSE



Hydraulic applications

#									
	mm	inch	mm	bar	psi	bar	psi	mm	kg/m
R12-6	10.0	3/8	20.0	280	4,000	112	16,000	62.5	0.60
R12-8	12.5	1/2	24.0	280	4,000	112	16,000	90.0	0.93
R12-10	16.0	5/8	27.0	280	4,000	112	16,000	100.0	1.10
R12-12	19.0	3/4	31.0	280	4,000	112	16,000	120.0	1.40
R12-16	25.0	1	38.0	280	4,000	112	16,000	150.0	1.99
R12-20	31.5	1 1/4	46.0	210	3,000	840	12,000	210.0	2.59
R12-24	38.0	1 1/2	53.0	175	2,500	700	10,000	250.0	2.99
R12-32	51.0	2	66.0	175	2,500	700	10,000	320.0	4.09

APPLICATIONS

Petroleum based hydraulic fluids and lubricating oils. High pressure power lines up to 4,000 psi in heavy duty conditions, specific installations with high abrasion conditions, marine applications, underground and open pit mining.

FEATURES

- Approved at 1,000,000 impulse cycles high abrasion resistance
- High ozone and weather resistance
- Flame resistance to a wide range of spec
- Biological and mineral oils compatibility
- Applicable specifications: Exceed EN 856 R12 - SAE 100 R12 - ISO 3862 R12

CONSTRUCTION

Core tube: Synthetic rubber.
Pressure reinforcement: Four high tensile steel spirals.
Cover: Synthetic rubber abrasion resistant, MSHA accepted.

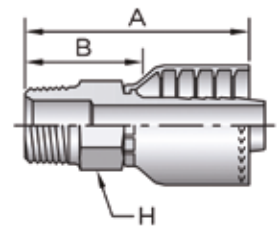
TEMPERATURE RANGE

-40°C to +125°C.

FITTINGS

Male NPTF pipe - rigid

		A	B	
inch		mm	mm	inch
3/8	3/8 x 18	60.0	37.0	3/4
1/2	1/2 x 14	72.0	41.0	7/8
1/2	3/4 x 14	68.0	37.0	1 1/16
3/4	3/4 x 14	78.0	43.0	1 1/16
3/4	1 x 11 - 1/2	78.0	44.0	1 3/8
1	1 x 11 - 1/2	92.0	52.0	1 3/8
1	1 1/4 x 11 - 1/2	89.0	48.0	1 11/16
1 1/4	1 1/4 x 11 - 1/2	103.0	61.0	1 3/4
1 1/4	1 1/2 x 11 - 1/2	96.0	53.0	2
1 1/2	1 1/2 x 11 - 1/2	110.0	56.0	2
2	2 x 11 - 1/2	118.0	64.0	2 1/2



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.



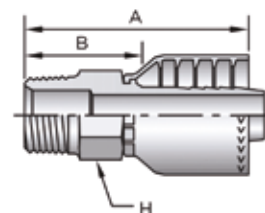
R12

FOUR SPIRAL WIRE RUBBER HOSE

RUBBER HOSE - HYDRAULIC

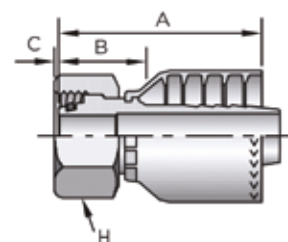
Female JIC 37° - swivel

		A	B		Additional Material
inch		mm	mm	inch	Stainless Steel
3/8	9/16 x 18	58.0	35.0	1 1/16	-
3/8	3/4 x 16	63.0	40.0	1 1/16	-
1/2	3/4 x 16	66.0	36.0	1 3/16	✓
1/2	7/8 x 14	72.0	42.0	7/8	-
5/8	7/8 x 14	72.0	40.0	1 5/16	-
3/4	7/8 x 14	74.0	39.0	1 1/16	-
1/2	1 1/16 x 12	70.0	40.0	1 1/16	-
5/8	1 1/16 x 12	76.0	44.0	1 1/16	-
3/4	1 1/16 x 12	75.0	41.0	1 1/16	✓
1	1 1/16 x 12	86.0	42.0	1 3/8	-
3/4	1 3/16 x 12	76.0	41.0	1 1/4	-
3/4	1 5/16 x 12	83.0	49.0	1 1/4	-
1	1 5/16 x 12	91.0	51.0	1 3/8	✓
1	1 5/8 x 12	97.0	56.0	1 5/8	-
1 1/4	1 5/8 x 12	100.0	57.0	1 7/8	✓
1 1/4	1 7/8 x 12	104.0	62.0	2 1/8	-
1 1/2	1 7/8 x 12	119.0	64.0	2 1/8	✓
2	2 1/2 x 12	137.0	81.0	2 1/2	-



Female metric S - swivel - (24° cone with O-ring)

		A	B	C	
inch		mm	mm	mm	mm
3/8	M20 x 1.5	51.0	30.0	1.0	24.0
1/2	M24 x 1.5	59.0	30.0	2.0	30.0
5/8	M30 x 2	65.0	35.0	1.0	36.0
3/4	M36 x 2	68.0	28.0	3.0	46.0
1	M42 x 2	78.0	33.0	5.0	50.0
1 1/4	M52 x 2	80.0	33.0	6.0	60.0



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.

R13

FOUR & SIX SPIRAL WIRE HOSE



Hydraulic applications

#												
	mm	inch	mm	bar	psi	bar	psi	mm	kg/m			
R13-4	14.6	0.57	17.6	690	10,000	3250	47,130	120.0	0.66			
R13-6	17.4	0.69	20.4	690	10,000	2900	42,060	150.0	0.83			
R13-8	21.5	0.85	24.5	620	8,990	2500	36,250	200.0	1.14			
R13-12	29.0	1.14	31.8	350	5,070	1950	28,280	240.0	1.63			
R13-16	36.0	1.42	39.2	350	5,070	1650	23,930	300.0	2.19			
R13-20	47.0	1.85	50.0	350	5,070	1500	21,750	420.0	3.6			
R13-24	54.6	2.15	57.5	350	5,070	1600	23,200	500.0	4.7			
R13-32	68.4	2.69	72.0	350	5,070	1500	21,750	630.0	6.8			

APPLICATIONS

Heavy duty lines, hydrostatic transmissions, in heavy duty environmental conditions, specific installations with severe abrasion conditions, marine applications, underground and open pit mining.

FEATURES

- Approved at 1,000,000 flexing impulse cycles
- Superior abrasion resistance
- High ozone and weather resistance
- Flame resistance to a wide range of specification
- Biological and mineral oils compatibility

CONSTRUCTION

Core tube: Oil resistant synthetic rubber.
Pressure reinforcement: Four high tensile steel spirals (DN 6-25).
 Six high tensile steel spirals (DN 31-51).
Cover: Synthetic rubber with high ozone, weather and heat resistance.

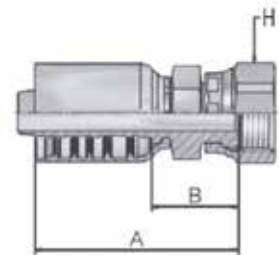
TEMPERATURE RANGE

-40°C to +121°C.

FITTINGS

Female metric heavy series

					A	B	
DN	inch	size	mm		mm	mm	mm
16	5/8	-10	15.9	M24 x 1.5	67.0	28.0	30.0
16	5/8	-10	15.9	M30 x 2	67.0	28.0	36.0
19	3/4	-12	19.1	M30 x 2	76.0	30.0	36.0
19	3/4	-12	19.1	M36 x 2	76.6	30.6	46.0
25	1	-16	25.4	M42 x 2	89.0	35.0	50.0
31	1 1/4	-20	31.8	M42 x 2	102.0	39.0	50.0



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.

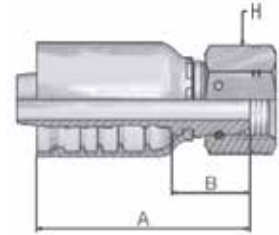


R13

FOUR & SIX SPIRAL WIRE HOSE

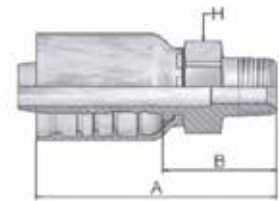
Female BSP 60° cone

					A	B	
DN	inch	size	mm		mm	mm	mm
19	3/4	-12	19.1	3/4 x 14	73.0	27.0	32.0
19	3/4	-12	19.1	1 x 11	85.0	39.0	41.0
25	1	-16	25.4	3/4 x 14	83.0	29.0	32.0
25	1	-16	25.4	1 x 11	91.0	37.0	41.0
31	1 1/4	-20	31.8	1 1/4 x 11	98.0	34.0	50.0



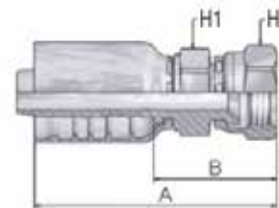
Male NPTF pipe - rigid

					A	B	
DN	inch	size	mm		mm	mm	mm
19	3/4	-12	19.1	1/2 x 14	87.0	41.0	30.0
19	3/4	-12	19.1	3/4 x 14	87.0	41.0	30.0
25	1	-16	25.4	1 x 11 1/2	103.0	49.0	36.0
31	1 1/4	-20	31.8	1 1/4 x 11	116.0	53.0	46.0
38	1 1/2	-24	38.1	1 1/2 x 11	124.0	57.0	50.0



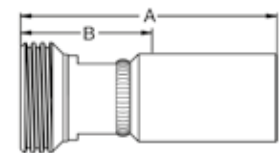
Female JIC 37° - swivel

					A	B		
DN	inch	size	mm		mm	mm	mm	mm
16	5/8	-10	15.9	7/8 x 14	81.0	42.0	27.0	24.0
16	5/8	-10	15.9	1 1/16 x 12	84.0	45.0	32.0	30.0
19	3/4	-12	19.1	7/8 x 14	92.0	46.0	27.0	30.0
19	3/4	-12	19.1	1 1/16 x 12	94.0	48.0	32.0	30.0
19	3/4	-12	19.1	1 5/16 x 12	99.0	53.0	41.0	36.0
25	1	-16	25.4	1 1/16 x 12	102.0	48.0	32.0	36.0
25	1	-16	25.4	1 5/16 x 12	106.0	52.0	41.0	36.0
25	1	-16	25.4	1 5/8 x 12	109.0	55.0	50.0	41.0
31	1 1/4	-20	31.8	1 5/16 x 12	120.0	57.0	41.0	46.0
31	1 1/4	-10	31.8	1 5/8 x 12	124.0	60.0	50.0	46.0
31	1 1/4	-20	31.8	1 7/8 x 12	108.0	44.0	60.0	50.0
38	1 1/2	-24	38.1	1 7/8 x 12	136.0	69.0	60.0	50.0



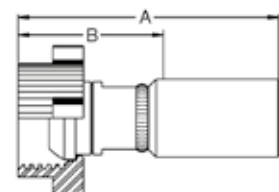
1502 Hammerlug union female

	A	B	
mm	mm	bar	
4 1/8 - 3 ACME	286.0	149.0	1035



1502 Hammerlug union male

	A	B	
mm	mm	bar	
4 1/8 - 3 ACME	241.0	105.0	1035



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.

R15

SIX SPIRAL WIRE HOSE



Hydraulic application

#												
	mm	inch	mm		bar	psi	bar	psi	mm		kg/m	
R15-12	19.0	3/4	32.0		420	6,000	1680	24,000	200.0		1.59	
R15-16	25.0	1	39.0		420	6,000	1680	24,000	250.0		2.20	
R15-20	31.5	1 1/4	50.0		420	6,000	1680	24,000	250.0		3.69	
R15-24	38.0	1 1/2	58.0		420	6,000	1680	24,000	305.0		4.79	

APPLICATIONS

High pressure power lines, hydrostatic transmissions, in heavy duty environmental conditions, specific installations with severe abrasion conditions, marine applications, underground and open pit mining. Cementing applications subsea and offshore.

FEATURES

- High abrasion resistant cover
- 6,000 psi constant working pressure in all sizes
- Exceeds SAE 100R15 specification

CONSTRUCTION

Core tube: Synthetic rubber.
Pressure reinforcement: Six spiral steel wire.
Cover: Synthetic rubber abrasion resistant, MSHA accepted.

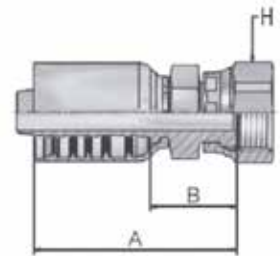
TEMPERATURE RANGE

-40°C to +125°C.

FITTINGS

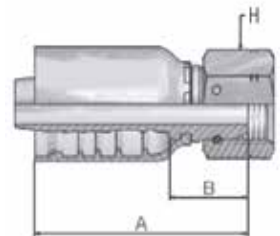
Female metric heavy series

					A	B	
DN	inch	size	mm		mm	mm	mm
19	3/4	-12	19.1	M30 x 2	76.0	30.0	36.0
19	3/4	-12	19.1	M36 x 2	76.6	30.6	46.0
25	1	-16	25.4	M42 x 2	89.0	35.0	50.0
31	1 1/4	-20	31.8	M42 x 2	102.0	39.0	50.0



Female BSP 60° cone

					A	B	
DN	inch	size	mm		mm	mm	mm
19	3/4	-12	19.1	3/4 x 14	73.0	27.0	32.0
25	1	-16	25.4	3/4 x 14	83.0	29.0	32.0
31	1 1/4	-20	31.8	1 1/4 x 11	98.0	34.0	50.0



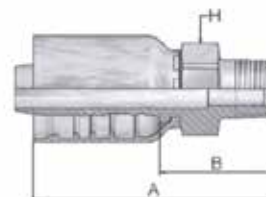
Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.



R15 SIX SPIRAL WIRE HOSE

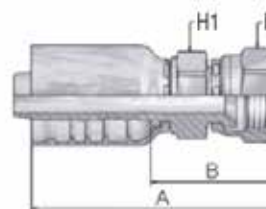
Male NPTF pipe - rigid

					A	B	
DN	inch	size	mm		mm	mm	mm
19	3/4	-12	19.1	1/2 x 14	87.0	41.0	30.0
19	3/4	-12	19.1	3/4 x 14	87.0	41.0	30.0
25	1	-16	25.4	1 x 11 1/2	103.0	49.0	36.0
31	1 1/4	-20	31.8	1 1/4 x 11	116.0	53.0	46.0
38	1 1/2	-24	38.1	1 1/2 x 11	124.0	57.0	50.0



Female JIC 37° – swivel straight

					A	B		
DN	inch	size	mm		mm	mm	mm	mm
19	3/4	-12	19.1	7/8 x 14	92.0	46.0	27.0	30.0
19	3/4	-12	19.1	1 1/16 x 12	94.0	48.0	32.0	30.0
19	3/4	-12	19.1	1 5/16 x 12	99.0	53.0	41.0	36.0
25	1	-16	25.4	1 1/16 x 12	102.0	48.0	32.0	36.0
25	1	-16	25.4	1 5/16 x 12	106.0	52.0	41.0	36.0
25	1	-16	25.4	1 5/8 x 12	109.0	55.0	50.0	41.0
31	1 1/4	-20	31.8	1 5/16 x 12	120.0	57.0	41.0	46.0
31	1 1/4	-10	31.8	1 5/8 x 12	124.0	60.0	50.0	46.0
31	1 1/4	-20	31.8	1 7/8 x 12	108.0	44.0	60.0	50.0
38	1 1/2	-24	38.1	1 7/8 x 12	136.0	69.0	60.0	50.0



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.

ISOBARIC RUBBER HOSE

210 BAR XTRAFLEX



Hydraulic application

#										
	DN	dash	inch	mm	bar	psi	bar	psi	mm	lb/ft
H10093031	32	-20	1 1/4	44.5	210	3,040	840	12,180	210.0	2.07
H10093038	38	-24	1 1/2	52.1	210	3,040	840	12,180	260.0	2.9
H10093051	51	-32	2	66.8	210	3,040	840	12,180	330.0	4.3

APPLICATIONS

Medium and high pressure hydraulic lines for general hydraulics. Return lines of hydraulic systems. Oils (up to 100°C / 212°F), glycols and polyglycols, mineral oils in aqueous emulsion, water.

FEATURES

- Good flexibility in the whole temperature range
- High impulse resistance according to ISO 18752 requirements
- Weight saving vs traditional R12 hose construction
- Isobaric pressure rating for easy selection and product management

CONSTRUCTION

Core tube: Oil resistant synthetic rubber.
Pressure reinforcement: 4 high tensile steel spirals.
Cover: Synthetic rubber with high abrasion, ozone, weather and heat resistance.

TEMPERATURE RANGE

-40°C / +100°C

FITTINGS

A wide range of fittings are available.
 Please contact our sales team for further information.

Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.



ISOBARIC RUBBER HOSE

280 BAR XTRAFLEX

Hydraulic application

#										
	DN	dash	inch	mm	bar	psi	bar	psi	mm	lb/ft
H10095010	10	-06	3/8	18.9	280	4,060	1120	16,240	65.0	0.52
H10095012	12	-8	1/2	21.8	280	4,060	1120	16,240	90.0	0.65
H10095016	16	-10	5/8	25.7	280	4,060	1120	16,240	100.0	0.93
H10095019	19	-12	3/4	26.9	280	4,060	1120	16,240	120.0	1.04
H10095025	25	-16	1	34.1	280	4,060	1120	16,240	150.0	1.53
H10095031	31	-20	1 1/4	41.7	280	4,060	1120	16,240	210.0	2.16
H10095038	38	-24	1 1/2	48.9	280	4,060	1120	16,240	280.0	2.99
H10095051	51	-32	2	63.9	280	4,060	1120	16,240	350.0	4.63

APPLICATIONS

High pressure hose for general hydraulics. Applications with installation constraints (short assemblies, compact spaces, low bend radii, etc.). Oils (up to 100°C / 212°F), glycols and polyglycols, mineral oils in aqueous emulsion.

FEATURES

- Excellent flexibility
- High impulse resistance according to ISO 18752 requirements
- Weight saving of 20% vs traditional R12 hose construction
- Isobaric pressure rating for easy selection and product management

CONSTRUCTION

Core tube: Oil resistant synthetic rubber.
Pressure reinforcement: 4 high tensile steel spirals.
Cover: Synthetic rubber with high abrasion, ozone, weather and heat resistance.

TEMPERATURE RANGE

-46°C to +121°C.

FITTINGS

A wide range of fittings are available.
 Please contact our sales team for further information.

Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.

ISOBARIC RUBBER HOSE

350 BAR XTRAFLEX



Hydraulic applications

#										
	DN	dash	inch	mm	bar	psi	bar	psi	mm	
H10096010	10	-6	3/8	18.7	350	5,070	1400	20,300	80.0	0.53
H10096012	12	-8	1/2	21.8	350	5,070	1400	20,300	90.0	0.66
H10096016	16	-10	5/8	25.7	350	5,070	1400	20,300	100.0	0.93
H10096019	19	-12	3/4	29.9	350	5,070	1400	20,300	120.0	1.22
H10096025	25	-16	1	37.0	350	5,070	1400	20,300	150.0	1.8
H10096031	31	029	1 1/4	44.9	350	5,070	1400	20,300	230.0	2.34
H10096038	38	-24	1 1/2	56.1	350	5,070	1400	20,300	300.0	4.17
H10096051	51	-32	2	70.4	350	5,070	1400	20,300	360.0	6.2

APPLICATIONS

High pressure hose for general hydraulics. Oils (up to 100°C / 212°F), glycols and polyglycols, mineral oils in aqueous emulsion water.

FEATURES

- Excellent flexibility
- High impulse resistance according to ISO 18751 requirements
- Weight saving of 20% vs traditional R13 hose construction
- Isobaric pressure rating for easy selection and product management

CONSTRUCTION

Core tube: Oil resistance synthetic rubber.
Pressure reinforcement: Four high tensile steel spirals (DN 6-31).
 Six high tensile steel spirals (DN 38-51).
Cover: Synthetic rubber with high abrasion, ozone, weather and heat resistance.

TEMPERATURE RANGE

-46°C / +121°C

FITTINGS

A wide range of fittings are available.
 Please contact our sales team for further information.

Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.



ISOBARIC RUBBER HOSE

420 BAR XTRAFLEX

Isobaric

#										
	DN	dash	inch	mm	bar	psi	bar	psi	mm	lb/ft
H10097010	10	-6	3/8	20.0	420	6,090	1680	24,360	100.0	0.55
H10097012	12	-8	1/2	22.7	420	6,090	1680	24,360	120.0	0.80
H10097019	19	-12	3/4	30.2	420	6,090	1680	24,360	150.0	1.28
H10097025	25	-16	1	37.3	420	6,090	1680	24,360	210.0	1.91
H10097031	31	-20	1 1/4	49.5	420	6,090	1680	24,360	260.0	3.66
H10097038	38	-24	1 1/2	56.4	420	6,090	1680	24,360	310.0	4.54

APPLICATIONS

High pressure lines for general hydraulics. Heavy duty hydraulics. Mineral oils, vegetable oils and synthetic ester based oils (up to 100°C / 212°F), water.

FEATURES

- Excellent flexibility
- High impulse resistance according to ISO 18752 requirements
- Weight saving of 20% vs traditional R15 hose construction
- Isobaric pressure rating for easy selection and product management

CONSTRUCTION

Core tube: Oil resistant synthetic rubber.
Pressure reinforcement: Four high tensile steel spirals (DN 6-25).
 Six high tensile steel spirals (DN 31-51).
Cover: Synthetic rubber with high abrasion, ozone, weather and heat resistance.

TEMPERATURE RANGE

-46°C / +121°C

FITTINGS

A wide range of fittings are available.
 Please contact our sales team for further information.

Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.

A-BLAST WATERBLAST



Waterblast applications

#										
	DN	inch	size	mm	bar	psi	bar	psi	mm	kg/m
AB2-06	10	3/8	06	20.8	1250	18,000	3125	45,000	230.0	0.90
AB2-08	12	1/2	08	24.6	1100	16,000	2750	40,000	230.0	1.24
AB2-12	19	3/4	12	32.0	1000	14,500	2500	36,250	250.0	1.26
AB3-08	12	1/2	08	29.0	1450	21,000	3625	52,500	250.0	1.87
AB3-12	19	3/4	12	34.0	1350	19,500	3375	48,750	300.0	2.14

APPLICATIONS

Very high constant pressure hose for water and water emulsions scaling systems.

FEATURES

- High abrasion resistant cover, suited to harsh applications
- High kink resistance and large through bore ID to improve flow rate and reduce pressure drop
- Available in lengths up to 60m
- Extremely flexible

CONSTRUCTION

Core tube: Synthetic rubber.
Pressure reinforcement: Four or Six high tensile steel wire spirals.
Cover: Synthetic rubber.

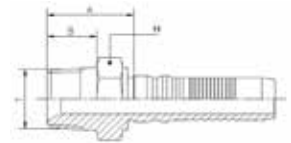
TEMPERATURE RANGE

-40°C / +80°C

FITTINGS

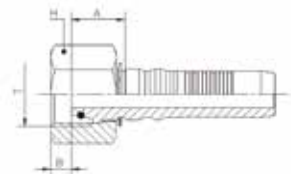
NPTF Male 60° cone seat

				A	B	
DN	size	inch		mm	mm	mm
10	-06	3/8	3/8 - 18	37.5	14.0	22.0
12	-08	1/2	1/2 - 14	44.5	19.0	22.0
20	-12	3/4	3/4 - 14	45.5	19.0	30.0



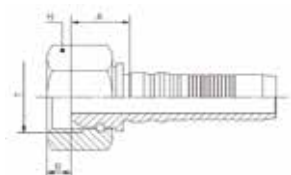
Metric O-ring female 24° cone heavy duty

				A	B	
DN	size	inch		mm	mm	mm
10	-06	3/8	M24 x 1.5	35.0	3.0	32.0
12	-08	1/2	M24 x 1.5	31.0	3.0	30.0
20	-12	3/4	M36 x 2	42.0	3.0	46.0



BSP 60° female cone

				A	B	
DN	size	inch		mm	mm	mm
10	-06	3/8 BSP	3/8 BSP Female	31.5	6.0	27.0
12	-08	1/2 BSP	1/2 BSP Female	30.0	6.5	27.0
19	-12	3/4 BSP	3/4 BSP Female	-	-	36.0



Please Note: Variety of fittings in mild steel or AISI 316 stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.



A-blast

AB2-08

DN 12 - 1/2"

AB2-08

DN 12 - 1/2"

Max. Working

A-blast

AB2-08

DN 12 - 1/2"

A-blast

Max. Working Pres

Max. Working Pressure 1100 BAR

Max. Working Pressure 1100 BAR

Max. Working Pressure 1100 BAR

16000 PSI

16000 PSI

16000 PSI

16000 PSI

GOLDENBLAST™ PLUS

WATERBLAST



Waterblast applications

#	DN	size	inch	mm	bar	psi	bar	psi	mm	kg/m
H10066010	10	-06	3/8	20.0	1250	18,120	3125	45,320	230.0	0.8
H10066A12	12	-08	1/2	24.1	1100	15,950	2750	39,880	230.0	1.11
H10066019	19	-12	3/4	32.0	1000	14,500	2500	36,250	250.0	1.73
H10066025	25	-16	1	38.1	700	10,150	1750	25,370	250.0	2.04

APPLICATIONS

High pressure water blasting used for heavy construction, ship building/main tenance and general industrial cleaning applications. Hydro- demolition (including the removal of concrete and marine paint). High pressure grease injection.

FEATURES

- High abrasion resistant cover, suited to harsh applications
- High kink resistance and large through bore ID to improve flow rate and reduce pressure drop
- Available in lengths up to 40m

CONSTRUCTION

Core tube: Water resistant synthetic rubber.
Pressure reinforcement: Four spiral layers of maximum tensile steel wire.
Cover: Synthetic rubber.

TEMPERATURE RANGE

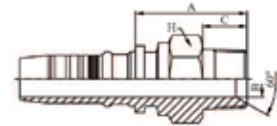
-10°C / +70°C.

FITTINGS

*Stainless steel 316 available - Please prefix the part numbers above with the letter "I".

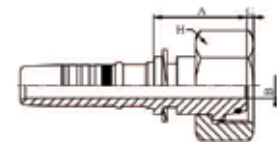
NPTF Male 60° cone seat: SAE J516/JS14 – M57810.

#	DN	size	inch		A	B	C	H
					mm	mm	mm	mm
M57810-06-06	10	-06	3/8	3/8 - 18	38.0	8.5	15.5	22.0
M57810-08-08	12	-08	1/2	1/2 - 14	44.6	10.00	21.0	27.0
M57810-12-12	20	-12	3/4	3/4 - 14	49.4	15.0	21.0	32.0
M57810-16-16	25	-16	1	1 - 11.5	55.0	19.5	24.2	41.0



Metric O-ring female 24° cone heavy duty: DIN 20066/ISO – M66613.

#	DN	size	inch		A	B	C	H
					mm	mm	mm	mm
M66613-06-22	10	-06	3/8	M22 x 1.5	32.0	4.8	3.5	27.0
M66613-06-24	10	-06	3/8	M24 x 1.5	34.2	6.3	4.0	32.0
M66613-08-24	12	-08	1/2	M24 x 1.5	35.4	7.5	4.0	32.0
M66613-12-36	20	-12	3/4	M36 x 2	44.7	12.0	3.4	46.0
M66613-16-42	25	-16	1	M42 x 2	43.5	19.5	5.3	50.0



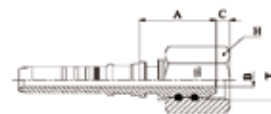
Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.



GOLDENBLAST™ PLUS WATERBLAST

BSP 60° Female cone, double thrust-wire nut: BS5200/ISO – 12151-6.

#	DN	size	inch		A	B	C	H
M65514-06-06	10	-06	3/8 BSP	3/8 BSP Female	34.5	4.8	6.0	24.0
M65514-08-08	12	-08	1/2 BSP	1/2 BSP Female	37.0	7.5	6.5	30.0
M65514-12-12	19	-12	3/4 BSP	3/4 BSP Female	43.0	12.0	8.7	36.0



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
We reserve the right to make technical changes without notice.

GOLDENBLAST™ SIX WATERBLAST



Waterblast applications

#									
	size	inch	mm	bar	psi	bar	psi	mm	kg/m
H10067012	-08	1/2	28.9	1450	21,030	3625	52,570	250.0	1.88
H10067019	-12	3/4	35.4	1350	19,580	3375	48,950	280.0	2.63

APPLICATIONS

High pressure water blasting used for heavy construction, ship building / main tenance and general industrial cleaning applications. Hydro-demolition (including the removal of concrete and marine paint). High pressure grease injection.

FEATURES

- High abrasion resistant cover, suited to harsh applications
- High kink resistance and large through bore ID to improve flow rate and reduce pressure drop
- Available in lengths up to 40m

CONSTRUCTION

Core tube: Water resistant synthetic rubber.
Pressure reinforcement: Six high tensile steel spirals.
Cover: Synthetic rubber with very high temperature, ozone and abrasion resistance.

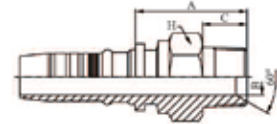
TEMPERATURE RANGE

-10°C to +70°C.

FITTINGS

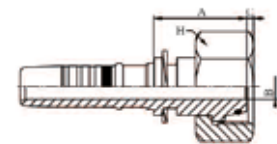
NPTF Male 60° cone seat: SAE J516/JS14 – M57810.

#					A	B	C	H
	DN	size	inch		mm	mm	mm	mm
M57810-08-08	12	-08	1/2	1/2 - 14	44.6	10.00	21.0	27.0
M57810-12-12	20	-12	3/4	3/4 - 14	49.4	15.0	21.0	32.0



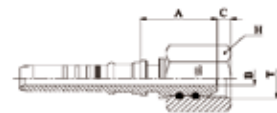
Metric O-Ring female 24° cone heavy duty: DIN 20066/ISO – M66613.

#					A	B	C	H
	DN	size	inch		mm	mm	mm	mm
M66613-08-24	12	-08	1/2	M24 x 1.5	35.4	7.5	4.0	32.0
M66613-12-36	20	-12	3/4	M36 x 2	44.7	12.0	3.4	46.0



BSP 60° Female cone, double thrust-wire nut: BS5200/ISO – 12151-6.

#					A	B	C	H
	DN	size	inch		mm	mm	mm	mm
M65514-08-08	12	-08	1/2 BSP	1/2 BSP Female	37.0	7.5	6.5	30.0
M65514-12-12	19	-12	3/4 BSP	3/4 BSP Female	43.0	12.0	8.7	36.0



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request.
 We reserve the right to make technical changes without notice.



SAFESHEILD WATERBLAST

Waterblast applications

#												
	mm	inch	mm		bar	psi	bar	psi	mm		kg/m	
EC910-08	12.7	1/2	24.6		1100	16,000	2750	40,000	228.6		1.12	
EC910-12	19.0	3/4	32.8		1000	14,500	2500	36,250	279.4		1.75	

APPLICATIONS

Water treatment facilities. Marine surfaces, runway cleaning, paint removal, bridge renovation. Waterblast service with water, water-soap emulsion. Exceeds ISO 7751 requirements.

FEATURES

- Four spiral wire construction
- Eaton's highly abrasion resistant DURA-TUFF hose cover
- 2.5:1 hose safety factor
- Meets global specifications EN1829-2 (impulse) and AS / NZ4233.2
- Superior hose flexibility provides ease of use in the field

CONSTRUCTION

Core tube:

Water resistant synthetic rubber.

Pressure reinforcement:

Six high tensile steel spirals

Cover:

Synthetic rubber with very high temperature, ozone and abrasion resistance.

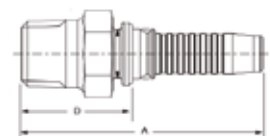
TEMPERATURE RANGE

-10°C to +70°C.

FITTINGS

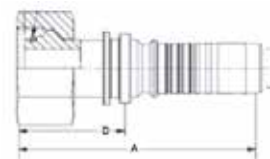
Male NPTF

#				A	E
	DN	size		mm	mm
FW1889-0808S	12	-08	1/2 - 14	77.1	9.0
1W12MP12	19	-12	3/4-14	92.1	15.1



Metric O-ring female 24° cone heavy duty

#				A	E
	DN	size		mm	mm
GH10235-8W	12	-08	M24 x 1.5	74.0	9.0
1W20DS12	19	-12	M36 x 2.0	103.2	15.1



Please Note: Variety of fittings in mild steel or stainless steel available, other fittings available on request. We reserve the right to make technical changes without notice.



INDUSTRIAL

INDUSTRIAL HOSE

Name an industry sector that might need a hose. We'll have been there, delivering every kind of hose, backed by outstanding expertise, knowledge and support.

Abdex has manufactured a wide range of industrial hose assemblies for over 40 years. We work closely with leading manufacturers from around the world, such as Parker Hannifin, Contitech, Eaton, and others. That means we're able to offer a solution for almost any application.

ADVANTAGES

Industrial hoses need to be tough, reliable and readily available. That's why Abdex holds large stock, has crimping capabilities to 10" nominal bore and container testing to offer many rapid solutions. Working with the best manufacturing partners and organisations like NAHAD, further enhances our capabilities.

APPLICATIONS & CAPABILITIES

Abdex industrial hoses cover a wide range of applications, including air / water, automotive, petrochemical, offshore industries, material handling, vacuum, food and drink, mining, agriculture, shipbuilding. We crimp hose up to 8 inch and we offer an extensive range of end fittings, such as camlocks, Minsup couplings, bauer couplings, hammer unions, API, NPT, flanges and many more. Whatever you need, we've got it, in stock. We test and certify every hose assembly to international standards. All backed by a comprehensive dedicated hose management programme.



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SAE J1402 AIR BRAKE AUTOMOTIVE



Product specifications

#								
	inch	inch	bar	psi	bar	psi	mm	kg/m
ABD520	3/8	0.75	10	145	62	900	50.0	0.30
ABD522	1/2	0.88	10	145	62	900	50.0	0.35

APPLICATIONS

Designed for compressed air brake systems found on heavy-duty trucks and equipment.

FEATURES

- DOT approved hose
- Achieved one million cycle test in house
- Extremely flexible

CONSTRUCTION

Core tube: Black EPDM.
Pressure reinforcement: Spiral synthetic.
Cover: Black EPDM.

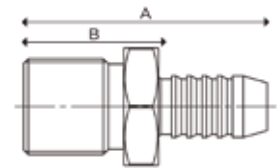
TEMPERATURE RANGE

-40°C to +93°C.

FITTINGS

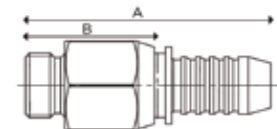
Male / female metric fixed

#			A	B
	inch		mm	mm
ABD966	1/2	M22 Male / M16 Female	56.0	31.0



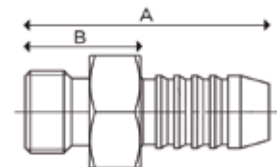
Male metric swivel

#			A	B
	inch		mm	mm
ABD944A	1/2	M16 x 1.5	61.0	36.0



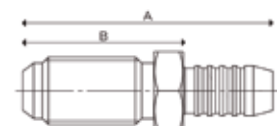
Male metric fixed

#			A	B
	inch		mm	mm
ABD03	1/2	M16 x 1.5	47.5	12.5



SAE Bulkhead male

#			A	B
	inch		mm	mm
ABD94	1/2	3/4 JIC	70.3	45.3



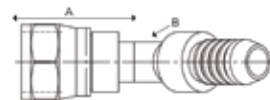
Please Note: We reserve the right to make technical changes without notice.



SAE J1402 AIR BRAKE AUTOMOTIVE

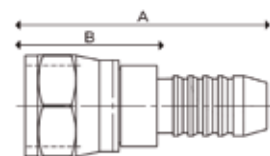
Female JIC swivel swept 45

#			A	
ABD997	inch 1/2	3/4 JIC	mm 36.0	mm 25.0



Female JIC swivel

#			A	B	
ABD1010	inch 1/2	3/4 JIC	mm 50.0	mm 25.0	mm 24.0



Full range of crimp ferrules, 3/8" and 1/2" available from stock.
Please contact our sales team for further information.



Please Note: We reserve the right to make technical changes without notice.

AS / NZS 1869 LPG GAS HOSE



Product specifications

#							
	inch	mm	mm	bar	psi	kg/m	mm
7132-19352	3/16	4.8	13.0	24.1	350	0.05	50.8
7132-25354	1/4	6.4	15.5	24.1	350	0.07	63.5
7132-38354	3/8	9.5	19.1	24.1	350	0.10	88.9
7132-50354	1/2	12.7	23.8	24.1	350	0.15	114.3
7132-75354	3/4	19.1	31.8	24.1	350	0.23	165.1
7132-100354	1	25.4	38.1	24.1	350	0.29	190.5

APPLICATIONS

Series 7132 is a flexible, lightweight liquefied petroleum gas (LPG) / propane delivery and transfer hose. The hose meets all Underwriters Laboratories (UL21) and Canadian Gas Association (CGA Type I) requirements. The construction incorporates multiple textile plies of reinforcement for flexibility and kink resistance. The perforated cover is resistant to mild chemicals, oil and ozone. Series 7132 is available in long lengths on reels, long cut lengths and factory-tested assemblies from stock in popular configurations.

FEATURES

- Extremely flexible
- Kink resistant
- AS1869 approved

CONSTRUCTION

Core tube: Black nitrile.
Pressure reinforcement: Multiple textile plies.
Cover: Black chloroprene; perforated smooth finish.

TEMPERATURE RANGE

-40°C to +82°C (The hose construction is capable of this rating, but LP Gas should NEVER be conveyed over 60°C/140°F).



Please Note: We reserve the right to make technical changes without notice.

Product specifications

#							Length
	inch	mm	mm	bar	psi	kg/m	m
20026239	1/4	6.4	15.5	34.5	500	0.25	152.4
20026255	5/16	7.9	17.5	34.5	500	0.30	152.4
20026256	3/8	9.5	18.6	34.5	500	0.33	152.4
20026273	1/2	12.7	22.6	34.5	500	0.42	15.2
20026289	5/8	15.9	26.9	34.5	500	0.52	152.4
20026290	3/4	19.1	30.2	34.5	500	0.61	152.4
20026304	1	25.4	37.8	34.5	500	0.86	137.2
20026306	1 1/4	31.8	45.6	34.5	500	1.18	30.5
20026309	1 1/2	38.1	51.8	34.5	500	1.27	91.0
20023183	2	50.8	66.6	34.5	500	1.82	30.5

APPLICATIONS

A premium-quality, multipurpose industrial hose with a wide range of applications in factories, construction, agriculture, quarries, mines, railroads, the oil and gas industry, and shipbuilding. All sizes are rated at 500 psi (3.4 MPa) maximum working pressure. Non-conductive, minimum electrical resistance greater than one megaohm per inch of hose length at 1000 Volts DC.

FEATURES

- Premium quality
- Non-conductive
- Safety yellow cover

CONSTRUCTION

Core tube: Nitrile synthetic rubber, RMA Class A (high oil resistance).
Pressure reinforcement: Spiral flexten yarn, 2" is braided synthetic yarn.
Cover: Yellow Carbryn™ synthetic rubber, RMA Class A (high oil resistance) MSHA approved.

TEMPERATURE RANGE

-29°C to 88°C.

For asset management please refer to the accessories section on page 245.

ORTAC®

AIR & MULTIPURPOSE



Product specifications

#							Length
	inch	mm	mm	bar	psi	kg/m	m
20026560	3/16	5.0	11.8	20.7	300	0.10	152.4
20026527	1/4	6.0	13.5	20.7	300	0.13	152.4
20026529	5/16	8.0	17.5	20.7	300	0.21	152.4
20026531	3/8	10.0	17.5	20.7	300	0.22	152.4
20026534	1/2	12.0	21.3	20.7	300	0.30	152.4
20026570	5/8	16.0	26.9	20.7	300	0.52	152.4
20026540	3/4	19.0	29.0	20.7	300	0.51	152.4
20026575	1	25.0	38.1	20.7	300	0.88	137.2
20026579	1 1/4	32.0	45.2	17.2	250	1.04	122.0
20023267	1 1/2	38.0	52.8	17.2	250	1.43	91.4
20024996	2	50.0	63.5	13.8	200	1.80	30.5

APPLICATIONS

Ortac® (oil resistant tube and cover) is our most popular premium-quality multipurpose hose. Used in the most abusive industrial applications, Ortac will handle air, oil, water, kerosene and some chemicals. Non-conductive, minimum electrical resistance greater than one (1) megohm per inch of hose length; at 1000 Volts DC.

Available in 250, 300 and 400 PSI working pressures.

Note: Ortac® 400 Yellow is USMSHA approved.

FEATURES

- Premium quality
- Non-conductive

CONSTRUCTION

Core tube:

Nitrile synthetic rubber, RMA Class A (high oil resistance).

Pressure reinforcement:

Spiral synthetic yarn, 2" is braided.

Cover:

Red or Yellow Carbryn™ synthetic rubber, RMA Class A (high oil resistance).

TEMPERATURE RANGE

-29°C to 88°C.



Please Note: We reserve the right to make technical changes without notice.



V107HD

AIR & MULTIPURPOSE

Product specifications

#							Length
	inch	mm	mm	bar	psi	kg/m	m
20768673	1/2	12.0	23.0	21	300	0.33	20.0
20768674	3/4	19.0	31.0	21	300	0.60	20.0
20768675	1	25.0	38.0	21	300	0.81	20.0
20768676	1 1/4	32.0	44.0	21	300	0.92	20.0
20768677	1 1/2	38.0	51.0	21	300	1.19	20.0
20768678	2	50.0	65.0	21	300	1.38	20.0
20768679	2 1/2	63.0	76.0	21	300	1.73	20.0
20768680	3	75.0	90.0	21	300	2.34	20.0

APPLICATIONS

A versatile heavy duty air/water hose for use in mining, construction, quarries and various industrial applications.

FEATURES

- Premium quality
- Heavy duty
- Weather and ozone resistant

CONSTRUCTION

Core tube: NR / SBR blended.
Pressure reinforcement: 2 Spiral plies of synthetic fabric.
Cover: Black SBR/EPDM blended.

TEMPERATURE RANGE

-32°C to 88°C.

ABSWAH-40

AIR & MULTIPURPOSE



Product specifications

#									
	inch	mm		bar	psi	bar	psi		
AH600-0050	1/2	13.0	24.0	40	600	160	2400	0.51	130.0
AH600-0075	3/4	19.0	31.0	40	600	160	2400	0.74	133.0
AH600-0100	1	25.0	38.0	40	600	160	2400	0.91	175.0
AH600-0125	1 1/4	32.0	45.0	40	600	160	2400	1.51	224.0
AH600-0150	1 1/2	38.0	56.0	40	600	160	2400	1.93	266.0
AH600-0200	2	51.0	69.0	40	600	160	2400	2.40	357.0
AH600-0250	2 1/2	63.5	81.0	40	600	160	2400	2.90	441.0
AH600-0300	3	76.0	95.0	40	600	160	2400	4.68	532.0
AH600-0400	4	102.0	120.0	40	600	160	2400	7.34	714.0

APPLICATIONS

Designed for the most severe working conditions in mining, quarries, industrial and construction service, this mandrel built hose has a high margin safety and gives a long and trouble-free service under the most arduous working conditions.

FEATURES

- High pressure
- Weather and ozone resistant

CONSTRUCTION

Core tube: Synthetic NBR rubber, resistant to oil-mist mixed air and inert fluids.
Pressure reinforcement: High tensile steel wire.
Cover: Abrasion, ozone and weather resistant pin pricked synthetic rubber.

TEMPERATURE RANGE

-40°C to 100°C.



Please Note: We reserve the right to make technical changes without notice.



V214

WATER SUCTION & DISCHARGE

Product specifications

#							Length
	inch	mm	mm	bar	psi	kg/m	m
20572365	1	25.0	36.0	10.3	150	0.85	30.0
20574529	1	25.0	36.0	10.3	150	0.85	60.0
20572366	1 1/4	32.0	43.0	10.3	150	1.11	30.0
20574531	1 1/4	32.0	43.0	10.3	150	1.11	60.0
20572367	1 1/2	38.0	49.0	10.3	150	1.55	30.0
20574532	1 1/2	38.0	49.0	10.3	150	1.55	60.0
20572368	2	50.0	63.0	10.3	150	2.08	30.0
20574533	2	50.0	63.0	10.3	150	2.08	60.0
20572369	2 1/2	63.0	77.0	10.3	150	2.66	30.0
20574534	2 1/2	63.0	77.0	10.3	150	2.66	60.0
20572370	3	75.0	89.0	10.3	150	2.14	30.0
20574535	3	75.0	89.0	10.3	150	2.19	60.0
20572361	4	100.0	110.0	10.3	150	5.23	30.0
20572362	5	125.0	146.0	10.3	150	6.15	30.0
20572363	6	150.0	170.0	10.3	150	8.97	30.0

APPLICATIONS

General purpose suction and discharge hose for use in medium to heavy duty operations.

FEATURES

- Premium quality
- Weather and ozone resistant

CONSTRUCTION

Core tube: NR / SBR blended.
Pressure reinforcement: Synthetic fabric plies with wire helix.
Cover: Black SBR / EPDM blended; wrapped finish.

TEMPERATURE RANGE

-20°C to 70°C.

FLEXSTEEL PETROL

PETROLEUM TRANSFER



Product specifications

#							Length
	inch	mm	mm	bar	psi	kg/m	m
20022226	5/8	16.0	25.4	2.5	36	0.51	145-190
20022229	3/4	19.0	20.2	2.5	36	0.67	145-190
20022230	1	25.0	38.1	2.5	36	0.91	100-160

APPLICATIONS

Flexsteel Petrol Pump hose is a hose which offers excellent kink resistance in petrol dispensing applications. Meeting the performance criteria of AS2683-1989 Type 4, Grade 2, Kind 1 and 2. Its wire-braid reinforcing, coupled with Contitech specially developed compounds (intrinsically conducting), make this the safest and most durable hose available for this application.

FEATURES

- Excellent Kink resistance
- Hardwall for long service life
- Smooth cover prevents marking
- Meets AS2683 Standard

CONSTRUCTION

Core tube: Black Chemigum® (Nitrile).
Pressure reinforcement: Single braided high tensile wire.
Cover: Black Chemivic® (Nitrile blend).
Branding: Contitech 5/8" Flexsteel Petrol Pump – AS2683-1989 Type 4, Grade 2, Kind 1 and 2, 250 Kpa W.P.

TEMPERATURE RANGE

-29°C to 82°C.



Please Note: We reserve the right to make technical changes without notice.



V404 PETROLEUM TRANSFER

Product specifications

#							Length
	inch	mm	mm	bar	psi	kg/m	m
20572398	3/4	19.0	29.0	10.3	150	0.59	30.0
20572399	1	25.0	36.0	10.3	150	0.83	30.0
20574515	1	25.0	36.0	10.3	150	0.83	60.0
20572400	1 1/4	32.0	43.0	10.3	150	1.07	30.0
20574516	1 1/4	32.0	43.0	10.3	150	1.07	60.0
20572401	1 1/2	38.0	49.0	10.3	150	1.21	30.0
20574517	1 1/2	38.0	49.0	10.3	150	1.21	60.0
20572402	2	50.0	63.0	10.3	150	1.76	30.0
20574518	2	50.0	63.0	10.3	150	1.76	60.0
20572403	2 1/2	63.0	77.0	10.3	150	1.59	30.0
20574520	2 1/2	63.0	77.0	10.3	150	1.59	60.0
20572404	3	75.0	89.0	10.3	150	2.83	30.0
20574521	3	75.0	89.0	10.3	150	2.83	60.0
20572397	4	100.0	118.0	10.3	150	4.67	30.0

APPLICATIONS

General purpose hose used to transfer gasoline, oil and other petroleum based products. Hose is designed for pressure, gravity flow or suction service.

FEATURES

- Premium quality
- Weather and ozone resistant

CONSTRUCTION

Core tube: NBR (Oil resistant).
Pressure reinforcement: Synthetic fabric plies (2) with wire helix.
Cover: Black NBR (Oil resistant); wrapped finish.
Branding: Veyance V404 oil suction and delivery WP150psi

TEMPERATURE RANGE

-20°C to 70°C.

PLICORD® EXTREMEFLEX™ PETROLEUM TRANSFER



Product specifications

#								Vacuum HG			Length
	inch	mm		mm	bar	psi	mm	inch	mm		
20459042	3/4	19.0	30.5	17.2	250	19.0	19.05	737.0	29	0.65	30.48
20459043	1	25.4	36.8	17.2	250	25.0	25.40	737.0	29	0.81	30.48
20472432	1 1/4	32.0	42.5	17.2	250	32.0	1.25	737.0	29	0.88	30.48
20459044	1 1/2	38.0	48.5	17.2	250	37.1	1.5	737.0	29	1.08	30.48
20474865	1 1/2	38.0	48.5	17.2	250	37.1	1.5	737.0	29	1.08	60.96
20635998	1 3/4	44.0	55.8	17.2	250	44.0	1.73	737.0	29	1.28	121.92
20459045	2	50.0	61.8	17.2	250	50.8	2	737.0	29	1.46	30.48
20474866	2	50.0	61.8	17.2	250	50.8	2	737.0	29	1.46	60.96
20459046	2 1/2	63.0	76.1	13.7	200	63.5	2.5	737.0	29	2.10	30.48
20459047	3	75.0	88.8	13.7	200	76.2	3	737.0	29	2.51	30.48
20607374	3 1/2	88.0	103.6	10.3	150	88.0	3.43	737.0	29	3.21	30.48
20459048	4	100.0	115.7	10.3	150	101.6	4	737.0	29	3.61	30.48
20546328	6	150.0	168.1	10.3	150	150.0	6	737.0	29	6.61	30.48

APPLICATIONS

An extremely flexible and lightweight drop hose for use in tank truck and in-plant operation to transfer diesel, ethanol, gasoline, oil and petroleum base products up to 60% aromatic content. Corrugated construction for lower drag coefficient and superior abrasion resistance.

FEATURES

- Extremely flexible
- Lightweight
- Weather and ozone resistant

CONSTRUCTION

Core tube:

Black Nitrile synthetic rubber (Class A oil resistance).

Pressure reinforcement:

Spiral plied synthetic fabric with wire helix.

Cover:

Black Chemivic™ synthetic (corrugated).

TEMPERATURE RANGE

-40°C to 93°C.



Continental ContiTech

Please Note: We reserve the right to make technical changes without notice.



PLICORD® SUPER BLACK FLEXWING®

PETROLEUM TRANSFER

#								Vacuum HG		
	inch	mm		bar	psi	mm	inch	mm	inch	
20155914	1 1/4	31.8	47.1	207	300	100.0	4	737.0	29	1.48
20017550	1 1/2	38.1	52.8	207	300	100.0	4	737.0	29	1.71
20017552	2	50.8	65.8	207	300	125.0	5	737.0	29	2.14
20017558	2 1/2	63.5	79.0	207	300	150.0	6	737.0	29	2.74
20017560	3	76.2	92.7	207	300	175.0	7	737.0	29	3.56
20017564	4	101.6	122.7	207	300	254.0	10	737.0	29	5.60
20017568	5	127.0	149.0	207	300	500.0	20	737.0	29	7.60
20338990	6	152.4	183.3	207	300	600.0	24	737.0	29	12.60

APPLICATIONS

A premium high-pressure petroleum transfer hose for handling ethanol blends, gasoline, oils and other petroleum products at higher working pressures.

FEATURES

- Premium quality
- Weather and ozone resistant
- Early warning system for external wear

CONSTRUCTION

Core tube:

Special fuel-resistant black nitrile synthetic rubber RMA Class A (High oil resistance)

Pressure reinforcement:

Spiral-plied synthetic fabric with wire helix

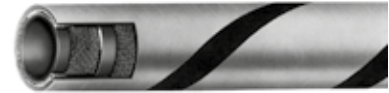
Cover:

Black Chemivic™ smooth cover with wrapped finish. Also available with ARC treatment for improved abrasion resistance. Both hoses standard with built in blue wear ply to illustrate wear condition and potential trigger point for product replacement.

TEMPERATURE RANGE

-37°C to 93°C.

BLUE FLEXWING® SPECLAR® (XLPE) CHEMICAL TRANSFER



Product specifications

#							Vacuum HG			Length
	inch	mm	mm	bar	psi	mm	inch	mm	kg/m	m
20018506	1	25.0	37.3	13.8	200	203.0	29	737.0	0.82	30.5
20018512	1 1/4	32.0	44.5	13.8	200	229.0	29	737.0	1.04	30.5
20018517	1 1/2	38.0	51.7	13.8	200	254.0	29	737.0	1.41	30.5
20018520	1 1/2	38.0	51.7	13.8	200	254.0	29	737.0	1.41	122.0
20018524	2	50.0	65.5	13.8	200	305.0	29	737.0	1.82	30.5
20018525	2	50.0	65.5	13.8	200	305.0	29	737.0	1.82	61.0
20018527	2	50.0	65.5	13.8	200	305.0	29	737.0	1.82	122.0
20018532	2 1/2	63.0	79.5	13.8	200	381.0	29	737.0	2.46	122.0
20018535	3	75.0	94.0	13.8	200	457.0	29	737.0	3.33	30.5
20018539	4	100.0	120.1	13.8	200	610.0	29	737.0	4.48	30.5

APPLICATIONS

Handles the majority of today's industrial chemicals in pressure, gravity flow or suction service.

FEATURES

- Premium quality
- Extra long lengths available

CONSTRUCTION

Core tube:

Clear Speclar® synthetic rubber cross-linked polyethylene (XLPE).

Pressure reinforcement:

Spiral-plied synthetic fabric with double wire helix.

Cover:

Blue Versigard® synthetic rubber with spiral white stripe (wrapped impression).

TEMPERATURE RANGE

-32°C to 66°C.



Continental ContiTech

Please Note: We reserve the right to make technical changes without notice.



CHEM ONE™ CHEMICAL TRANSFER

Product specifications

#							Vacuum HG			Length
	inch	mm		bar	psi		inch	mm		
20408836	3/4	19.0	30.5	13.8	200	50.8	29	737.0	0.58	30.5
20408837	1	25.0	36.8	13.8	200	76.2	29	737.0	0.73	30.5
20408838	1 1/4	32.0	42.2	13.8	200	76.2	29	737.0	0.78	30.5
20408870	1 1/2	38.0	48.3	13.8	200	101.6	29	737.0	0.93	30.5
20408871	2	50.0	61.8	13.8	200	127.0	29	737.0	1.28	30.5
20408872	2 1/2	63.0	75.6	13.8	200	152.4	29	737.0	1.84	30.5
20408873	3	75.0	88.1	13.8	200	293.2	29	737.0	2.17	30.5
20462713	4	100.0	115.0	13.8	200	279.4	29	737.0	3.06	30.5

APPLICATIONS

For the transfer of a variety of current industrial chemicals used today. (Refer to Contitech® Chemical resistance Guide for compatibility.) For use in pressure, gravity flow and / or suction service.

FEATURES

- Premium quality
- Extremely flexible

CONSTRUCTION

Core tube:

Alphasyn® modified cross-linked polyethylene (Mod XLPE).

Pressure reinforcement:

Spiral plied synthetic fabric with double wire helix.

Cover:

Black corrugated abrasion-resistant Omegasyn™ EPDM with red spiral stripe.

Branding:

CHEM ONE™ chemical transfer hose Alphasyn® 200 PSI WP. Contitech®.

TEMPERATURE RANGE

-40°C to 121°C.



Product specifications

#							Vacuum HG		
	inch	mm		bar	psi		mm	inch	
20013527	1 1/4	31.8	41.4	3.1	45	76.0	737.0	29	0.51
20013528	1 1/2	38.1	48.0	2.8	40	81.0	737.0	29	0.60
20013529	2	50.8	62.7	2.8	40	140.0	737.0	29	1.00
20013531	2 1/2	63.5	77.5	2.4	35	152.0	737.0	29	1.29
20013532	3	76.2	93.7	2.1	30	191.0	737.0	29	1.73
20013535	4	101.6	122.2	2.1	30	279.0	737.0	29	3.21
20013539	5	127.0	146.8	2.1	30	381.0	737.0	29	3.87
20013545	6	152.4	179.8	1.7	25	508.0	737.0	29	5.10
20013549	8	203.2	234.2	1.4	20	762.0	737.0	29	8.69
20013554	10	254.0	284.7	1.4	20	1143.0	737.0	29	11.85

APPLICATIONS

The Artrac® hose is used for a variety of abrasive, material handling applications to transfer sand, gravel, cement, fly ash, glass, metals, plastic pellets, fertilizers, rock salts and slurries.

FEATURES

- Premium quality
- Lightweight

CONSTRUCTION

Core tube:

Thermoplastic alloyed blend of polyurethane and PVC (static dissipating / static conductive).

Pressure reinforcement:

Rigid high-density PVC helix.

Cover:

Thermoplastic alloyed blend of nitrile, polyurethane, and PVC (non-conductive).

TEMPERATURE RANGE

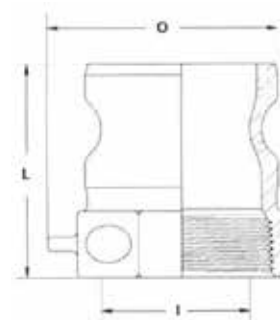
-40°C to 70°C.



INSTA-LOCK™ TYPE A MALE ADAPTOR X FEMALE BSP THREAD

Product specifications

Size inch	Aluminum	Stainless Steel	Distance chain lug extends from body inch	Overall Length (L) inch	Max. width across adaptor (O) inch	Minimum ID (I) inch
1/2	A050AL	A050SS	0.375	1.656	1.500	0.500
3/4	A075AL	A075SS	0.375	1.656	1.688	0.781
1	A100AL	A100SS	0.375	2.163	1.804	0.875
1 1/4	A125AL	A125SS	0.375	2.473	2.237	1.063
1 1/2	A150AL	A150SS	0.375	2.531	2.368	1.375
2	A200AL	A200SS	0.375	2.781	2.909	1.750
2 1/2	A250AL	A250SS	0.375	3.093	3.585	2.187
3	A300AL	A300SS	0.375	3.281	4.009	2.812
4	A400AL	A400SS	0.375	3.528	5.257	3.750
5	A500AL	A500SS	0.375	3.813	6.438	4.688
6	A600AL	A600SS	0.375	3.656	7.688	5.750



Also available in NPT Thread ex USA.

Note: Contitech® Insta-Lock fittings are never to be used in steam or compressed air service.

APPLICATIONS

Type A fitting is commonly threaded onto a pipe, threaded hose end or manifold system, which is connected and disconnected on a regular basis. Insta-Lock™ fittings are designed for liquids and dry bulk. Consult the chemical resistance guide for specific chemical recommendations.

MATERIALS

Aluminum, 316# stainless steel and brass.

PRESSURE RATING

Sizes 1/2"-2", 250 psi; sizes 2 1/2"-4", 150 psi; sizes 5"-6", 75 psi. Recommended working pressure ratings based on ambient temperature 70°F (21°C).

CONSTRUCTION

Branding: Contitech® A200SS.

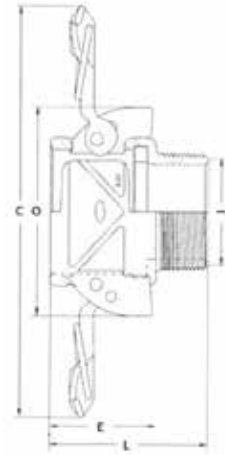
INSTA-LOCK™ TYPE B

FEMALE COUPLER X MALE BSP THREAD



Product specifications

Size inch	Aluminum	Stainless Steel	Max. width with cam arms closed (O) inch	Overall Length (L) inch	Exposed Length (E) inch	Minimum ID (I) inch	Max. width with cam arms extended (C) inch
1/2	B050AL	B050SS	2.469	1.906	1.188	0.469	4.969
3/4	B075AL	B075SS	2.781	2.031	1.313	0.688	5.261
1	B100AL	B100SS	2.920	2.500	1.625	0.875	5.367
1 1/4	B125AL	B125SS	3.510	2.937	2.000	1.063	7.669
1 1/2	B150AL	B150SS	3.830	2.937	2.000	1.375	7.967
2	B200AL	B200SS	4.210	3.218	2.156	1.750	8.340
2 1/2	B250AL	B250SS	4.720	3.718	2.250	2.187	8.837
3	B300AL	B300SS	5.680	4.000	2.468	2.812	10.435
4	B400AL	B400SS	6.780	4.218	2.593	3.750	11.538
5	B500AL	B500SS	7.813	4.406	2.625	4.688	12.571
6	B600AL	B600SS	9.344	4.750	2.844	5.750	16.096



Also available in NPT Thread ex USA.

Note: Contitech® Insta-Lock fittings are never to be used in steam or compressed air service Contitech® Engineered products Insta-Lock cam arms are designed exclusively for Insta-Lock fittings.

APPLICATIONS

Type B fitting is normally threaded onto a pipe or manifold which joins to a rubber hose assembly that is connected and disconnected regularly. Insta-Lock™ fittings are designed for liquids and dry bulk. Consult the chemical resistance guide for specific chemical recommendations.

MATERIALS

Aluminum, 316# stainless steel and brass.

PRESSURE RATING

Sizes 1/2"-2", 250 psi; sizes 2 1/2"-4", 150 psi; sizes 5"-6", 75 psi. Recommended working pressure ratings based on ambient temperature 70°F (21°C) with Standard Nitrile gaskets.

CONSTRUCTION

Branding: Contitech® B200SS.



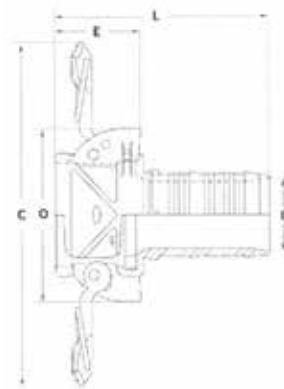
Please Note: We reserve the right to make technical changes without notice.



INSTA-LOCK™ TYPE C FEMALE COUPLER X HOSE SHANK

Product specifications

Size inch	Aluminum	Stainless Steel	Max. width with cam arms closed (O) inch	Overall Length (L) inch	Exposed Length (E) inch	Minimum ID (I) inch	Max. width with cam arms extended (C) inch
1/2	C050AL	C050SS	2.469	3.063	1.188	0.260	4.969
3/4	C075AL	C075SS	2.781	3.656	1.313	0.490	5.261
1	C100AL	C100SS	2.920	4.250	1.975	0.718	5.367
1 1/4	C125AL	C125SS	3.510	4.625	2.350	0.906	7.669
1 1/2	C150AL	C150SS	3.830	4.750	2.370	1.156	7.967
2	C200AL	C200SS	4.210	5.281	2.531	1.625	8.340
2 1/2	C250AL	C250SS	4.720	5.750	2.625	2.093	8.837
3	C300AL	C300SS	5.680	6.840	2.849	2.560	10.435
4	C400AL	C400SS	6.780	7.218	2.994	3.468	11.538
5	C500AL	C500SS	7.813	7.563	2.625	4.469	12.571
6	C600AL	C600SS	9.344	8.969	2.844	5.469	16.096



Note: Contitech® Insta-Lock fittings are never to be used in steam or compressed air service Contitech® Engineered products Insta-Lock cam arms are designed exclusively for Insta-Lock fittings.

APPLICATIONS

Type C fitting can be attached to a rubber hose with the use of interlocking ferrules, crimp sleeves, or bands. Insta-Lock™ fittings are designed for liquids and dry bulk. Consult the chemical resistance guide for specific chemical recommendations.

MATERIALS

Aluminum, 316# stainless steel and brass.

PRESSURE RATING

Sizes 1/2" - 2", 250 psi; sizes 2 1/2" - 4", 150 psi; sizes 5" - 6", 75 psi. Recommended working pressure ratings based on ambient temperature 70°F (21°C) with Standard Nitrile gaskets.

CONSTRUCTION

Branding: Contitech® C200SS.



ContiTech

Please Note: We reserve the right to make technical changes without notice.

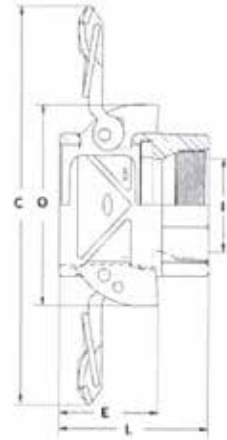
INSTA-LOCK™ TYPE D

FEMALE COUPLER X FEMALE BSP THREAD



Product specifications

Size inch	Aluminum	Stainless Steel	Max. width with cam arms closed (O) inch	Overall Length (L) inch	Exposed Length (E) inch	Minimum ID (I) inch	Max. width with cam arms extended (C) inch
1/2	D050AL	D050SS	2.469	1.813	1.188	0.656	4.969
3/4	D075AL	D075SS	2.781	2.063	1.313	0.813	5.261
1	D100AL	D100SS	2.920	2.375	1.975	1.000	5.367
1 1/4	D125AL	D125SS	3.510	2.687	2.350	1.300	7.669
1 1/2	D150AL	D150SS	3.830	2.843	2.370	1.560	7.967
2	D200AL	D200SS	4.210	3.156	2.531	1.937	8.340
2 1/2	D250AL	D250SS	4.720	3.437	2.625	2.312	8.837
3	D300AL	D300SS	5.680	3.718	2.849	2.937	10.435
4	D400AL	D400SS	6.780	4.030	2.994	3.750	11.538
5	D500AL	D500SS	7.813	4.313	2.563	4.688	12.571
6	D600AL	D600SS	9.344	4.513	2.719	5.750	16.096



Also available in NPT Thread ex USA.

Note: Contitech® Insta-Lock fittings are never to be used in steam or compressed air service. Contitech® Engineered products Insta-Lock cam arms are designed exclusively for Insta-Lock fittings.

APPLICATIONS

Type D fitting is commonly threaded onto a pipe, threaded hose end or manifold system, which is connected and disconnected on a regular basis. Insta-Lock™ fittings are designed for liquids and dry bulk. Consult the chemical resistance guide for specific chemical recommendations.

MATERIALS

Aluminum, 316# stainless steel and brass.

PRESSURE RATING

Sizes 1/2"-2", 250 psi; sizes 2 1/2"-4", 150 psi; sizes 5"-6", 75 psi. Recommended working pressure ratings based on ambient temperature 70°F (21°C) with Standard Nitrile gaskets.

CONSTRUCTION

Branding: Contitech® D200SS.



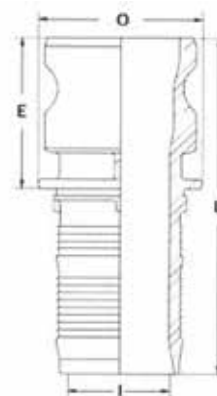
Please Note: We reserve the right to make technical changes without notice.



INSTA-LOCK™ TYPE E **MALE ADAPTOR X HOSE SHANK**

Product specifications

Size inch	Aluminum	Stainless Steel	Maximum OD (O) inch	Overall Length (L) inch	Exposed Length (E) inch	Minimum ID (I) inch
1/2	E050AL	E050SS	1.188	3.500	1.625	0.260
3/4	E075AL	E075SS	1.262	3.969	1.625	0.490
1	E100AL	E100SS	1.625	4.569	1.944	0.718
1 1/4	E125AL	E125SS	2.000	4.812	2.187	0.906
1 1/2	E150AL	E150SS	2.312	5.000	2.250	1.156
2	E200AL	E200SS	2.687	5.625	2.500	1.625
2 1/2	E250AL	E250SS	3.062	6.187	2.687	2.093
3	E300AL	E300SS	3.781	7.125	2.750	2.562
4	E400AL	E400SS	4.875	7.434	2.809	3.468
5	E500AL	E500SS	6.563	7.844	2.906	4.469
6	E600AL	E600SS	7.125	9.188	3.063	5.469



Note: Contitech® Insta-Lock fittings are never to be used in steam or compressed air service.

APPLICATIONS

Type E fitting can be attached to a rubber hose with the use of interlocking ferrules, crimp sleeve and bands. Insta-Lock™ fittings are designed for liquids and dry bulk. Consult the chemical resistance guide for specific chemical recommendations.

MATERIALS

Aluminum, 316# stainless steel and brass.

PRESSURE RATING

Sizes 1/2"-2", 250 psi; sizes 2 1/2"-4", 150 psi; sizes 5"-6", 75 psi. Recommended working pressure ratings based on ambient temperature 70°F (21°C) with Standard Nitrile gaskets.

CONSTRUCTION

Branding: Contitech® E200SS.



Please Note: We reserve the right to make technical changes without notice.

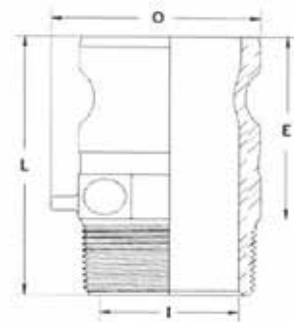
INSTA-LOCK™ TYPE F

MALE ADAPTOR X MALE BSP THREAD



Product specifications

Size inch	Aluminum	Stainless Steel	Max. width across adaptor (O) inch	Overall Length (L) inch	Exposed Length (E) inch	Minimum ID (I) inch	Distance chain lug extends from BOD inch
1/2	F050AL	F050SS	1.150	2.250	1.531	0.469	0.375
3/4	F075AL	F075SS	1.688	2.375	1.656	0.688	0.375
1	F100AL	F100SS	1.750	2.819	2.038	0.875	0.375
1 1/4	F125AL	F125SS	2.130	3.156	2.279	1.187	0.375
1 1/2	F150AL	F150SS	2.300	3.222	2.347	1.437	0.375
2	F200AL	F200SS	2.909	3.593	2.596	1.750	0.375
2 1/2	F250AL	F250SS	3.281	4.218	2.812	2.187	0.375
3	F300AL	F300SS	3.844	4.343	2.875	2.812	0.375
4	F400AL	F400SS	4.994	4.746	3.184	3.734	0.375
5	F500AL	F500SS	6.188	4.906	3.125	4.688	0.375
6	F600AL	F600SS	7.500	5.219	3.313	5.750	0.375



Also available in NPT Thread ex USA.

Note: Contitech® Insta-Lock fittings are never to be used in steam or compressed air service. Contitech® Insta-Lock cam arms are designed exclusively for Insta-Lock fittings.

APPLICATIONS

Type F fitting is normally threaded onto a pipe, or manifold connections and mated with Part C, Part B or Part D. Used in applications that require frequent connections. Insta-Lock™ fittings are designed for liquids and dry bulk. Consult the chemical resistance guide for specific chemical recommendations.

MATERIALS

Aluminum, 316# stainless steel and brass.

PRESSURE RATING

Sizes 1/2"-2", 250 psi; sizes 2 1/2"-4", 150 psi; sizes 5"-6", 75 psi. Recommended working pressure ratings based on ambient temperature 70°F (21°C) with Standard Nitrile gaskets.

CONSTRUCTION

Branding: Contitech® F200SS.



Please Note: We reserve the right to make technical changes without notice.



INSTA-LOCK™ FITTINGS REDUCERS & JUMP SIZES

Product specifications

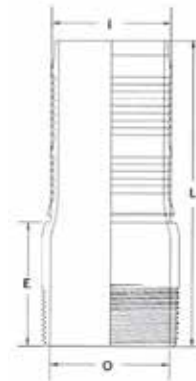
Continental ContiTech SAP	#	Description	Size	Material
inch	inch	inch	inch	inch
20668616	AA200AL	Spool adaptor (male x male)	2 x 2	Aluminum
20668617	AA300AL	Spool adaptor (male x male)	3 x 3	Aluminum
20668618	AA400AL	Spool adaptor (male x male)	4 x 4	Aluminum
20668774	DA3020AL	Jump size female coupler x male adaptor	3 x 2	Aluminum
20668775	DA3040AL	Jump size female coupler x male adaptor	3 x 4	Aluminum
20668776	DA4030AL	Jump size female coupler x male adaptor	4 x 3	Aluminum
20668777	DA6040AL	Jump size female coupler x male adaptor	6 x 4	Aluminum
20668779	DD300AL	Female coupler x female coupler	3 x 3	Aluminum
20668780	DD400AL	Female coupler x female coupler	4 x 4	Aluminum

INSTA-LOCK™ INTERLOCKING STAINLESS MALE NPT & BSP HOSE STEMS



Product specifications

Size inch	NPT	BSP	Maximum OD (O) inch	Overall Length (L) inch	Exposed Length (L) inch	Minimum ID (I) inch
1	GTM100SS	GTM100SSBT	1.315	4.375	1.750	0.830
1 1/4	GTM125SS	GTM125SSBT	1.660	4.500	1.875	1.130
1 1/2	GTM150SS	GTM150SSBT	1.900	4.750	2.000	1.360
2	GTM200SS	GTM200SSBT	2.375	5.250	2.125	1.820
2 1/2	GTM250SS	GTM250SSBT	2.875	6.125	2.625	2.240
3	GTM300SS	GTM300SSBT	3.500	7.000	2.625	2.730
4	GTM400SS	GTM400SSBT	4.500	7.625	3.000	3.710



Note: Contitech® Insta-Lock fittings are never to be used in steam or compressed air service.

APPLICATIONS

Interlocking stainless steel male NPT and BSP hose stem fittings are designed to be attached to a rubber hose with the use of a Continental ContiTech Insta-Lock™ Ferrule. Consult the chemical resistance guide for specific chemical resistance recommendations.

MATERIALS

316# stainless steel.

PRESSURE RATING

Sizes 1" to 2" 250 psi, 2 1/2" to 4" 150 psi. Recommended working pressure ratings based on ambient temperature 70°F (21°C).



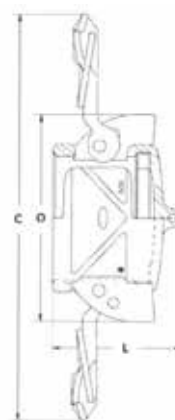
Please Note: We reserve the right to make technical changes without notice.



INSTA-LOCK™ DUST CAP **FEMALE CAP FOR MALE INSTA-LOCK**

Product specifications

Size inch	Aluminum	Stainless Steel	Max. width with cam arms closed (O) inch	Overall Length (L) inch	OD with cam arms extended (C) inch	Distance chain lug extends from body inch
1/2	DC050AL	DC050SS	2.469	1.625	4.969	0.375
3/4	DC075AL	DC075SS	2.781	1.625	5.261	0.375
1	DC100AL	DC100SS	2.920	2.086	5.367	0.375
1 1/4	DC125AL	DC125SS	3.510	2.360	7.669	0.375
1 1/2	DC150AL	DC150SS	3.830	2.400	7.967	0.375
2	DC200AL	DC200SS	4.210	2.633	8.340	0.375
2 1/2	DC250AL	DC250SS	4.720	2.786	8.837	0.375
3	DC300AL	DC300SS	5.680	2.957	10.435	0.375
4	DC400AL	DC400SS	6.780	3.134	11.538	0.375
5	DC500AL	DC500SS	7.813	3.219	12.571	0.375
6	DC600AL	DC600SS	9.344	3.500	16.096	0.375



Note: Contitech® Insta-Lock fittings are never to be used in steam or compressed air service. Contitech® Insta-Lock cam arms are designed exclusively for Insta-Lock fittings.

Warning: Dust Caps and Dust Plugs are not to be used in pressure applications for safety and environmental reasons.

APPLICATIONS

Dust cap is used to seal the pipe system and hose assemblies during non-use or transfer of assembly.

MATERIALS

Aluminum, 316# stainless steel and brass (standard Nitrile gasket).

CONSTRUCTION

Branding: Contitech® DC200SS.

INSTA-LOCK™ DUST PLUG

MALE PLUG FOR FEMALE INSTA-LOCK



Product specifications

Size inch	Aluminum	Stainless Steel	Overall Length (L) inch	Exposed Length (E) inch
1/2	DP050AL	DP050SS	1.531	0.500
3/4	DP075AL	DP075SS	1.563	0.500
1	DP100AL	DP100SS	1.843	0.469
1 1/4	DP125AL	DP125SS	2.125	0.469
1 1/2	DP150AL	DP150SS	2.156	0.469
2	DP200AL	DP200SS	2.375	0.469
2 1/2	DP250AL	DP250SS	2.437	0.469
3	DP300AL	DP300SS	2.500	0.469
4	DP400AL	DP400SS	2.559	0.469
5	DP500AL	DP500SS	2.594	0.469
6	DP600AL	DP600SS	2.781	0.469



Note: Contitech® Insta-Lock fittings are never to be used in steam or compressed air service.

Warning: Dust Caps and Dust Plugs are not to be used in pressure applications for safety and environmental reasons.

APPLICATIONS

Dust plugs are used to seal the pipe system and hose assemblies during non-use or transfer of assembly.

MATERIALS

Aluminum, 316# stainless steel and brass.

CONSTRUCTION

Branding: Contitech® DP200SS.



Please Note: We reserve the right to make technical changes without notice.



INSTA-LOCK™ REPAIR KITS **ACCESSORIES**

Product specifications

Size	Stainless Steel Handles	Brass Handles
inch	inch	inch
1/2	050SGMP	050BGMP
3/4	100SGMP	100BGMP
1	100SGMP	100BGMP
1 1/4	125SGMP	125BGMP
1 1/2	150SGMP	150BGMP
2	200SGMP	200BGMP
2 1/2	250SGMP	250BGMP
3	300SGMP	300BGMP
4	300SGMP	300BGMP
5	300SGMP	300BGMP
6	600SGMP	600BGMP

APPLICATIONS

316# stainless steel.

MATERIALS

1 handle, 1 finger ring, 1 pin.

PART NUMBER SYSTEM

First 3 digits = Size
 S = Stainless steel
 B = Brass
 G = Contitech® Insta-Lock handle
 M = Music wire ring
 P = Pin



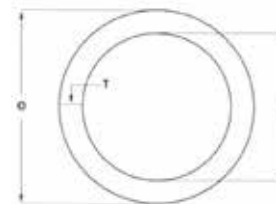
Please Note: We reserve the right to make technical changes without notice.

INSTA-LOCK™ GASKETS ACCESSORIES



Product specifications

Size inch	OD (O)	ID (I)	Thickness (T)	Nitrile inch	Viton inch	Teflon Encapsulated Viton inch	White Neoprene inch	Neoprene inch	Silicone inch
1/2	1.031	0.688	0.156	G050BN	G050VT	G050TE	G050WN	G050NE	G050SL
3/4	1.375	0.875	0.218	G075BN	G075VT	G075TE	G075WN	G075NE	G075SL
1	1.563	1.062	0.250	G100BN	G100VT	G100TE	G100WN	G100NE	G100SL
1 1/4	1.938	1.359	0.250	G125BN	G125VT	G125TE	G125WN	G125NE	G125SL
1 1/2	2.188	1.625	0.250	G150BN	G150VT	G150TE	G150WN	G150NE	G150SL
2	2.625	2.000	0.250	G200BN	G200VT	G200TE	G200WN	G200NE	G200SL
2 1/2	3.125	2.375	0.250	G250BN	G250VT	G250TE	G250WN	G250NE	G250SL
3	3.719	3.000	0.250	G300BN	G300VT	G300TE	G300WN	G300NE	G300SL
4	4.875	4.000	0.250	G400BN	G400VT	G400TE	G400WN	G400NE	G400SL
5	5.906	4.875	0.250	G500BN	G500VT	G500TE	G500WN	G500NE	G500SL
6	7.063	6.000	0.250	G600BN	G600VT	G600TE	G600WN	G600NE	G600SL



Nitrile = BN, Black.

White Neoprene = WN, White.

Viton® = VT, Black with yellow stripe.

Neoprene = NE, Black with red stripe.

Teflon® = TE, White / Black with yellow stripe.

Silicone = SL, Red.

Viton® is a registered trademark of DuPont Dow Elastomers L.L.C.

Teflon® is a registered trademark of E.I. du Pont de Nemours and Company.

MATERIALS

Nitrile, Viton®, Teflon® Encapsulated Viton®, White Neoprene, Neoprene, Silicone.

PART NUMBER SYSTEM

G = Gasket

First 3 digits = Size of Gasket

Letters = Gasket material code



Please Note: We reserve the right to make technical changes without notice.



INSTA-LOCK™ INTERLOCKING FERRULES

ACCESSORIES

Stainless steel

1	1 1/4	1 1/2	2	2 1/2	3	4
FRSS100124	FRSS125144	FRSS150156	FRSS200232	FRSS250256	FRSS300332	FRSS400436
FRSS100128	FRSS125148	FRSS150160	FRSS200236	FRSS250260	FRSS300336	FRSS400440
FRSS100132	FRSS125152	FRSS150200	FRSS200240	FRSS250300	FRSS300340	FRSS400444
FRSS100136	FRSS125156	FRSS150204	FRSS200244	FRSS250304	FRSS300344	FRSS400448
FRSS100140		FRSS150208	FRSS200248	FRSS250308	FRSS300348	FRSS400452
		FRSS150212	FRSS200252	FRSS250312	FRSS300352	FRSS400456
		FRSS150216	FRSS200256	FRSS250316	FRSS300356	FRSS400460
		FRSS150220	FRSS200260	FRSS250320	FRSS300360	FRSS400500
				FRSS150224	FRSS300400	FRSS400504
					FRSS300404	

Plated carbon steel

1 1/2	2	3	4
FRCS150208	FRCS200232	FRCS300336	FRCS400444
FRCS150212	FRCS200236	FRCS300340	FRCS400448
FRCS150216	FRCS200240	FRCS300344	FRCS400452
	FRCS200244	FRCS300348	
	FRCS200248		

MATERIALS

304# Stainless steel.

Plated carbon steel.

PART NUMBER SYSTEM

FRSS200244 or FRCS200244.

FR = Ferrule

SS = Stainless steel

CS = Plated carbon steel

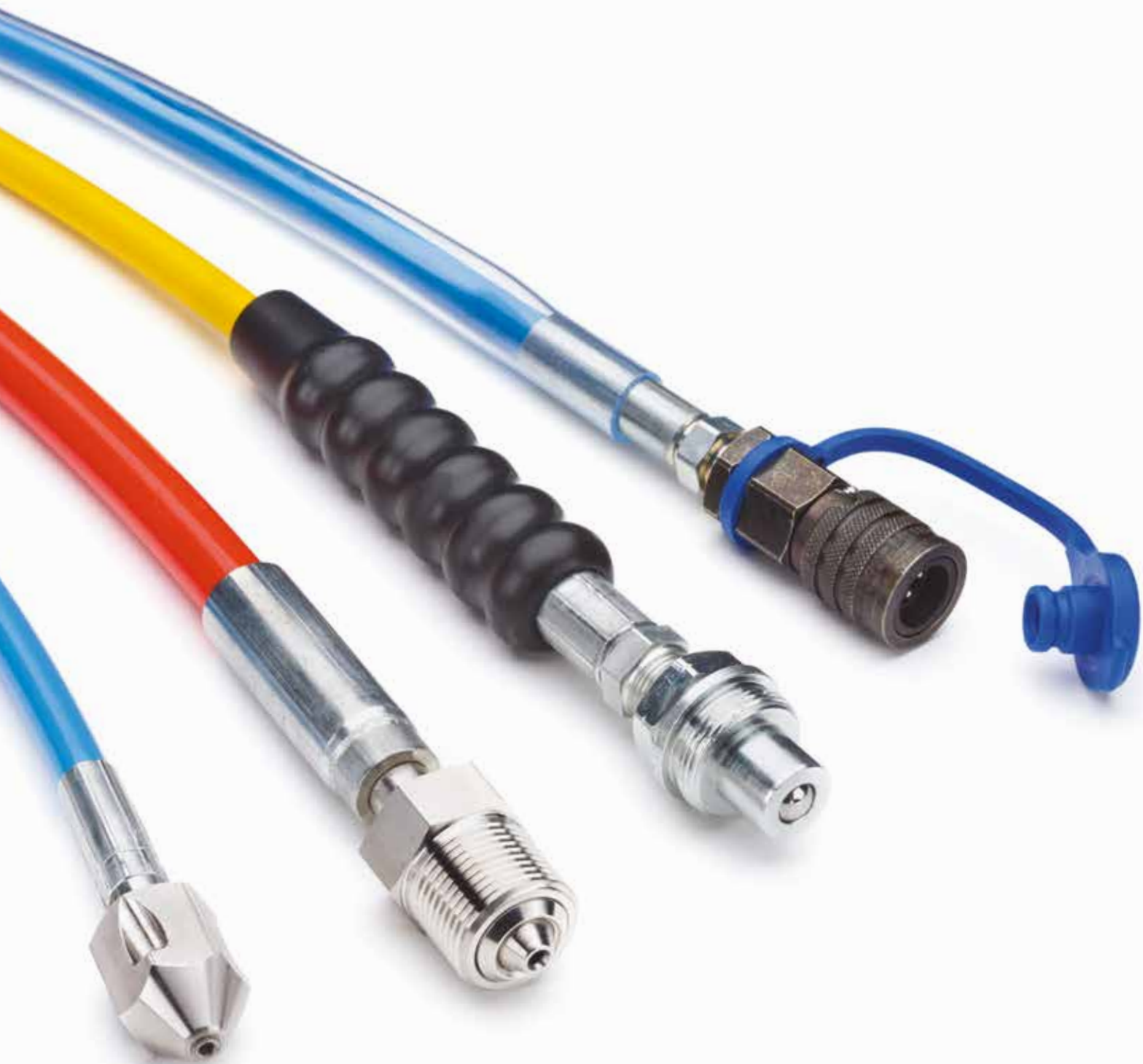
First 3 digits = Inside diameter of hose

Fourth digit = Inside diameter of ferrule in inches

Fifth and sixth digits = Inside diameter of ferrule in 64ths of an inch



Please Note: We reserve the right to make technical changes without notice.



COUPLINGS & ACCESSORIES

COUPLINGS & ACCESSORIES

Changing tools or equipment means uncoupling and recoupling hoses. In a busy workplace, that can happen time after time, day after day. Safe work with different hose types, pressures, fluids and working conditions mean you need exactly the right coupling for the job, made to the right specification, from the right materials. Using the right couplings lets you work without spanners or wrenches, without oil loss and depending on your choice of coupling, at full working pressure.

Hoses can get rough treatment too. While operating under high or ultra-high pressure they are often exposed to harsh environments and materials as well as rough and hurried handling. Cover damage can mean scrapping an expensive hose assembly. Failure to protect hoses can mean damage to machinery or worse, injury to personnel.

Abrasion / burst sleeves and containment grips combat reduction in service life of hoses. They protect your investment by prolonging the working life of hoses and more importantly they protect your operators from harm.

Abdex makes life easy, with a huge range of highest-quality couplings, for safe and quick connection and disconnection of every kind of hose, in every kind of environment. Abdex hose protection and burst containment products come in a wide range of materials, from nylon and galvanised steel, through to stainless steel and aramid fibre.

APPLICATIONS

- Jacking
- Torquing and tensioning
- Water jetting
- Hydraulic breakers
- Offshore subsea well intervention
- Gas applications
- Anywhere you need to connect and disconnect quickly and safely (without tools)
- Wherever a rough life is routine
- Whenever safety counts



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PAV1 SERIES

ISO A



Technical Data

Nominal size		Max working pressure	Max flow rate	Min burst pressure			Fluid spillage
DN	ISO			Probe MPa	Coupler MPa	Coupled MPa	
06	6.3	35	17	150	170	140	0.5
10	10	35	46	140	150	150	1.9
13	12.5	25	90	100	140	120	2.7
20	20	25	190	90	150	100	9.3
25	25	20	280	130	100	100	16
30	31.5	20	480	110	85	100	30
39	40	19	757	80	80	82	54
50	50	16	1000	65	96	100	120

APPLICATIONS

Used for a wide range of agricultural and mobile construction equipment applications, such as tractors, plant machinery and accessories.

FEATURES

- Meets ISO 7241-1 A
- Working pressure 160-350 bar

CONSTRUCTION

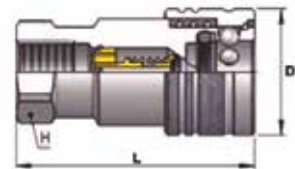
Occlusion:	Poppet.
Locking:	Radial balls.
Material:	Steel.
Finishing:	Zn-Fe (Cr III).
Standard Seals:	NBR.
Optional Seals:	FKM, EPDM.

TEMPERATURE RANGE

-25°C up to +100°C.

PAV1 - COUPLERS

#	DN			L	D	
			mm	mm	mm	MPa
PAV1.0606.002	06	1/4 BSP Female	19.0	49.2	26.0	35.0
PAV1.0606.012	06	1/4 NPT Female	19.0	49.2	26.0	35.0
PAV1.0615.032	06	9/16 - 18 UNF Female	19.0	49.2	26.0	35.0
PAV1.1010.002	10	3/8 BSP Female	22.0	60.5	30.0	35.0
PAV1.1010.012	10	3/8 NPT Female	22.0	60.5	30.0	35.0
PAV1.1019.032	10	3/4 - 16 UNF Female	22.0	60.5	30.0	35.0
PAV1.1313.002	13	1/2 BSP Female	27.0	70.0	38.0	25.0
PAV1.1313.012	13	1/2 NPT Female	27.0	70.0	38.0	25.0
PAV1.2019.002	20	3/4 BSP Female	34.0	84.3	45.0	25.0
PAV1.2019.012	20	3/4 NPT Female	34.0	84.3	45.0	25.0
PAV1.2525.002	25	1 BSP Female	41.0	101.0	52.0	20.0
PAV1.2525.012	25	1 NPT Female	41.0	101.0	52.0	20.0
PAV1.3031.002	30	1 1/4 BSP Female	50.0	116.9	70.0	20.0
PAV1.3031.012	30	1 1/4 NPT Female	50.0	116.9	70.0	20.0
PAV1.3939.002	39	1 1/2 BSP Female	60.0	133.0	82.0	19.0
PAV1.3939.012	39	1 1/2 NPT Female	60.0	133.0	82.0	19.0
PAV1.5051.002	50	2 BSP Female	75.0	169.0	99.0	16.0
PAV1.5051.012	50	2 BSP Female	75.0	169.0	99.0	16.0



Please Note: Other threads are available on request.

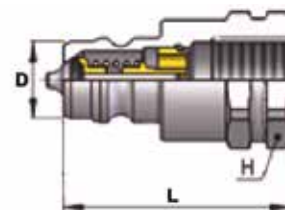


PAV1 SERIES

ISO A

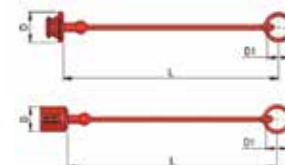
PAV1 - PROBES

#	DN			L	D	
			mm	mm	mm	MPa
PAV1.0606.003	06	1/4 BSP Female	19.0	35.0	11.85	35.0
PAV1.0606.013	06	1/4 NPT Female	19.0	35.0	11.85	35.0
PAV1.0615.033	06	9/16 - 18 UNF Female	19.0	35.0	11.85	35.0
PAV1.1010.003	10	3/8 BSP Female	22.0	42.5	17.3	35.0
PAV1.1010.013	10	3/8 NPT Female	22.0	42.5	17.3	35.0
PAV1.1019.033	10	3/4 - 18 UNF Female	22.0	42.5	17.3	35.0
PAV1.1313.003	13	1/2 BSP Female	27.0	48.0	20.55	25.0
PAV1.1313.013	13	1/2 NPT Female	27.0	48.0	20.55	25.0
PAV1.2019.003	20	3/4 BSP Female	34.0	57.0	29.1	25.0
PAV1.2019.013	20	3/4 NPT Female	34.0	57.0	29.1	25.0
PAV1.2525.003	25	1 BSP Female	41.0	67.5	34.35	20.0
PAV1.2525.013	25	1 NPT Female	41.0	67.5	34.35	20.0
PAV1.3031.003	30	1 1/4 BSP Female	50.0	75.0	45.0	20.0
PAV1.3031.013	30	1 1/4 NPT Female	50.0	75.0	45.0	20.0
PAV1.3939.003	39	1 1/2 BSP Female	60.0	83.5	55.0	19.0
PAV1.3939.013	39	1 1/2 NPT Female	60.0	83.5	55.0	19.0
PAV1.5051.003	50	2 BSP Female	75.0	108.0	65.1	16.0
PAV1.5051.013	50	2 NPT Female	75.0	108.0	65.1	16.0



PLASTIC CAPS

Nominal size		Female dust plug				Male dust plug				Colour	Material
DN	ISO	CODE F	D*	L*	D1*	CODE M	D*	L*	D1*		
06	6.3	SPAV.06002	10	110	6	SPAV.06003	11	110	6	Red	PVC
10	10	SPAV.10002	28	228	22	SPAV.10003	23.5	220	22	Red	PVC
10	10	SPAV.10022	28	220	22	SPAV.10023	23.5	220	22	Green	PVC
10	10	SPAV.10032	28	220	22	SPAV.10033	23.5	220	22	Blue	PVC
13	12.5	SPAV.13002	35	250	26	SPAV.13003	29	250	26	Red	PVC
13	12.5	SPAV.13012	35	250	26	SPAV.13013	29	250	26	Yellow	PVC
13	12.5	SPAV.13022	35	250	26	SPAV.13023	29	250	26	Green	PVC
13	12.5	SPAV.13032	35	250	26	SPAV.13033	29	250	26	Blue	PVC
13	12.5	SPAV.13042	35	250	26	SPAV.13043	29	250	26	Black	PVC
13	12.5	SPAV.13052	35	250	26	SPAV.13053	29	250	26	White	PVC
13	12.5	SPAV.13062	35	250	26	SPAV.13063	29	250	26	Grey	PVC
20	20	SPAV.20002	42	270	36	SPAV.20003	36.5	270	39	Red	PVC
20	20	SPAV.20012	42	270	36	SPAV.20013	36.5	270	36	Yellow	PVC
20	20	SPAV.20032	42	270	36	SPAV.20033	36.5	270	36	Blue	PVC
20	20	SPAV.20052	42	270	36	SPAV.20053	36.5	270	36	White	PVC
20	20	SPAV.20062	42	270	36	SPAV.20063	36.5	270	36	Grey	PVC
25	25	SPAV.25002	41	235	28	SPAV.25003	36	235	28	Red	PVC



* Dimensions.

Please Note: Other threads are available on request.

PAV1 SERIES

ISO A



METAL CAPS

Nominal size		Female dust plug				Male dust plug				Material
DN	ISO	CODE F	D*	L*	D1*	CODE M	D*	L*	D1*	
06	6.3	SPAV.06202	19	160	31	SPAV.06203	19	180	30	Aluminium
10	10	SPAV.10202	30	200	33	SPAV.10203	30	200	33	Aluminium
13	12.5	SPAV.13202	38	205	32	SPAV.13203	30	205	32	Aluminum
20	20	SPAV.20202	45	275	47	SPAV.20203	45	275	47	Aluminum
25	25	SPAV.25202	43	240	41	SPAV.25203	45	290	41	Aluminum
30	31.5	SPAV.30202	70	275	47	SPAV.30203	70	275	47	Aluminum
39	40	SPAV.39202	83	275	47	SPAV.39203	83	275	47	Aluminum
50	50	SPAV.50202	99	275	47	SPAV.50203	99	275	47	Aluminum



* Dimensions.

SPARE PARTS

Nominal size		Female gasket	
DN	ISO	OR (NBR*)	BK (PTFE)
06	6.3	PAV.006.120	PAV.006.130
10	10	PAV.010.120	PAV.010.130
13	12.5	PAV.013.120	PAV.013.130
20	20	PAV.019.120	PAV.019.130
25	25	PAV.025.120	PAV.025.130
30	31.5	PAV.030.120	PAV.030.130
39	40	PAV.039.120	PAV.039.130
50	50	PAV.050.120	PAV.050.130



For the NBR Gasket code add "E" for EPDM or "V" for Viton.

Please Note: Other threads are available on request.



PAVX SERIES ISO A – STAINLESS STEEL

Technical Data

Nominal size		Max working pressure MPa	Max flow rate l/min	Min burst pressure			Fluid spillage cc
DN	ISO			Probe MPa	Coupler MPa	Coupled MPa	
06	6.3	45	17	320	290	290	0.5
10	10	30	46	125	125	130	1.9
13	12.5	30	90	120	120	135	2.7
20	20	25	190	80	100	110	9.3
25	25	20	280	60	65	85	19
30	31.5	10	480	40	40	40	30
39	40	8	700	32	32	32	54
50	50	6	1000	25	25	25	120

APPLICATIONS

Used for a wide range of agricultural and mobile construction equipment applications, such as tractors, plant machinery and accessories.

FEATURES

- Meets ISO 7241-1 A
- Working pressure 60-450 bar

CONSTRUCTION

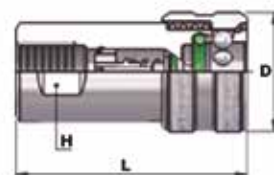
Occlusion:	Poppet.
Locking:	Radial balls.
Material:	Stainless steel AISI 316.
Standard Seals:	KFM.
Optional Seals:	FFKM, EPDM.

TEMPERATURE RANGE

-25°C up to +200°C.

PAVX - COUPLERS

#	DN			L	D	
			mm	mm	mm	MPa
PAVX.0606.002	06	1/4 BSP Female	19.0	50.5	26.0	45
PAVX.0606.012	06	1/4 NPT Female	19.0	50.5	26.0	45
PAVX.1010.002	10	3/8 BSP Female	22.0	58.5	30.0	30
PAVX.1010.012	10	3/8 NPT Female	22.0	58.5	30.0	30
PAVX.1313.002	13	1/2 BSP Female	27.0	68.0	37.9	30
PAVX.1313.012	13	1/2 NPT Female	27.0	68.0	37.9	30
PAVX.2019.002	20	3/4 BSP Female	34.0	84.3	45.0	25
PAVX.2019.012	20	3/4 NPT Female	34.0	84.3	45.0	25
PAVX.2525.002	25	1 BSP Female	41.0	97.0	52.0	20
PAVX.2525.012	25	1 NPT Female	41.0	97.0	52.0	20
PAVX.3031.002	30	1 1/4 BSP Female	50.0	115.0	70.0	10
PAVX.3031.012	30	1 1/4 NPT Female	50.0	115.0	70.0	10
PAVX.3939.002	39	1 1/2 BSP Female	60.0	123.0	80.5	8
PAVX.3939.012	39	1 1/2 NPT Female	60.0	123.0	80.5	8
PAVX.5051.002	50	2 BSP Female	70.0	147.0	102.0	6
PAVX.5051.012	50	2 BSP Female	70.0	147.0	102.0	6



Please Note: Other threads are available on request.

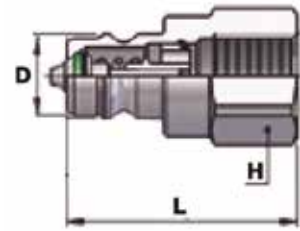
PAVX SERIES

ISO A – STAINLESS STEEL



PAVX - PROBES

#	DN			L	D	
			mm	mm	mm	MPa
PAVX.0606.003	06	1/4 BSP Female	19.0	35.5	11.85	45
PAVX.0606.013	06	1/4 NPT Female	19.0	35.5	11.85	45
PAVX.1010.003	10	3/8 BSP Female	22.0	40.5	17.3	30
PAVX.1010.013	10	3/8 NPT Female	22.0	40.5	17.3	30
PAVX.1313.003	13	1/2 BSP Female	27.0	46.0	20.55	30
PAVX.1313.013	13	1/2 NPT Female	27.0	46.0	20.55	30
PAVX.2019.003	20	3/4 BSP Female	34.0	57.0	29.1	25
PAVX.2019.013	20	3/4 NPT Female	34.0	57.0	29.1	25
PAVX.2525.003	25	1 BSP Female	41.0	63.5	34.35	20
PAVX.2525.013	25	1 NPT Female	41.0	63.5	34.35	20
PAVX.3031.003	30	1 1/4 BSP Female	50.0	69.0	45.0	10
PAVX.3031.013	30	1 1/4 NPT Female	50.0	69.0	45.0	10
PAVX.3939.003	39	1 1/2 BSP Female	60.0	73.0	55.0	8
PAVX.3939.013	39	1 1/2 NPT Female	60.0	73.0	55.0	8
PAVX.5051.003	50	2 BSP Female	75.0	90.0	65.1	6
PAVX.5051.013	50	2 NPT Female	75.0	90.0	65.1	6



PLASTIC CAPS

Nominal size		Female dust plug				Male dust plug				Colour	Material
DN	ISO	CODE F	D*	L*	D1*	CODE M	D*	L*	D1*		
06	6.3	SPAV.06002	10	110	6	SPAV.06003	11	110	6	Red	PVC
10	10	SPAV.10002	28	228	22	SPAV.10003	23.5	220	22	Red	PVC
10	10	SPAV.10022	28	220	22	SPAV.10023	23.5	220	22	Green	PVC
10	10	SPAV.10032	28	220	22	SPAV.10033	23.5	220	22	Blue	PVC
13	12.5	SPAV.13002	35	250	26	SPAV.13003	29	250	26	Red	PVC
13	12.5	SPAV.13012	35	250	26	SPAV.13013	29	250	26	Yellow	PVC
13	12.5	SPAV.13022	35	250	26	SPAV.13023	29	250	26	Green	PVC
13	12.5	SPAV.13032	35	250	26	SPAV.13033	29	250	26	Blue	PVC
13	12.5	SPAV.13042	35	250	26	SPAV.13043	29	250	26	Black	PVC
13	12.5	SPAV.13052	35	250	26	SPAV.13053	29	250	26	White	PVC
13	12.5	SPAV.13062	35	250	26	SPAV.13063	29	250	26	Grey	PVC
20	20	SPAV.20002	42	270	36	SPAV.20003	36.5	270	39	Red	PVC
20	20	SPAV.20012	42	270	36	SPAV.20013	36.5	270	36	Yellow	PVC
20	20	SPAV.20032	42	270	36	SPAV.20033	36.5	270	36	Blue	PVC
20	20	SPAV.20052	42	270	36	SPAV.20053	36.5	270	36	White	PVC
20	20	SPAV.20062	42	270	36	SPAV.20063	36.5	270	36	Grey	PVC
25	25	SPAV.25002	41	235	28	SPAV.25003	36	235	28	Red	PVC



* Dimensions.

Please Note: Other threads are available on request.



PAVX SERIES

ISO A – STAINLESS STEEL

METAL CAPS

Nominal size		Female dust plug				Male dust plug				Material
DN	ISO	CODE F	D*	L*	D1*	CODE M	D*	L*	D1*	
06	6.3	SPAV.06202	19	160	31	SPAV.06203	19	180	30	Aluminum
10	10	SPAV.10202	30	200	33	SPAV.10203	30	200	33	Aluminum
13	12.5	SPAV.13202	38	205	32	SPAV.13203	30	205	32	Aluminum
20	20	SPAV.20202	45	275	47	SPAV.20203	45	275	47	Aluminum
25	25	SPAV.25202	43	240	41	SPAV.25203	45	290	41	Aluminum
30	31.5	SPAV.30202	70	275	47	SPAV.30203	70	275	47	Aluminum
39	40	SPAV.39202	83	275	47	SPAV.39203	83	275	47	Aluminum
50	50	SPAV.50202	99	275	47	SPAV.50203	99	275	47	Aluminum

* Dimensions.



SPARE PARTS

Nominal size		Female gasket	
DN	ISO	OR (NBR*)	BK (PTFE)
06	6.3	PAV.006.120	PAV.006.130
10	10	PAV.010.120	PAV.010.130
13	12.5	PAV.013.120	PAV.013.130
20	20	PAV.019.120	PAV.019.130
25	25	PAV.025.120	PAV.025.130
30	31.5	PAV.030.120	PAV.030.130
39	40	PAV.039.120	PAV.039.130
50	50	PAV.050.120	PAV.050.130

For the NBR Gasket code add "E" for EPDM or "V" for Viton



Please Note: Other threads are available on request.

PBV1 SERIES

ISO B



Technical Data

Nominal size		Max working pressure	Max flow rate	Min burst pressure			Fluid spillage
DN	ISO			Probe MPa	Coupler MPa	Coupled MPa	
04	5	50	9	240	230	270	0.5
06	6.3	25	24	110	180	100	1
10	10	25	46	140	140	130	2.4
13	12.5	25	90	110	140	110	3.9
20	20	25	220	100	130	120	11
25	25	25	260	100	110	100	19
39	40	20	757	80	80	80	95
50	50	10	1000	40	40	40	170

APPLICATIONS

Used for a wide range of pneumatic and hydraulic applications such as hand tools and within the food industry.

FEATURES

- Meets ISO 7241-1 B
- Working pressure 100-500 bar

CONSTRUCTION

Occlusion:	Poppet.
Locking:	Radial balls.
Material:	Steel.
Finishing:	Zn-Fe (Cr III).
Standard Seals:	NBR.
Optional Seals:	FKM, EPDM.

TEMPERATURE RANGE

-25°C up to +100°C.

PBV1 - COUPLERS

#	DN			L	D	
			mm	mm	mm	MPa
PBV1.0404.002	04	1/8 BSP Female	17.0	50.6	23.0	50
PBV1.0404.012	04	1/8 NPT Female	17.0	50.6	23.0	50
PBV1.0606.002	06	1/4 BSP Female	19.0	60.0	28.0	25
PBV1.0606.012	06	1/4 NPT Female	19.0	60.0	28.0	25
PBV1.1010.002	10	3/8 BSP Female	22.0	67.2	35.0	25
PBV1.1010.012	10	3/8 NPT Female	22.0	67.2	35.0	25
PBV1.1313.002	13	1/2 BSP Female	27.0	75.7	44.0	25
PBV1.1313.012	13	1/2 NPT Female	27.0	75.7	44.0	25
PBV1.2019.002	20	3/4 BSP Female	34.0	91.5	52.0	25
PBV1.2019.012	20	3/4 NPT Female	34.0	91.5	52.0	25
PBV1.2525.002	25	1 BSP Female	41.0	105.8	60.0	25
PBV1.2525.012	25	1 NPT Female	41.0	105.8	60.0	25
PBV1.3931.002	39	1 1/4 BSP Female	65.0	126.5	79.0	20
PBV1.3931.012	39	1 1/4 NPT Female	65.0	126.5	79.0	20
PBV1.3939.002	39	1 1/2 BSP Female	65.0	126.5	79.0	20
PBV1.3939.012	39	1 1/2 NPT Female	65.0	126.5	79.0	20
PBV1.5051.002	50	2 BSP Female	90.0	142.0	105.0	10
PBV1.5051.012	50	2 NPT Female	90.0	142.0	105.0	10



Please Note: Other threads are available on request.

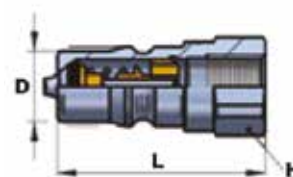


PBV1 SERIES

ISO B

PBV1 - PROBES

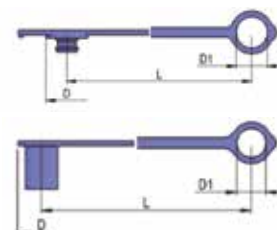
#	DN			L	D	
			mm	mm	mm	MPa
PBV1.0404.003	04	1/8 BSP Female	14.0	32.0	10.9	50
PBV1.0404.013	04	1/8 NPT Female	14.0	32.0	10.9	50
PBV1.0606.003	06	1/4 BSP Female	19.0	38.0	14.2	25
PBV1.0606.013	06	1/4 NPT Female	19.0	38.0	14.2	25
PBV1.1010.003	10	3/8 BSP Female	22.0	43.0	19.1	25
PBV1.1010.013	10	3/8 NPT Female	22.0	43.0	19.1	25
PBV1.1313.003	13	1/2 BSP Female	27.0	48.0	23.55	25
PBV1.1313.013	13	1/2 NPT Female	27.0	48.0	23.55	25
PBV1.2019.003	20	3/4 BSP Female	34.0	57.0	31.45	25
PBV1.2019.013	20	3/4 NPT Female	34.0	57.0	31.45	25
PBV1.2525.003	25	1 BSP Female	41.0	65.5	37.77	25
PBV1.2525.013	25	1 NPT Female	41.0	65.5	37.77	25
PBV1.3931.003	39	1 1/4 BSP Female	65.0	127.0	44.49	20
PBV1.3931.013	39	1 1/4 NPT Female	65.0	127.0	44.49	20
PBV1.3939.003	39	1 1/2 BSP Female	65.0	127.0	44.49	20
PBV1.3939.013	39	1 1/2 NPT Female	65.0	127.0	44.49	20
PBV1.5051.003	50	2 BSP Female	90.0	142.0	63.2	10
PBV1.5051.013	50	2 NPT Female	90.0	142.0	63.2	10



PLASTIC CAPS

Nominal size		Female dust plug				Male dust plug				Colour	Material
DN	ISO	CODE F	D*	L*	D1*	CODE M	D*	L*	D1*		
06	6.3	SPBV.06032	28	125	21	SPBV.06033	28	125	19	Blue	PVC
10	10	SPBV.10032	33	135	25	SPBV.10033	33	130	20	Blue	PVC
13	12.5	SPBV.13032	44	175	32	SPBV.13033	40	165	24	Blue	PVC
20	20	SPBV.20032	52	190	37	SPBV.20033	44	190	31	Blue	PVC
25	25	SPBV.25032	61	230	43	SPBV.25033	53	230	37	Blue	PVC

* Dimensions.



Nominal size		Female dust plug				Male dust plug				Colour	Material
DN	ISO	CODE F	D*	L*	D1*	CODE M	D*	L*	D1*		
06	6.3	SPBV.06002	26	240	23	SPBV.06003	18	240	23	Red	PVC
10	10	SPBV.10002	33	235	25	SPBV.10003	23	240	24	Red	PVC
13	12.5	SPBV.13002	38	240	29	SPBV.13003	29	245	28	Red	PVC
20	20	SPBV.20002	49	240	38	SPBV.20003	36	245	38	Red	PVC
25	25	SPBV.25002	60	245	46	SPBV.25003	44	235	44	Red	PVC

* Dimensions.



Please Note: Other threads are available on request.

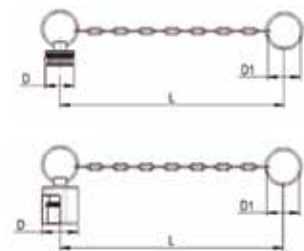
PBV1 SERIES

ISO B



METAL CAPS

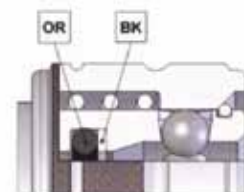
Nominal size		Female dust plug					Male dust plug					Material
DN	ISO	CODE F	D*	L*	D1*		CODE M	D*	L*	D1*		
06	6.3	SPBV.06202	22	210	30		SPBV.06203	22	245	28		Aluminum
06	6.3	-	-	-	-		SPBV.06303	21	265	19		AISI 316
10	10	SPBV.10202	22	155	30		SPBV.10203	27	155	30		Aluminum
13	12.5	SPBV.13202	28	305	41		SPBV.13203	35	265	41		Aluminum
20	20	SPBV.20202	35	265	43		SPBV.13203	42	250	30		Aluminum
25	25	SPBV.25202	44	240	41		SPBV.25203	48	340	49		Aluminum
39	40	SPBV.39202	74	225	46		SPBV.39203	55	225	46		Aluminum
50	50	SPBV.50202	105	350	75		SPBV.50203	80	350	75		Aluminum



* Dimensions.

SPARE PARTS

Nominal size		Female gasket	
DN	ISO	OR (VITON)	BK (PTFE)
04	5	PBV.004.120	PBV.004.130
06	6.3	PBV.006.120	PBV.006.130
10	10	PDV.010.120	PBV.010.130
13	12.5	PBV.013.120	PBV.013.130
20	20	PBV.019.120	PBV.019.130
25	25	PBV.025.120	PBV.025.130
39	40	PBV.039.120	-
50	50	PBV.050.120	-



Please Note: Other threads are available on request.



PBVX SERIES

ISO B – STAINLESS STEEL

Technical Data

Nominal size		Max working pressure MPa	Max flow rate l/min	Min burst pressure			Fluid spillage cc
DN	ISO			Probe MPa	Coupler MPa	Coupled MPa	
04	5	40	9	210	200	140	0.5
06	6.3	35	24	170	150	160	1
10	10	30	46	110	110	210	2.4
13	12.5	30	90	150	140	150	3.9
20	20	22	220	100	90	100	11
25	25	20	260	60	65	85	19
39	40	8	757	25	25	25	95
50	50	6	1000	20	20	20	170

APPLICATIONS

Used for a wide range of pneumatic and hydraulic applications such as hand tools and within the food industry.

FEATURES

- Meets ISO 7241-1 B
- Working pressure 60-400 bar

CONSTRUCTION

Occlusion:	Poppet.
Locking:	Radial balls.
Material:	Stainless steel AISI 316.
Standard Seals:	KFM.
Optional Seals:	FFKM, EPDM.

TEMPERATURE RANGE

-25°C up to +200°C.

PBVX - COUPLERS

#	DN			L	D	
			mm	mm	mm	MPa
PBV1.0404.002	04	1/8 BSP Female	17.0	50.6	23.0	50
PBV1.0404.012	04	1/8 NPT Female	17.0	50.6	23.0	50
PBV1.0606.002	06	1/4 BSP Female	19.0	60.0	28.0	25
PBV1.0606.012	06	1/4 NPT Female	19.0	60.0	28.0	25
PBV1.1010.002	10	3/8 BSP Female	22.0	67.2	35.0	25
PBV1.1010.012	10	3/8 NPT Female	22.0	67.2	35.0	25
PBV1.1313.002	13	1/2 BSP Female	27.0	75.7	44.0	25
PBV1.1313.012	13	1/2 NPT Female	27.0	75.7	44.0	25
PBV1.2019.002	20	3/4 BSP Female	34.0	91.5	52.0	25
PBV1.2019.012	20	3/4 NPT Female	34.0	91.5	52.0	25
PBV1.2525.002	25	1 BSP Female	41.0	105.8	60.0	25
PBV1.2525.012	25	1 NPT Female	41.0	105.8	60.0	25
PBV1.3931.002	39	1 1/4 BSP Female	65.0	126.5	79.0	20
PBV1.3931.012	39	1 1/4 NPT Female	65.0	126.5	79.0	20
PBV1.3939.002	39	1 1/2 BSP Female	65.0	126.5	79.0	20
PBV1.3939.012	39	1 1/2 NPT Female	65.0	126.5	79.0	20
PBV1.5051.002	50	2 BSP Female	90.0	142.0	105.0	10
PBV1.5051.012	50	2 NPT Female	90.0	142.0	105.0	10



Please Note: Other threads are available on request.

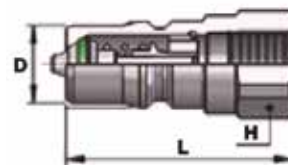
PBVX SERIES

ISO B – STAINLESS STEEL



PBVX - PROBES

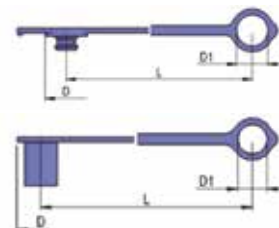
#	DN			L	D	
			mm	mm	mm	MPa
PBVX.0404.003	04	1/8 BSP Female	14.0	32.0	10.9	40
PBVX.0404.013	04	1/8 NPT Female	14.0	32.0	10.9	40
PBVX.0606.003	06	1/4 BSP Female	19.0	38.0	14.2	35
PBVX.0606.013	06	1/4 NPT Female	19.0	38.0	14.2	35
PBVX.1010.003	10	3/8 BSP Female	22.0	40.5	19.1	30
PBVX.1010.013	10	3/8 NPT Female	22.0	40.5	19.1	30
PBVX.1313.003	13	1/2 BSP Female	27.0	46.0	23.55	30
PBVX.1313.013	13	1/2 NPT Female	27.0	46.0	23.55	30
PBVX.2019.003	20	3/4 BSP Female	34.0	57.0	31.45	22
PBVX.2019.013	20	3/4 NPT Female	34.0	57.0	31.45	22
PBVX.2525.003	25	1 BSP Female	41.0	63.5	37.8	20
PBVX.2525.013	25	1 NPT Female	41.0	63.5	37.8	20
PBVX.3931.003	39	1 1/4 BSP Female	65.0	127.0	44.45	8
PBVX.3931.013	39	1 1/4 NPT Female	65.0	127.0	44.45	8
PBVX.3939.003	39	1 1/2 BSP Female	65.0	127.0	44.45	8
PBVX.3939.013	39	1 1/2 NPT Female	65.0	127.0	44.45	8
PBVX.5051.003	50	2 BSP Female	90.0	142.5	63.2	6
PBVX.5051.013	50	2 NPT Female	90.0	142.5	63.2	6



PLASTIC CAPS

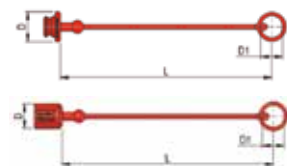
Nominal size		Female dust plug				Male dust plug				Colour	Material
DN	ISO	CODE F	D*	L*	D1*	CODE M	D*	L*	D1*		
06	6.3	SPBV.06032	28	125	21	SPBV.06033	28	125	19	Blue	PVC
10	10	SPBV.10032	33	135	25	SPBV.10033	33	130	20	Blue	PVC
13	12.5	SPBV.13032	44	175	32	SPBV.13033	40	165	24	Blue	PVC
20	20	SPBV.20032	52	190	37	SPBV.20033	44	190	31	Blue	PVC
25	25	SPBV.25032	61	230	43	SPBV.25033	53	230	37	Blue	PVC

* Dimensions.



Nominal size		Female dust plug				Male dust plug				Colour	Material
DN	ISO	CODE F	D*	L*	D1*	CODE M	D*	L*	D1*		
06	6.3	SPBV.06002	26	240	23	SPBV.06003	18	240	23	Red	PVC
10	10	SPBV.10002	33	235	25	SPBV.10003	23	240	24	Red	PVC
13	12.5	SPBV.13002	38	240	29	SPBV.13003	29	245	28	Red	PVC
20	20	SPBV.20002	49	240	38	SPBV.20003	36	245	38	Red	PVC
25	25	SPBV.25002	60	245	46	SPBV.25003	44	235	44	Red	PVC

* Dimensions.



Please Note: Other threads are available on request.



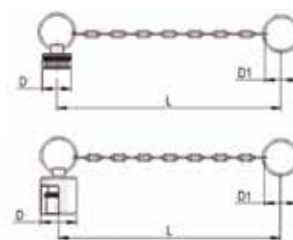
PBVX SERIES

ISO B – STAINLESS STEEL

METAL CAPS

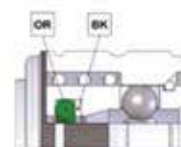
Nominal size		Female dust plug				Male dust plug				Material
DN	ISO	CODE F	D*	L*	D1*	CODE M	D*	L*	D1*	
06	6.3	SPBV.06202	22	210	30	SPBV.06203	22	245	28	Aluminum
06	6.3	-	-	-	-	SPBV.06303	21	265	19	AISI 316
10	10	SPBV.10202	22	155	30	SPBV.10203	27	155	30	Aluminum
13	12.5	SPBV.13202	28	305	41	SPBV.13203	35	265	41	Aluminum
20	20	SPBV.20202	35	265	43	SPBV.13203	42	250	30	Aluminum
25	25	SPBV.25202	44	240	41	SPBV.25203	48	340	49	Aluminum
39	40	SPBV.39202	74	225	46	SPBV.39203	55	225	46	Aluminum
50	50	SPBV.50202	105	350	75	SPBV.50203	80	350	75	Aluminum

* Dimensions.



SPARE PARTS

Nominal size		Female gasket	
DN	ISO	OR (VITON)	BK (PTFE)
04	5	PBV.004.120 V	PBV.004.130
06	6.3	PBV.006.120 V	PBV.006.130
10	10	PBV.010.120 V	PBV.010.130
13	12.5	PBV.013.120 V	PBV.013.130
20	20	PBV.019.120 V	PBV.019.130
25	25	PBV.025.120 V	PBV.025.130
39	40	PBV.039.120 V	-
50	50	PBV.050.120 V	-



Please Note: Other threads are available on request.

PLT1 SERIES

ISO 16028



Technical Data

Nominal size		Max working pressure MPa	Max flow rate l/min	Min burst pressure			Fluid spillage cc
DN	ISO			Probe MPa	Coupler MPa	Coupled MPa	
06	6.3	30	24	180	120	140	0.008
13	10	25	46	160	100	160	0.010
20	12.5	25	90	150	110	190	0.012
25	19	25	200	140	110	140	0.020
30	25	25	280	130	100	140	0.030
35	31.5	25	520	100	120	110	0.040
39	40	25	700	120	120	110	0.050
50	50	25	1000	100	100	100	0.100

APPLICATIONS

Used for a wide range of hydraulic application, such as plant machinery and accessories including breakers and hydraulic grabs.

FEATURES

- Meets ISO 16028
- Safety locking mechanism to avoid accidental disconnection
- Working pressure 250-300 bar

CONSTRUCTION

Occlusion:	Poppet.
Locking:	Radial balls.
Material:	Steel.
Finishing:	Zn-Fe (Cr III).
Standard Seals:	NBR.
Optional Seals:	FKM, EPDM.

TEMPERATURE RANGE

-25°C up to +100°C.

Please Note: Other threads are available on request.

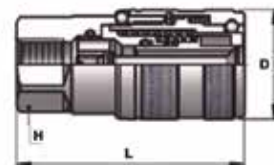


PLT1 SERIES

ISO 16028

PLT1 - COUPLERS

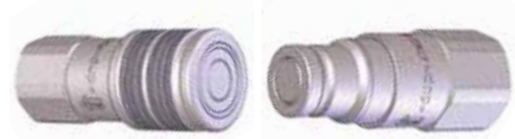
#	DN			L	D	
			mm	mm	mm	MPa
PLT1.0606.002	06	1/4 BSP Female	22.0	58.2	28.0	30
PLT1.0606.012	06	1/4 NPT Female	22.0	58.2	28.0	30
PLT1.1310.002	13	3/8 BSP Female	27.0	67.3	32.0	25
PLT1.1310.012	13	3/8 NPT Female	27.0	67.3	32.0	25
PLT1.1313.002	13	1/2 BSP Female	27.0	72.3	32.0	25
PLT1.1313.012	13	1/2 NPT Female	27.0	72.3	32.0	25
PLT1.2013.002	20	1/2 BSP Female	32.0	78.5	38.0	25
PLT1.2013.012	20	1/2 NPT Female	32.0	84.0	38.0	25
PLT1.2019.002	20	3/4 BSP Female	36.0	84.0	38.0	25
PLT1.2019.012	20	3/4 NPT Female	36.0	84.0	38.0	25
PLT1.2519.002	25	3/4 BSP Female	46.0	93.6	48.0	25
PLT1.2519.012	25	3/4 NPT Female	46.0	93.6	48.0	25
PLT1.2525.002	25	1 BSP Female	46.0	93.6	48.0	25
PLT1.2525.012	25	1 NPT Female	46.0	93.6	48.0	25
PLT1.3031.002	30	1 1/4 BSP Female	50.0	109.3	55.0	25
PLT1.3031.012	30	1 1/4 NPT Female	50.0	109.3	55.0	25
PLT1.3531.002	35	1 1/4 BSP Female	60.0	112.5	75.0	25
PLT1.3531.012	35	1 1/4 NPT Female	60.0	112.5	75.0	25
PLT1.3541.032	35	1 5/8 - 12 UNF Female	60.0	112.5	75.0	25
PLT1.3939.002	39	1 1/2 BSP Female	70.0	118.3	79.0	25
PLT1.3939.012	39	1 1/2 NPT Female	70.0	118.3	79.0	25
PLT1.3947.032	39	1 7/8 - 12 UNF Female	70.0	118.3	79.0	25
PLT1.5051.112	50	2 BSP Female	80.0	147.4	103.0	25
PLT1.5051.012	50	2 NPT Female	80.0	147.4	103.0	25
PLT1.5063.032	50	2 1/2 - 12 UNF Female	80.0	147.4	103.0	25



Please Note: Other threads are available on request.

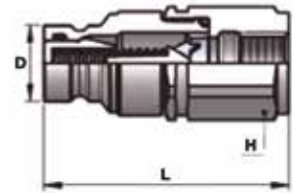
PLT1 SERIES

ISO 16028



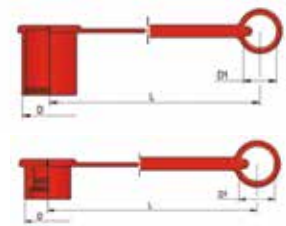
PLT1 - PROBES

#	DN			L	D	
			mm	mm	mm	MPa
PLT1.0606.003	06	1/4 BSP Female	22.0	52.0	16.2	30
PLT1.0606.013	06	1/4 NPT Female	22.0	52.0	16.2	30
PLT1.1310.003	13	3/8 BSP Female	27.0	63.5	19.76	25
PLT1.1310.013	13	3/8 NPT Female	27.0	63.5	19.76	25
PLT1.1313.003	13	1/2 BSP Female	27.0	67.5	19.76	25
PLT1.1313.013	13	1/2 NPT Female	27.0	67.5	19.76	25
PLT1.2013.003	20	1/2 BSP Female	36.0	72.5	24.55	25
PLT1.2013.013	20	1/2 NPT Female	36.0	74.0	24.55	25
PLT1.2019.003	20	3/4 BSP Female	36.0	74.5	24.55	25
PLT1.2019.013	20	3/4 NPT Female	36.0	74.0	24.55	25
PLT1.2519.003	25	3/4 BSP Female	41.0	86.0	29.95	25
PLT1.2519.013	25	3/4 NPT Female	41.0	86.0	29.95	25
PLT1.2525.003	25	1 BSP Female	41.0	86.0	29.95	25
PLT1.2525.013	25	1 NPT Female	41.0	86.0	29.95	25
PLT1.3031.003	30	1 1/4 BSP Female	50.0	90.0	36.0	25
PLT1.3031.013	30	1 1/4 NPT Female	50.0	90.0	36.0	25
PLT1.3531.003	35	1 1/4 BSP Female	55.0	105.0	44.0	25
PLT1.3531.013	35	1 1/4 NPT Female	55.0	105.0	44.0	25
PLT1.3541.033	35	1 5/8 - 12 UNF Female	55.0	105.0	44.0	25
PLT1.3939.003	39	1 1/2 BSP Female	70.0	119.5	57.05	25
PLT1.3939.013	39	1 1/2 NPT Female	70.0	119.5	57.05	25
PLT1.3947.033	39	1 7/8 - 12 UNF Female	70.0	119.5	57.05	25
PLT1.5051.113	50	2 BSP Female	80.0	173.0	72.9	25
PLT1.5051.013	50	2 NPT Female	80.0	173.0	72.9	25
PLT1.5063.033	50	2 1/2 - 12 UNF Female	80.0	173.0	72.9	25



PLASTIC CAPS

Nominal size		Female dust plug				Male dust plug				Colour	Material
DN	ISO	CODE F	D*	L*	D1*	CODE M	D*	L*	D1*		
06	6.3	SPLT.06002	32.5	200	20	SPLT.06003	26	200	20	Red	PVC
13	10	PLT.13002	37	200	26	SPLT.13003	27.5	200	26	Red	PVC
20	12.5	SPLT.20002	43	200	31.5	SPLT.20003	35	200	31.5	Red	PVC
25	19	SPLT.25002	53.5	265	35	SPLT.25003	43	265	35	Red	PVC
30	25	SPLT.30002	63	280	48	SPLT.30003	50	280	48	Red	PVC



* Dimensions.

Please Note: Other threads are available on request.



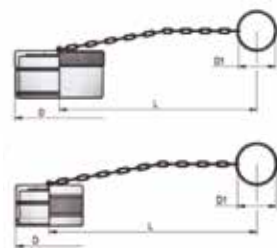
PLT1 SERIES

ISO 16028

METAL CAPS

Nominal size		Female dust plug				Male dust plug				Material
DN	ISO	CODE F	D*	L*	D1*	CODE M	D*	L*	D1*	
06	6.3	SPLT.06202	46	200	32	SPLT.06203	33	200	32	Aluminum
13	10	SPLT.13202	40	200	32	SPLT.13203	30	200	32	Aluminum
20	12.5	SPLT.20202	60	200	32	SPLT.20203	42	200	32	Aluminum
25	19	SPLT.25202	55	275	47.5	SPLT.25203	40	275	47.5	Aluminum
30	25	SPLT.30202	65	275	47.5	SPLT.30203	45	275	47.5	Aluminum
35	31.5	SPLT.35202*	-	-	-	SPLT.35203*	-	-	-	Aluminum
39	40	SPLT.39202	90	275	47.5	SPLT.39203	68	275	47.5	Aluminum
50	50	SPLT.50202	114	275	47.5	SPLK.50203	83	275	47.5	Aluminum

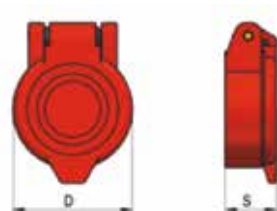
* Dimensions.



AUTOMATIC CAPS

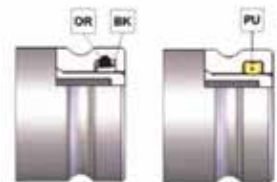
Nominal size		Automatic female cap			Colour	Material
DN	ISO	CODE F	D*	S*		
13	10	SPLT.13302	38	16.8	Red	Nylon
13	10	SPLT.13342	38	16.8	Black	Nylon
20	12.5	SPPV.13302	46	18.4	Black	Nylon
20	12.5	SPPV.13312	46	18.4	Yellow	Nylon
20	12.5	SPPV.13322	46	18.4	Green	Nylon
20	12.5	SPPV.13332	46	18.4	Blue	Nylon
20	12.5	SPPV.13342	46	18.4	Red	Nylon

* Dimensions.



SPARE PARTS

Nominal size		Male gasket		Male gasket PU (POLYURETHANE)
DN	ISO	OR (VITON)	BK (PTFE)	
06	6.3	PLT.006.120	PLT.006.130	-
13	10	PLT.013.120	PLT.013.130	PLK.013.210
20	12.5	PLT.019.120	PLT.019.130	PVT.019.210
25	19	PLT.025.120	PLT.025.130	PVT.025.210
30	25	PLT.031.120	PLT.031.130	PVT.030.210
35	31.5	PLS.025.120	PLT.035.130	-
39	40	PLT.039.120	PLT.039.130	-
50	50	PLK.050.120	PLK.050.130	-



Please Note: Other threads are available on request.

PLTX SERIES

ISO 16028 – STAINLESS STEEL



Technical Data

Nominal size		Max working pressure MPa	Max flow rate l/min	Min burst pressure			Fluid spillage cc
DN	ISO			Probe MPa	Coupler MPa	Coupled MPa	
06	6.3	40	24	260	160	130	0.008
13	10	25	46	140	100	190	0.010
20	12.5	25	90	130	100	160	0.012
22	16	25	150	110	100	140	0.015
25	19	25	200	110	100	140	0.020
30	25	25	280	100	100	100	0.030
39	40	15	700	60	60	60	0.050
50	50	10	1000	40	40	40	0.100

APPLICATIONS

Used for a wide range of hydraulic application, such as plant machinery and accessories including breakers and hydraulic grabs.

FEATURES

- Meets ISO 16028
- Safety locking mechanism to avoid accidental disconnection
- Working pressure 100-400 bar

CONSTRUCTION

Occlusion:	Flat face.
Locking:	Radial balls.
Material:	Stainless steel AISI 316.
Standard Seals:	KFM.
Optional Seals:	FFKM, EPDM.

TEMPERATURE RANGE

-25°C up to +200°C.

Please Note: Other threads are available on request.

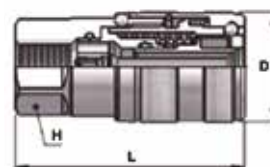


PLTX SERIES

ISO 16028 – STAINLESS STEEL

PLTX - COUPLERS

#	DN	 mm	 mm	L mm	D mm	 MPa
PLTX.0606.002	06	1/4 BSP Female	22.0	58.5	28.0	40
PLTX.0606.012	06	1/4 NPT Female	22.0	58.5	28.0	40
PLTX.0615.032	06	9/16 - 18 UNF Female	22.0	58.5	28.0	40
PLTX.1310.002	13	3/8 BSP Female	27.0	73.5	32.0	25
PLTX.1310.012	13	3/8 NPT Female	27.0	73.5	32.0	25
PLTX.1313.002	13	1/2 BSP Female	27.0	73.5	32.0	25
PLTX.1313.012	13	1/2 NPT Female	27.0	73.5	32.0	25
PLTX.1319.032	13	3/4 - 16 UNF Female	27.0	73.5	32.0	25
PLTX.2013.002	20	1/2 BSP Female	36.0	83.5	38.0	25
PLTX.2013.012	20	1/2 NPT Female	36.0	83.5	38.0	25
PLTX.2019.002	20	3/4 BSP Female	36.0	83.5	38.0	25
PLTX.2019.012	20	3/4 NPT Female	36.0	83.5	38.0	25
PLTX.2027.032	20	1 1/16 - 12 UNF Female	36.0	83.5	38.0	25
PLTX.2519.002	25	3/4 BSP Female	41.0	95.5	48.0	25
PLTX.2519.012	25	3/4 NPT Female	41.0	95.5	48.0	25
PLTX.2525.002	25	1 BSP Female	41.0	97.5	48.0	25
PLTX.2525.012	25	1 NPT Female	41.0	97.5	48.0	25
PLTX.2533.032	25	1 5/16 - 12 UNF Female	41.0	95.0	48.0	25
PLTX.3031.002	30	1 1/4 BSP Female	50.0	109.3	55.0	25
PLTX.3031.012	30	1 1/4 NPT Female	50.0	109.3	55.0	25
PLTX.3939.002	39	1 1/2 BSP Female	70.0	118.0	79.0	15
PLTX.3939.012	39	1 1/2 NPT Female	70.0	118.0	79.0	15
PLTX.5051.112	50	2 BSP Female	80.0	149.0	99.0	10
PLTX.5051.012	50	2 NPT Female	80.0	149.0	99.0	10



Please Note: Other threads are available on request.

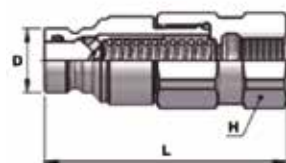
PLTX SERIES

ISO 16028 – STAINLESS STEEL



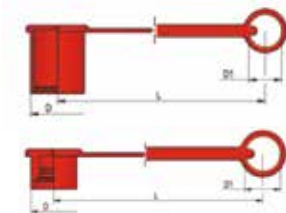
PLTX - PROBES

#	DN	 mm	 mm	L mm	D mm	 MPa
PLTX.0606.003	06	1/4 BSP Female	22.0	60.0	16.2	40
PLTX.0606.013	06	1/4 NPT Female	22.0	60.0	16.2	40
PLTX.0615.033	06	9/16 - 18 UNF Female	22.0	60.0	16.2	40
PLTX.1310.003	13	3/8 BSP Female	27.0	69.5	19.8	25
PLTX.1310.013	13	3/8 NPT Female	27.0	69.5	19.8	25
PLTX.1313.003	13	1/2 BSP Female	27.0	69.0	19.8	25
PLTX.1313.013	13	1/2 NPT Female	27.0	73.0	19.8	25
PLTX.1319.033	13	3/4 - 16 UNF Female	27.0	70.0	19.8	25
PLTX.2013.003	20	1/2 BSP Female	36.0	81.5	24.6	25
PLTX.2013.013	20	1/2 NPT Female	36.0	82.0	24.6	25
PLTX.2019.003	20	3/4 BSP Female	36.0	83.0	24.6	25
PLTX.2019.013	20	3/4 NPT Female	36.0	83.0	24.6	25
PLTX.2027.033	20	1 1/16 - 12 UNF Female	36.0	83.0	24.6	25
PLTX.2519.003	25	3/4 BSP Female	41.0	90.5	30.0	25
PLTX.2519.013	25	3/4 NPT Female	41.0	90.5	30.0	25
PLTX.2525.003	25	1 BSP Female	41.0	90.5	30.0	25
PLTX.2525.013	25	1 NPT Female	41.0	93.5	30.0	25
PLTX.2533.033	25	1 5/16 - 12 UNF Female	41.0	93.5	30.0	25
PLTX.3031.003	30	1 1/4 BSP Female	50.0	95.0	36.0	25
PLTX.3031.013	30	1 1/4 NPT Female	50.0	95.0	36.0	25
PLTX.3939.003	39	1 1/2 BSP Female	70.0	122.5	57.0	15
PLTX.3939.013	39	1 1/2 NPT Female	70.0	122.5	57.0	15
PLTX.5051.113	50	2 BSP Female	80.0	139.6	72.9	10
PLTX.5051.013	50	2 NPT Female	80.0	139.6	72.9	10



PLASTIC CAPS

Nominal size		Female dust plug				Male dust plug				Colour	Material
DN	ISO	CODE F	D*	L*	D1*	CODE M	D*	L*	D1*		
06	6.3	SPLT.06002	32.5	200	20	SPLT.06003	26	200	20	Red	PVC
13	10	PLT.13002	37	200	26	SPLT.13003	27.5	200	26	Red	PVC
20	12.5	SPLT.20002	43	200	31.5	SPLT.20003	35	200	31.5	Red	PVC
25	19	SPLT.25002	53.5	265	35	SPLT.25003	43	265	35	Red	PVC
30	25	SPLT.30002	63	280	48	SPLT.30003	50	280	48	Red	PVC



* Dimensions.

Please Note: Other threads are available on request.



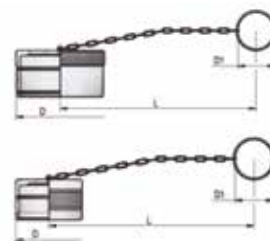
PLTX SERIES

ISO 16028 – STAINLESS STEEL

METAL CAPS

Nominal size		Female dust plug					Male dust plug				Material
DN	ISO	CODE F	D*	L*	D1*		CODE M	D*	L*	D1*	
06	6.3	SPLT.06202	46	200	32		SPLT.06203	33	200	32	Aluminum
13	10	SPLT.13202	40	200	32		SPLT.13203	30	200	32	Aluminum
20	12.5	SPLT.20202	60	200	32		SPLT.20203	42	200	32	Aluminum
22	16	SPLT.22202	66	200	32		SPLT.22203	46	200	32	Aluminum
25	19	SPLT.25202	55	275	47.5		SPLT.25203	40	275	47.5	Aluminum
30	25	SPLT.30202	65	275	47.5		SPLT.30203	45	275	47.5	Aluminum
39	40	SPLT.39202	90	275	47.5		SPLT.39203	68	275	47.5	Aluminum
50	50	SPLTX.50202	110	275	47.5		SPLK.50203	83	275	47.5	Aluminum

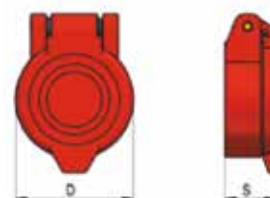
* Dimensions.



AUTOMATIC CAPS

Nominal size		Automatic female cap			Colour	Material
DN	ISO	CODE F	D*	S*		
13	10	SPLT.13302	38	16.8	Red	Nylon
13	10	SPLT.13342	38	16.8	Black	Nylon
20	12.5	SPPV.13302	46	18.4	Black	Nylon
20	12.5	SPPV.13312	46	18.4	Yellow	Nylon
20	12.5	SPPV.13322	46	18.4	Green	Nylon
20	12.5	SPPV.13332	46	18.4	Blue	Nylon
20	12.5	SPPV.13342	46	18.4	Red	Nylon

* Dimensions.



SPARE PARTS

Nominal size		Male gasket	
DN	ISO	OR (VITON)	BK (PTFE)
06	6.3	PLT.006.120 V	PLT.006.130
13	10	PLT.013.120 V	PLT.013.130
20	12.5	PLT.019.120 V	PLT.019.130
22	16	PLT.022.120 V	PLT.022.130
25	19	PLT.025.120 V	PLT.025.130
30	25	PLT.031.120 V	PLT.031.130
39	40	PLT.039.120 V	PLT.039.130
50	50	PLTX.050.120 V	PLTX.050.130



Please Note: Other threads are available on request.

PVS & PVM SERIES

700 BAR



Technical Data

PVS

Nominal size		Max working pressure MPa	Max flow rate l/min	Min burst pressure			Fluid spillage cc
DN	ISO			Probe MPa	Coupler MPa	Coupled MPa	
06	6.3	70	10	150	200	220	0.2
10	10	70	20	150	200	220	0.6

PVM

Nominal size		Max working pressure MPa	Max flow rate l/min	Min burst pressure			Fluid spillage cc
DN	ISO			Probe MPa	Coupler MPa	Coupled MPa	
06	6.3	70	10	270	200	220	0.5
10	10	100	20	280	340	330	1.7

APPLICATIONS

High pressure screw to connect couplings used on a wide range of hydraulic tools including jacking, presses and torque wrenches.

FEATURES

- Meets ISO 14540
- Screw to connect locking
- Working pressure 700 bar

CONSTRUCTION

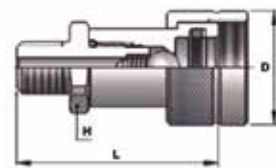
Occlusion:	Ball or Poppet.
Material:	Steel.
Finishing:	Zn-Fe (Cr III).
Standard Seals:	NBR.
Optional Seals:	FKM, EPDM.

TEMPERATURE RANGE

-25°C up to +100°C.

PVS BALL TYPE - COUPLERS

#	DN			L	D	
			mm	mm	mm	MPa
PVS3.0604.012	06	1/8 NPT Male	22.0	49.0	30.0	70
PVS3.0606.012	06	1/4 NPT Female	22.0	56.0	30.0	70
PVS3.0606.022	06	1/4 NPT Male	22.0	53.0	30.0	70
PVS3.0610.022	06	3/8 NPT Male	22.0	53.0	30.0	70
PVS3.1006.022	10	1/4 NPT Male	24.0	64.5	35.0	100
PVS3.1010.012	10	3/8 NPT Female	24.0	66.0	35.0	100
PVS3.1010.022	10	3/8 NPT Male	24.0	62.0	35.0	100



Please Note: Other threads are available on request.

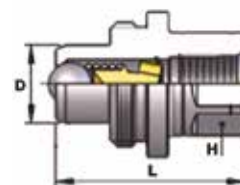


PVS & PVM SERIES

700 BAR

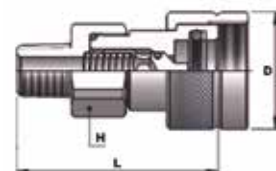
PVM BALL TYPE - PROBES

#	DN			L	D	
			mm	mm	mm	MPa
PVS1.0604.023	06	1/8 NPT Female	19.0	54.0	15.9	70
PVS1.0606.013	06	1/4 NPT Female	19.0	39.0	15.9	70
PVS1.0610.013	06	3/8 NPT Female	30.0	39.0	15.9	70
PVS3.0606.023	06	1/4 NPT Male	19.0	58.0	15.9	70
PVS1.1006.013	10	1/4 NPT Female	32.0	40.5	19.0	100
PVS1.1010.013	10	3/8 NPT Female	32.0	40.5	19.0	100
PVS1.1010.023	10	3/8 NPT Male	32.0	60.5	19.0	100



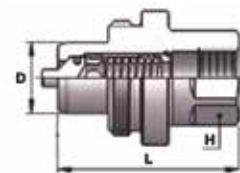
PVM POPPET TYPE - COUPLERS

#	DN			L	D	
			mm	mm	mm	MPa
PVM3.0606.012	06	1/4 NPT Female	22.0	51.3	30.0	70
PVM3.0606.022	06	1/4 NPT Male	22.0	51.8	30.0	70
PVM3.1010.022	10	3/8 NPT Male	24.0	55.6	35.0	100



PVM POPPET TYPE - PROBES

#	DN			L	D	
			mm	mm	mm	MPa
PVM1.0606.013	06	1/4 NPT Female	19.0	40.5	15.9	70
PVM1.1010.013	10	3/8 NPT Female	32.0	42.5	19.0	100



PLASTIC CAPS

Nominal size		Female dust plug				Male dust cap				Colour	Material
DN	ISO	CODE F	D*	L*	D1*	CODE M	D*	L*	D1*		
10	10	SPVS.10001	37	108	28.5	SPVS.10001	37	108	28.5	Red	Polyethylene
10	10	SPVS.10041	37	108	28.5	SPVS.10041	37	108	28.5	Black	Polyethylene



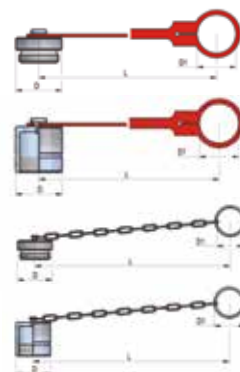
* Dimensions.

METAL CAPS

Nominal size		Female dust plug					Male dust cap				Material	
DN	ISO	CODE F	D*	L*	D1*	CODE M	D*	L*	D1*			
06	6.3	SPVS.06100	35	205	27	SPVS.06101	35	205	27		Steel with chain	
06	6.3	SPVS.06102	35	205	27	SPVS.06103	35	205	27		Aluminium with chain	
10	10	SPVS.10100 C	35	205	27	SPVS.10103 C	35	205	27		Steel with chain	
10	10	SPVS.10102 C	35	205	27	-	-	-	-		Aluminium with chain	
10	10	SPVS.10100 L	35	135	29.5	SPVS.10103 L	35	135	29.5		Steel with plastic tongue	
10	10	SPVS.10102 L	35	135	29.5	-	-	-	-		Aluminium with plastic tongue	

* Dimensions.

Please Note: Other threads are available on request.



PVSX & PVMX SERIES

700 BAR - STAINLESS STEEL



Technical Data

PVSX

Nominal size		Max working pressure MPa	Max flow rate l/min	Min burst pressure			Fluid spillage cc
DN	ISO			Probe MPa	Coupler MPa	Coupled MPa	
10	10	70	20	140	190	190	0.6

PVMX

Nominal size		Max working pressure MPa	Max flow rate l/min	Min burst pressure			Fluid spillage cc
DN	ISO			Probe MPa	Coupler MPa	Coupled MPa	
10	10	70	20	270	210	210	1.7

APPLICATIONS

High pressure screw to connect couplings used on a wide range of hydraulic tools including jacking, presses and torque wrenches.

FEATURES

- Meets ISO 14540
- Screw to connect locking
- Working pressure 700 bar

CONSTRUCTION

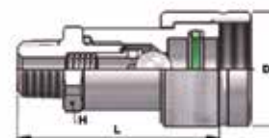
Occlusion: Ball or Poppet.
Material: Stainless steel AISI 316.
Standard Seals: FKM.
Optional Seals: NBR, EPDM.

TEMPERATURE RANGE

-25°C up to +200°C.

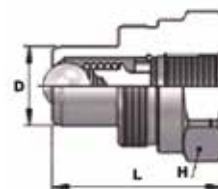
PVSX BALL TYPE - COUPLER

#	DN			L	D	
			mm	mm	mm	MPa
PVSX.1010.022	10	3/8 NPT Male	24.0	62.0	35.0	70



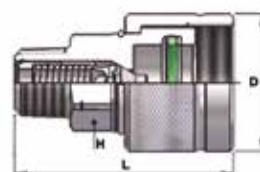
PVSX BALL TYPE - PROBE

#	DN			L	D	
			mm	mm	mm	MPa
PVSX.1010.013	10	3/8 NPT Female	32.0	41.0	19.0	70

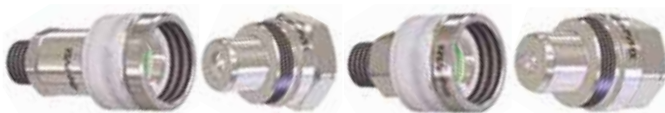


PVMX POPPET TYPE - COUPLER

#	DN			L	D	
			mm	mm	mm	MPa
PVMX.1010.022	10	3/8 NPT Male	22.0	55.6	35.0	70



Please Note: Other threads are available on request.

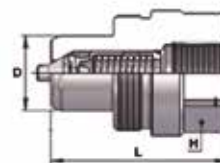


PVSX & PVMX SERIES

700 BAR - STAINLESS STEEL

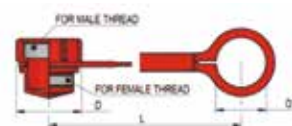
PVMX POPPET TYPE - PROBE

#	DN			L	D	
			mm	mm	mm	MPa
PVMX.1010.013	10	3/8 NPT Female	27.0	44.8	19.0	70



PLASTIC CAPS

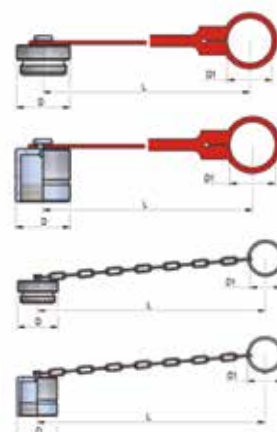
Nominal size		Female dust plug				Male dust cap				Colour	Material
DN	ISO	CODE F	D*	L*	D1*	CODE M	D*	L*	D1*		
10	10	SPVS.10001	37	108	28.5	SPVS.10001	37	108	28.5	Red	Polyethylene
10	10	SPVS.10041	37	108	28.5	SPVS.10041	37	108	28.5	Black	Polyethylene



* Dimensions.

METAL CAPS

Nominal size		Female dust plug				Male dust cap				Material
DN	ISO	CODE F	D*	L*	D1*	CODE M	D*	L*	D1*	
10	10	SPVS.10100 C	35	205	27	SPVS.10103 C	35	205	27	Steel with chain
10	10	SPVS.10100 C	35	205	27	-	-	-	-	Aluminum with chain
10	10	SPVS.10100 C	35	205	27	SPVS.10303 C	35	205	27	Stainless steel with chain
10	10	SPVS.10102 C	35	205	27	SPVS.10103 L	35	135	29.5	Steel with plastic tongue
10	10	SPVS.10100 L	35	135	29.5	-	-	-	-	Aluminum with plastic tongue



* Dimensions.

Please Note: Other threads are available on request.

BANJO SWIVEL ASSEMBLY

ZINC NICKEL BLACK



#		A	B	C	
S700	1/4 NPT Male	mm 12.19	mm 52.77	mm 45.25	bar 700

TECHNICAL DESCRIPTION

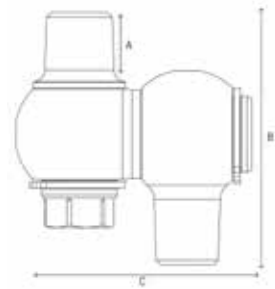
The Abdex 360° Swivel is designed for use when it is difficult to connect hoses to hydraulic tools. It enables full manoeuvrability in order that the hydraulic tool can be used in the smallest of spaces.

ADVANTAGES

- 360° Rotation
- Zinc nickel black - to avoid rust
- Hex bolt head for easy connection

MATERIAL

Steel, finished in zinc nickel black.



Please Note: Other threads are available on request.



PARKER HP1000-SERIES

HIGH PRESSURE COUPLINGS

TECHNICAL DESCRIPTION

The Tema high pressure coupling was specially developed for use in industrial machinery, salvage devices and testing equipment. This series is produced in galvanised steel. The probe and sleeve are made from hardened galvanised steel. The coupling can be supplied either with or without safety lock.

ADVANTAGES

- High flow as a result of optimised valve design
- Additional plug sealing via polymer valve casing, to guarantee high reliability seals even with second-hand plugs
- Tema high pressure couplings are supplied with dust caps inclusive!

FEATURES

- Compatibility: Cejn 115
- Fully guaranteed match when paired with the Parker Polyflex hose

SEALS

Coupler: bonded seal washer

Probe: bonded seal or inner cone

WORKING PRESSURE

1000 bar

WORKING TEMPERATURE

-30°C up to +100°C (NBR) depending on the medium. Special seals are available on request.



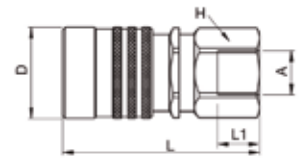
Coupler Construction	Standard
Coupler body	Steel, zinc plated, passivated, sealed
Sleeve	Steel, hardened, zinc plated, passivated, sealed
Valve	Steel, zinc plated, passivated, sealed
Springs	AISI 302
Locking balls	AISI 420 C
Seals	NBR
Inner sleeve	POM

Probe Construction	Standard
Probe body	Steel, hardened, zinc plated, passivated, sealed
Valve	Steel, zinc plated, passivated, sealed
Springs	AISI 302
Seals	NBR
Valve retainer	Steel, zinc plated, passivated

PARKER HP1000-SERIES HIGH PRESSURE COUPLINGS

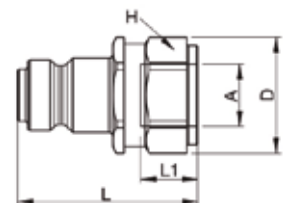
COUPLERS

#			L	L1	D	Safety Locking	 Connect	 Disconnect	
	A	mm	mm	mm	mm		bar	bar	bar
HP10104131	1/4 BSP Female	24.0	59.0	12.0	27.0	without	1000	1000	>3000
HP10104132	1/4 BSP Female	24.0	59.0	12.0	27.0	with	1000	1000	>3000
HP10105131	1/4 NPT Female	24.0	59.0	12.0	27.0	without	1000	1000	>3000
HP10105132	1/4 NPT Female	24.0	59.0	12.0	27.0	with	1000	1000	>3000
HP10104171	3/8 BSP Female	24.0	59.0	12.0	27.0	without	1000	1000	>3000
HP10104172	3/8 BSP Female	24.0	59.0	12.0	27.0	with	1000	1000	>3000
HP10105171	3/8 NPT Female	24.0	59.0	13.0	27.0	without	1000	1000	>3000
HP10105172	3/8 NPT Female	24.0	59.0	13.0	27.0	with	1000	1000	>3000



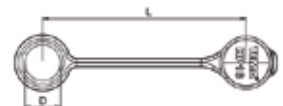
PROBES

#			L	L1	D	Safety Locking	 Connect	 Disconnect	
	A	mm	mm	mm	mm		bar	bar	bar
HP1020413	1/4 BSP Female	22.0	37.0	12.0	24.5	-	1000	1000	>3000
HP1020513	1/4 NPT Female	22.0	37.0	12.0	24.5	-	1000	1000	>3000
HP1020417	3/8 BSP Female	24.0	37.0	12.0	24.5	-	1000	1000	>3000
HP1020517	3/8 NPT Female	24.0	37.0	13.0	24.5	-	1000	1000	>3000

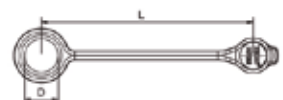


DUST PROTECTION

#	Version	L	D	Material	Colour
		mm	mm		
HP16	for coupler	120.0	21.0	PVC	Blue
HP16ARD	for coupler	125.0	-	Aluminium	Red



#	Version	L	D	Material	Colour
		mm	mm		
HP26	for probe	120.0	19.0	PVC	Blue
HP16ARD	for probe	140.0	-	Aluminium	Red



PARKER HP1500-SERIES

HIGH PRESSURE COUPLINGS

TECHNICAL DESCRIPTION

The Tema high pressure coupling was specially developed for use in bolt tensioning equipment. This series is produced in steel. The plug bodies and the sleeves are black galvanised. The coupling can be supplied either with or without additional safety lock.

ADVANTAGES

- High flow as a result of optimised valve design
- Additional plug sealing via polymer valve casing, to guarantee high reliability seals even with second-hand plugs
- Tema high pressure couplings are supplied with dust caps inclusive!

FEATURES

- Compatibility: Cejn 116
- Fully guaranteed match when paired with the Parker Polyflex hose

SEALS

Metal sealing cone threaded adaptors / metal sealing cone adaptors.

WORKING PRESSURE

1500 bar

WORKING TEMPERATURE

-30°C up to +100°C (NBR) depending on the medium. Special seals are available.



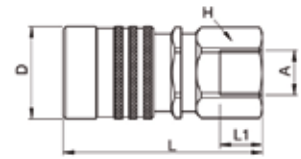
Coupler Construction	Standard
Coupler body	Steel, zinc-nickel coated, black passivated, sealed
Sleeve	Steel, hardened, zinc-iron coated, black passivated, sealed
Valve	Steel, zinc plated, passivated, sealed
Springs	AISI 302
Locking balls	AISI 420 C
Seals	NBR
Inner sleeve	POM

Probe Construction	Standard
Probe body	Steel, hardened, zinc-iron coated, black passivated, sealed
Valve	Steel, zinc plated, passivated, sealed
Springs	AISI 302
Seals	NBR
Valve retainer	Steel, zinc plated, passivated

PARKER HP1500-SERIES HIGH PRESSURE COUPLINGS

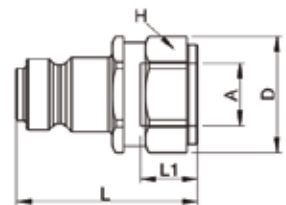
COUPLERS

#			L	L1	D	Safety Locking	 Connect	 Disconnect	
	A	mm	mm	mm	mm		bar	bar	bar
HP15104131	1/4 BSP Female	24.0	59.0	12.0	27.0	without	1500	1500	>3500
HP15104132	1/4 BSP Female	24.0	59.0	12.0	27.0	with	1500	1500	>3500
HP15105131	1/4 NPT Female	24.0	59.0	12.0	27.0	without	1500	1500	>3500
HP15105132	1/4 NPT Female	24.0	59.0	12.0	27.0	with	1500	1500	>3500
HP15104171	3/8 BSP Female	24.0	59.0	12.0	27.0	without	1500	1500	>3500
HP15104172	3/8 BSP Female	24.0	59.0	12.0	27.0	with	1500	1500	>3500
HP15105171	3/8 NPT Female	24.0	59.0	13.0	27.0	without	1500	1500	>3500
HP15105172	3/8 NPT Female	24.0	59.0	13.0	27.0	with	1500	1500	>3500



PROBES

#			L	L1	D	Safety Locking	 Connect	 Disconnect	
	A	mm	mm	mm	mm		bar	bar	bar
HP1520413	1/4 BSP Female	22.0	38.0	12.0	24.5	-	1500	1500	>3500
HP1520513	1/4 NPT Female	22.0	38.0	12.0	24.5	-	1500	1500	>3500



DUST PROTECTION

#	Version	L	D	Material	Colour
		mm	mm		
HP16	for coupler	120.0	21.0	PVC	Blue
HP16ARD	for coupler	125.0	21.0	Aluminium	Red



#	Version	L	D	Material	Colour
		mm	mm		
HP26	for probe	120.0	19.0	PVC	Blue
HP16ARD	for probe	140.0	19.0	Aluminium	Red



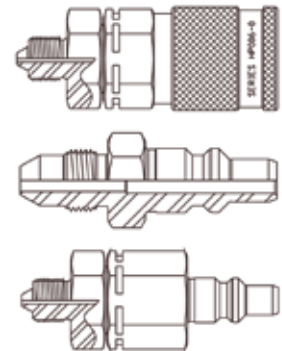
ROGAN SERIES

HIGH PRESSURE COUPLINGS

Technical Data

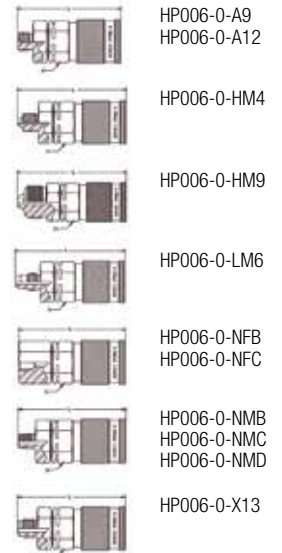
Type	Max working pressure (psi / MPa)	Test pressure (psi / MPa)	Nominal thru hole diameter (inch / mm)
HP006	30,000 / 206.8	35,000 / 241.3	0.24 / 6.1
HP010	20,000 / 137.9	25,000 / 172.4	0.40 / 10.2

A versatile connecting device that permits easy and rapid joining of hose assemblies to your system. Each coupling is assembled and pressure tested to at least 5,000 psi above its maximum rated working pressure. Couplings with check-valve can withstand the full working pressure in the disconnected condition.



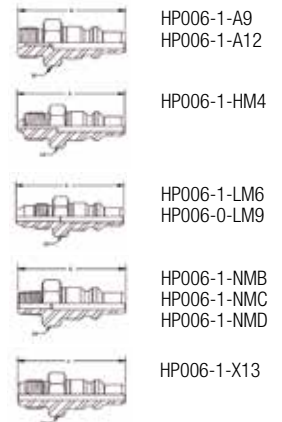
HP006 - COUPLERS

#			L		
				psi	MPa
HP006-0-A9	Type "M" (9/16 - 18 threads)	30.2	83.8	30,000	206.8
HP006-0-A12	Type "M" (3/4 - 16 threads)	30.2	84.8	30,000	206.8
HP006-0-HM4	1/4 High pressure male	30.2	87.9	30,000	206.8
HP006-0-HM9	9/16 High pressure male	30.2	94.9	30,000	206.8
HP006-0-LM6	3/8 Medium pressure male	30.2	89.9	20,000	137.9
HP006-0-NFB	1/4 NPT female	30.2	83.8	15,000	103.4
HP006-0-NFC	3/8 NPT female	30.2	83.8	15,000	103.4
HP006-0-NMB	1/4 NPT male	30.2	86.4	15,000	103.4
HP006-0-NMC	3/8 NPT male	30.2	83.8	15,000	103.4
HP006-0-NMD	1/2 NPT male	30.2	87.6	15,000	103.4
HP006-0-X13	Low angle face seal (9/16 - 18 threads)	30.2	85.6	30,000	206.8



HP006 - PROBES WITHOUT CHECK VALVE

#			L		
				psi	MPa
HP006-1-A9	Type "M" (9/16 - 18 threads)	19.1	50.3	30,000	206.8
HP006-1-A12	Type "M" (3/4 - 16 threads)	22.1	54.9	30,000	206.8
HP006-1-HM4	1/4 High pressure male	19.1	57.2	30,000	206.8
HP006-1-LM6	3/8 Medium pressure male	19.1	59.2	20,000	137.9
HP006-1-LM9	9/16 Medium pressure male	25.4	65.3	20,000	137.9
HP006-1-NMB	1/4 NPT male	19.1	53.1	15,000	103.4
HP006-1-NMC	3/8 NPT male	19.1	54.1	15,000	103.4
HP006-1-NMD	1/2 NPT male	25.4	58.7	15,000	103.4
HP006-1-X13	Low angle face seal (9/16 - 18 threads)	19.1	55.1	30,000	206.8

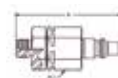


ROGAN SERIES

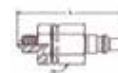
HIGH PRESSURE COUPLINGS

HP006 - PROBES WITH CHECK VALVE

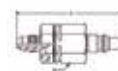
#			L		
		mm	mm	psi	MPa
HP006-2-A9	Type "M" (9/16 - 18 threads)	30.2	83.8	30,000	206.8
HP006-2-A12	Type "M" (3/4 - 16 threads)	30.2	83.8	30,000	206.8
HP006-2-HM4	1/4 High pressure male	30.2	87.6	30,000	206.8
HP006-1-LM6	3/8 Medium pressure male	30.2	89.4	20,000	137.9
HP006-2-NFB	1/4 NPT female	30.2	82.8	15,000	103.4
HP006-2-NFC	3/8 NPT female	30.2	82.6	15,000	103.4
HP006-2-NMB	1/4 NPT male	30.2	84.8	15,000	103.4
HP006-2-NMC	3/8 NPT male	30.2	84.8	15,000	103.4
HP006-2-NMD	1/2 NPT male	30.2	87.1	15,000	103.4
HP006-2-X13	Low angle face seal (9/16 - 18 threads)	30.2	85.1	30,000	206.8



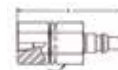
HP006-2-A9
HP006-2-A12



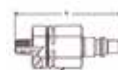
HP006-2-HM4



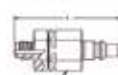
HP006-2-LM6



HP006-2-NFB
HP006-2-NFC



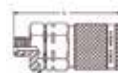
HP006-2-NMB
HP006-2-NMC
HP006-2-NMD



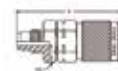
HP006-2-X13

HP010 - PROBES

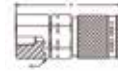
#			L		
		mm	mm	psi	MPa
HP010-0-A12	Type "M" (3/4 - 16 threads)	41.1	101.6	20,000	137.9
HP010-0-A16	Type "M" (1 - 12 threads)	41.1	104.1	20,000	137.9
HP010-0-LM12	3/4 High pressure male	41.1	117.9	20,000	137.9
HP010-0-NFD	1/2 NPT female	41.1	108.5	15,000	103.4
HP010-0-NMD	1/2 NPT female	41.1	104.9	15,000	103.4
HP010-0-X23	Low angle face seal (3/4 - 16 threads)	41.1	106.4	20,000	137.9



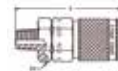
HP010-0-A12
HP010-0-A16



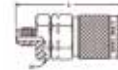
HP010-0-LM12



HP010-0-NFD



HP010-0-NMD



HP010-0-X23

ROGAN SERIES

HIGH PRESSURE COUPLINGS

HP010 - PROBES WITHOUT CHECK VALVE

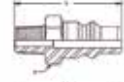
#			L		
		mm	mm	psi	MPa
HP010-1-A12	Type "M" (3/4 - 16 threads)	61.0	26.9	20,000	137.9
HP010-1-A16	Type "M" (1 - 12 threads)	64.3	30.0	20,000	137.9
HP010-1-LM9	9/16 Medium pressure male	79.2	30.0	20,000	137.9
HP010-1-LM12	3/4 Medium pressure male	72.1	26.9	20,000	137.9
HP010-1-NMD	1/2 NPT male	64.0	26.9	15,000	103.4
HP010-1-X23	Low angle face seal (3/4 - 16 threads)	65.5	26.9	20,000	137.9



HP010-1-A12
HP010-1-A16



HP010-1-LM9
HP010-1-LM12



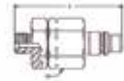
HP010-1-NMD



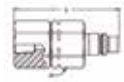
HP010-1-X23

HP010 - PROBES WITHOUT CHECK VALVE

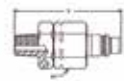
#			L		
		mm	mm	psi	MPa
HP010-2-A12	Type "M" (3/4 - 16 threads)	41.1	101.6	20,000	137.9
HP010-2-A16	Type "M" (1 - 12 threads)	41.1	103.6	20,000	137.9
HP010-2-NFD	1/2 NPT female	41.1	105.2	15,000	103.4
HP010-2-NMD	1/2 NPT male	41.1	104.9	15,000	103.4
HP010-2-X23	Low angle face seal (3/4 - 16 threads)	41.1	106.2	20,000	137.9



HP010-2-A12
HP010-2-A16



HP010-2-NFD



HP010-2-NMD



HP010-2-X23

HOSE CONTAINMENT GRIPS

DOUBLE EYE

APPLICATIONS

Hose containment grips are designed to prevent whipping of pressurised hose in the event of the hose separating from the fitting. The Chinese finger style design grips the hose in the unlikely event of separation which helps to prevent injury to operators or damage to nearby equipment.

FEATURES

- Two eye design ensures secure anchored connections
- The breaking load displayed in the table represents a strength of guarantee and safety

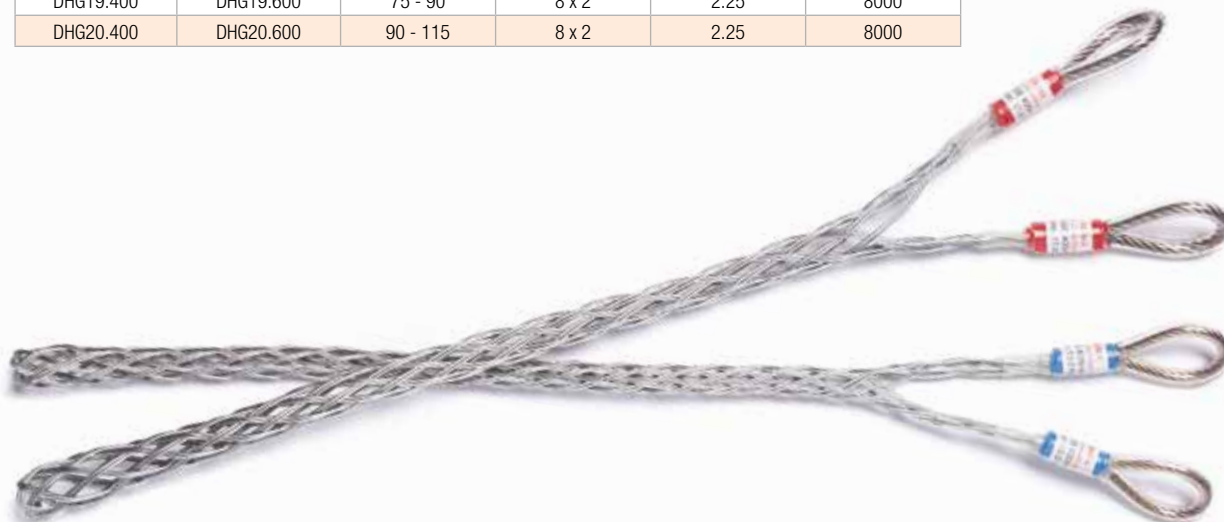
MATERIAL

Galvanised steel, stainless steel or aramid fibre.



GALVANISED HOSE CONTAINMENT GRIPS

#	#	Diameter	No. of plies	Diameter of wire rope	Breaking load
Length 400mm	Length 600mm	min - max		mm	kg
DHG01.400	DHG01.600	8 - 14	4 x 2	1.00	570
DHG02.400	DHG02.600	10 - 15	4 x 2	1.25	800
DHG03.400	DHG03.600	13 - 21	5 x 2	1.25	1000
DHG04.400	DHG04.600	15 - 20	5 x 2	1.50	1400
DHG05.400	DHG05.600	20 - 25	5 x 2	1.50	1400
DHG06.400	DHG06.600	17 - 31	5 x 2	1.50	1400
DHG07.400	DHG07.600	25 - 30	5 x 2	1.50	1800
DHG08.400	DHG08.600	25 - 30	6 x 2	1.75	2800
DHG09.400	DHG09.600	26 - 30	6 x 2	1.50	1800
DHG10.400	DHG10.600	30 - 40	6 x 2	1.75	2800
DHG11.400	DHG11.600	30 - 40	6 x 2	2.00	3900
DHG12.400	DHG12.600	27 - 52	6 x 2	2.00	3900
DHG13.400	DHG13.600	40 - 50	6 x 2	2.00	3900
DHG14.400	DHG14.600	45 - 75	6 x 2	2.25	5700
DHG15.400	DHG15.600	50 - 60	6 x 2	2.00	4600
DHG16.400	DHG16.600	50 - 60	7 x 2	2.25	5700
DHG17.400	DHG17.600	60 - 75	6 x 2	2.25	6800
DHG18.400	DHG18.600	72 - 110	8 x 2	2.25	8000
DHG19.400	DHG19.600	75 - 90	8 x 2	2.25	8000
DHG20.400	DHG20.600	90 - 115	8 x 2	2.25	8000



HOSE CONTAINMENT GRIPS

DOUBLE EYE

STAINLESS STEEL HOSE CONTAINMENT GRIP

#	#	Diameter	No. of plies	Diameter of wire rope	Breaking load
Length 400mm	Length 600mm	min - max		mm	kg
DHS01.400	DHS01.600	7 - 14	4 x 2	1.00	670
DHS02.400	DHS02.600	10 - 15	5 x 2	1.25	1200
DHS03.400	DHS03.600	13 - 21	5 x 2	1.25	1200
DHS04.400	DHS04.600	15 - 20	5 x 2	1.50	1600
DHS05.400	DHS05.600	20 - 25	5 x 2	1.50	1600
DHS06.400	DHS06.600	17 - 31	5 x 2	1.50	1600
DHS07.400	DHS07.600	25 - 30	6 x 2	1.50	2500
DHS08.400	DHS08.600	25 - 30	6 x 2	1.75	3400
DHS09.400	DHS09.600	20 - 36	6 x 2	1.50	2500
DHS10.400	DHS10.600	30 - 40	6 x 2	1.75	3400
DHS11.400	DHS11.600	27 - 52	6 x 2	2.00	4600
DHS12.400	DHS12.600	40 - 50	6 x 2	2.00	4600
DHS13.400	DHS13.600	45 - 70	6 x 2	2.25	6800
DHS14.400	DHS14.600	50 - 60	7 x 2	2.00	5700
DHS15.400	DHS15.600	60 - 75	7 x 2	2.25	7800
DHS16.400	DHS16.600	72 - 110	8 x 2	2.25	9100
DHS17.400	DHS17.600	75 - 90	8 x 2	2.25	9100
DHS18.400	DHS18.600	90 - 115	8 x 2	2.25	9100

ARAMID FIBRE HOSE CONTAINMENT GRIPS

#	Diameter	Length	No. of plies	Diameter of aramid fibre	Breaking load
	min - max	mm		mm	kg
2DA01	6-9	400.0	8 x 1	1.50	1000
2DA02	10-15	400.0	4 x 2	1.50	1650
2DA03	14-25	500.0	4 x 2	1.75	2500
2DA04	20-30	600.0	6 x 2	1.50	2900
2DA05	25-35	600.0	6 x 2	1.75	4000
2DA06	30-40	700.0	6 x 2	1.75	4000
2DA07	40-50	700.0	6 x 2	2.00	5500
2DA08	50-60	800.0	6 x 2	2.25	7500
2DA09	60-75	800.0	8 x 2	2.25	10000
2DA10	75-90	800.0	8 x 2	2.25	10000



ABDEXSLEEVE TEXTILE PROTECTIVE SLEEVE

ABDEXSLEEVE is revolutionary textile sleeve engineered and developed to provide superior levels of external protection for hoses and electrical cables. The manufacturing process uses de-aerated nylon fibre and compact weave technology, providing a strong light and easy to install sleeve with outstanding performance.

ABDEXSLEEVE has been tested and approved to international standards and can be used to prevent injury from failed hoses or cables, contain oil leaks and ensure excellent abrasion resistance in difficult operating conditions.



ABRASION RESISTANCE

ABDEXSLEEVE uses compact woven fibres, that have been carefully designed to deliver high mechanical strength and resist the most severe external abrasion conditions.

ABDEXSLEEVE fibres have a tensile strength superior to any other similar product and have successfully passed the abrasion test according to ISO 6945. It is due to ABDEXSLEEVE's superior technology, that it is possible to obtain a product with a thinner wall thickness, which results in a sleeve lighter, more flexible and easier to fit.

PRESSURE RESISTANCE

ABDEXSLEEVE offers an effective safety barrier by retaining oil spills should damage or malfunction occur on flexible hoses during service. Tests conforming to SAE J 343, have shown an oil retention capability 7 times better than any other similar product. (The sleeve holds 8 bar pressure for 15 seconds).

FIRE RESISTANCE

ABDEXSLEEVE textile fibres provide excellent flame propagation resistance, enabling ABDEXSLEEVE to withstand and pass severe flammability tests as conducted by MSHA (USA) and RAPRA (UK).

ELECTRICAL CONDUCTIVITY

When assembled on a flexible hose, ABDEXSLEEVE assures electrical conductivity values between 3 and 5 x 106 0 hm / metre, a value that meets and exceeds ISO 8031 standard.

WORKING TEMPERATURE

+100°C (+212°F) with peaks up to +130°C (+266°F).

ABDEXSLEEVE

#	Flat I.D mm	Round I.D mm	Coil length m
AS-17	27.0	17.0	50.0
AS-20	31.0	20.0	50.0
AS-23	36.0	23.0	50.0
AS-25	39.0	25.0	50.0
AS-27	42.0	27.0	50.0
AS-31	49.0	31.0	50.0
AS-33	52.0	33.0	50.0
AS-36	54.0	36.0	50.0
AS-40	63.0	40.0	50.0
AS-44	69.0	44.0	50.0
AS-47	74.0	47.0	50.0
AS-53	83.0	53.0	50.0
AS-55	86.0	55.0	50.0
AS-60	94.0	60.0	50.0
AS-66	104.0	66.0	50.0
AS-73	115.0	73.0	50.0
AS-93	145.0	93.0	50.0
AS-112	175.0	112.0	50.0
AS-127	202.0	127.0	50.0

ABDEXSLEEVE

TEXTILE PROTECTIVE SLEEVE

ABDEXWRAP TEXTILE WRAPPING SLEEVE, RESISTANT TO OIL SPILLS, ABRASION & HIGH TEMPERATURES

ABDEXWRAP is the ideal solution when it is necessary to protect more than one hose or electric cables already in place or to replace old or damaged protective sleeves.

The simple locking system, made of high pressure resistant VCO (VELCRO) enables a tubular protection, that is easy to assemble, and can be fitted in various lengths. (Special version available with eyelets).

Manufactured in fibreglass and coated with silicone rubber, ABDEXWRAP functions in very critical conditions, with particular regard to very high temperatures, where it provides excellent protection up to +200°C (+392°F).



ABDEXWRAP

#	Diameter	Coil length
	mm	m
AW-50	50.0	50.0
AW-75	75.0	50.0
AW-100	100.0	50.0
AW-125	125.0	50.0
AW-150	150.0	50.0
AW-175	175.0	50.0
AW-200	200.0	50.0

ABDEXSTRIP SELF LOCKING TEXTILE BELTS TO BUNDLE OR HANG MULTIPLE HOSES OR CABLES

ABDEXSTRIP is the ideal solution when it is necessary to firmly fix a group of hoses or cables by a strong self locking textile strip, and / or provide a secure means of attachment to a machine.

ABDEXSTRIP has stainless steel AISI 316 locking rings, designed for heavy duty industrial applications and is manufactured with the same materials utilized for the textile sleeve ABDEXSLEEVE.



ABDEXSTRIP

#	#	Approx. diameter of bundle	Circumference
Without eyelet	With eyelet	mm	mm
AST-31	AST-31-E	31-33	102.0
AST-47	AST-47-E	47-49	152.0
AST-63	AST-63-E	63-67	203.0
AST-79	AST-79-E	79-83	254.0
AST-95	AST-95-E	95-99	305.0
AST-111	AST-111-E	111-115	356.0
AST-127	AST-127-E	127-131	406.0
AST-144	AST-144-E	144-148	457.0
AST-160	AST-160-E	160-164	508.0
AST-176	AST-176-E	176-180	560.0
AST-192	AST-192-E	192-196	610.0
AST-208	AST-208-E	208-212	660.0



PLASTIC ABDEXGUARD HOSE PROTECTION

APPLICATIONS

ABDEXGUARD is suitable for the protection of most types of hydraulic, pneumatic and industrial hose assemblies across a wide range of industries. It has excellent recovery memory to maximise the hose coverage and exceptional anti-crushing performance. It maintains a high abrasion resistance, it's been proven in arduous conditions and has a good resistance to UV rays. Abdexguard is suitable for wrapping single hose or multiple hose bundles and comes conveniently packed in cartons for easy storage.

FEATURES

- High Abrasion resistance
- Resistant to UV rays
- Exceptional anti-crushing performance

MATERIAL

HDPE – High density polyethylene

TEMPERATURE RANGE

-65°C up to +90°C, max 100°C.

#	Compatible hose diameter (A)	Pitch length (B)	Wall thickness (C)	Wrapping range
	mm	mm	mm	mm
AG-12	9.0	9.0	1.9	9 - 13
AG-16	13.0	13.0	1.9	13 - 18
AG-20	16.0	16.0	2.0	16 - 26
AG-25	21.0	21.0	2.0	22 - 28
AG-32	27.0	27.0	3.1	27 - 44
AG-40	33.0	33.0	3.1	33 - 44
AG-50	44.0	44.0	3.9	44 - 70
AG-75	65.0	65.0	4.9	65 - 90
AG-90	80.0	80.0	5.9	80 - 200



Black as standard - other colours available upon request.

A = Overall width
B = Compatible hose diameter
C = Wall thickness

ABDEXCOVER

HOSE PROTECTION



APPLICATIONS

To gain extra protection for HP and UHP hose assemblies the use of an additional cover is recommended, the PVC hose with plastic helix reinforcement offers a lightweight and affordable option to protect against abrasion and rough handling whilst maintaining the flexibility.

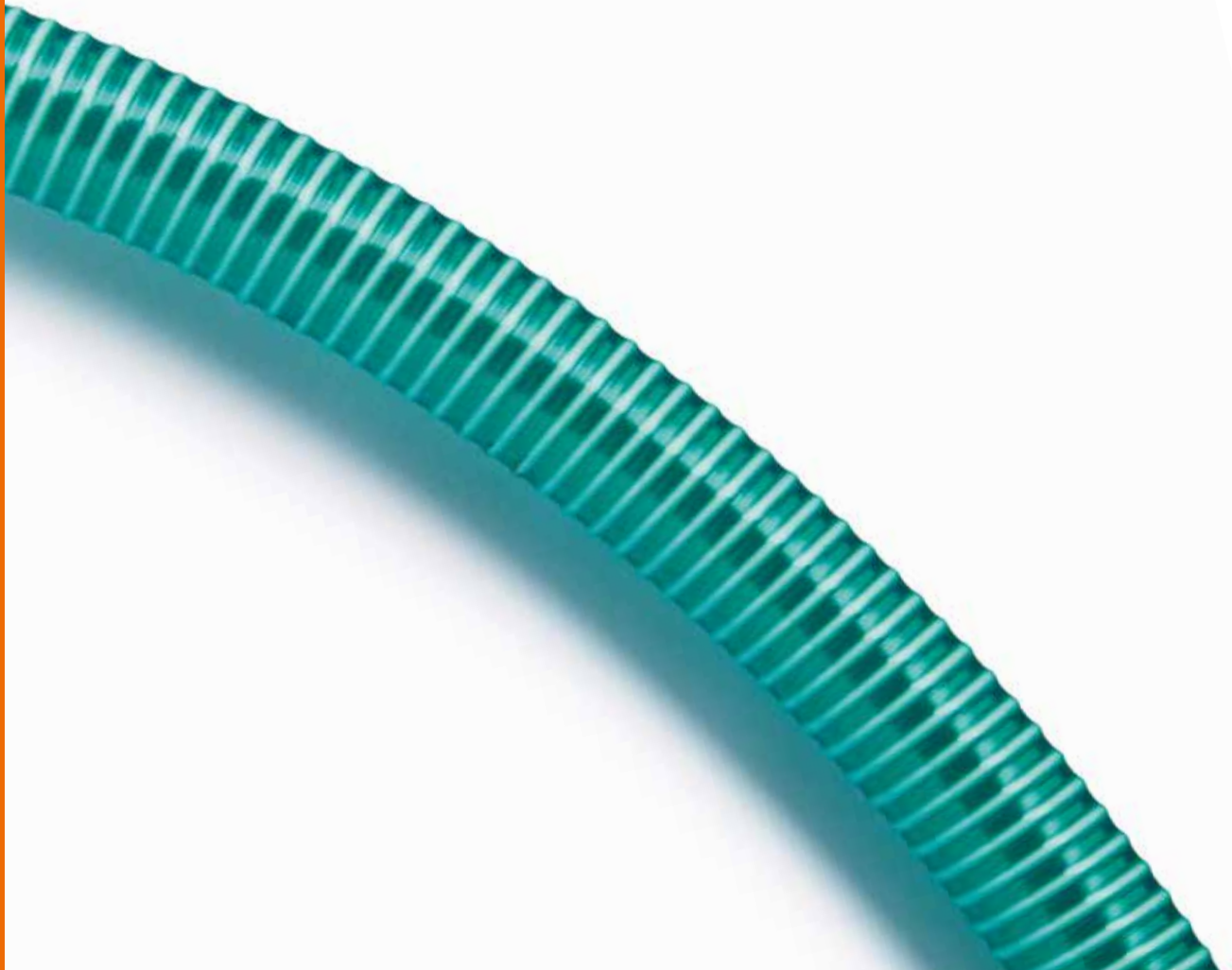
FEATURES

- Light weight
- Plastic helix reinforcement
- High flexibility

MATERIAL

PVC with plastic helix.

#	 mm	 bar	 mm	 kg
AC-19	19.0	5	85.0	0.28
AC-25	25.0	5	105.0	0.29
AC-32	32.0	5	125.0	0.37
AC-38	38.0	5	150.0	0.48





SPRING GUARD

ANTI-KINK PROTECTION

APPLICATIONS

The spring guard is designed specifically for our 700 bar hose range. The stepped size avoids the spring from being over assembled onto the ferrule and the close fit allows for the best anti-kink protection of the hose.

FEATURES

- Stepped construction
- Excellent anti-kink protection

MATERIAL

Steel.



700 BAR HAND GUARDS

HOSE PROTECTION



APPLICATIONS

The 700 bar hand guard is designed to push over the ferrule of a 700 bar hose assembly, the dual purpose is to provide a grip to hold the assembly and to also act as a bend restrictor to avoid over kinking.

FEATURES

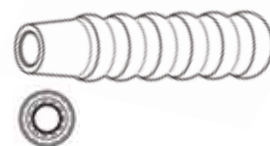
- Moulded shape for easy grip
- Multi-colour options available

MATERIAL

Flexible PVC.

PART NUMBERS

Black: HG8X-04
 Blue: HG8X-04-BLU
 Red: HG8X-04-RED
 Yellow: HG8X-04-YEL



A-TRACK ASSET MANAGEMENT

ASSET TAGGING & SOFTWARE



A-Track



- Easy to use software giving transparent overview to all assets
- Immediate online test data / certificates are available realtime or within minutes of the test being carried out at Abdex
- Detailed information and reports on every asset allowing fast identification and replacement when necessary
- Manage and plan inspections with automated reminders which are set according to the asset lifecycle

RFID micro-chips, Metal etched tags and labels



- Easy to read etched tags and PVC labels - proven against abrasion
- Duraband low profile micro-chips 1/2" to 24" diameter - Low profile and proven in the harshest applications
- A-Track unique assets - Every asset is different and all asset information is backed up and stored on the software

Detailed hose data and planned maintenance



- Full asset / hose assembly data is recorded at point of supply / manufacture and during maintenance surveys
- Easy to read dash board showing summary reports of the asset specification, planned maintenance schedules with any attached documentation as required
- Planned maintenance schedules can be set up, monitored and changed accordingly
- Free mobile app to allow customers to identify and view all of their asset / hose information straight to your phone or pad
- Bluetooth easy readers IP67 - Value for money and fast set up with no drivers, software or programming
- Offshore and mining approved hand held IP64 reads - Designed, manufactured and proven to work in the toughest environments

Peace of mind and saving money



- **Scan it!** Scan the barcode of any tag and quickly find your record in the Abdex database
- **Order it!** With exact replacement details provided Abdex will arrange delivery of replacement parts
- **Get it!** Abdex gives the operator peace of mind to keep production running
- **Manage it!** Full transparency and datalogs can be easily managed and kept up to date

DON'T RISK YOUR ASSETS, MANAGE THEM!



PARKER

PARKER INSTRUMENTATION

The flow inside your hoses is part of your process life support system. You have to test, monitor and measure that system, accurately, reliably and often. You need Parker instrumentation.

Parker is global leader in flow assurance instrumentation. It produces instrumentation connections, valves and fittings. The company is dedicated to engineering excellence and the development of truly innovative flow assurance instrumentation products that reduce leak paths, save space and weight, and that pay their way. Parker offers unparalleled manufacturing and engineering expertise facilities, warehousing and service, operating in 55 countries on six continents.

Abdex Industries are a Premier Parker distributor agent and stockist for their products. We offer local support and service across a range of industry segments. Products range from those for lower pressure (up to 6,000psi) applications to higher pressure applications (up to 10,000psi), including general Instrumentation valves and fittings, gas and liquid regulators, manifolds, filters, flow controllers and more.

UNRIVALLED QUALITY

Parker carries certificates from the following quality authorities; ABS, BV, CSS, DNV, DVGW, GL, ISO, Lloyds and others. Parker Instrumentation Products also carry HCT (Heat Code Traceability) to track materials used in their high quality engineered products.

UNBEATABLE SERVICE

Abdex carry extensive warehouse stock and, together with the Parker local distribution network, offer prompt delivery schedules on a wide range of industry standard product lines, backed by unrivalled technical expertise.



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General Instrumentation	
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Ball and Plug	341
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CPI™ / A-LOK®

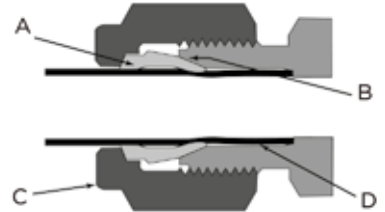
HOW IT WORKS

Parker CPI™ / A-LOK® fittings consists of precision engineered parts designed to provide secure leak-proof joints capable of satisfying high pressure, vacuum and vibration applications.

Parker Instrumentation Tube Fittings are supplied complete and ready to use. The ferrule(s) swage onto the tube as it moves down the body seat creating a pressure / vacuum-tight seal on both tube and body by the interface pressure and surface finish of mating components. The Parker Supercase® ferrule (back-ferrule only on A-LOK®) creates a strong mechanical hold on the tube.

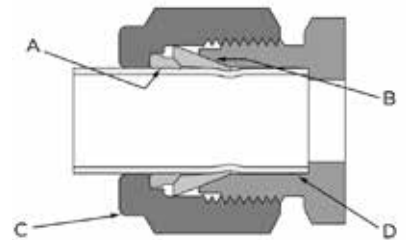
INCH - CPI™

- A - The Parker Supercase® ferrule provides a strong mechanical and anti-vibration hold on the tube.
- B - Dynamic seal by ferrule on tube and body.
- C - Molybdenum disulfide coated nut with fine pitch threads ensure no galling.
- D - Close tolerance of nut and body dimensions for accurate tube alignment.



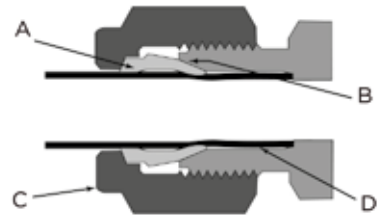
INCH - A-LOK®

- A - The Parker Supercase® back ferrule provides a strong mechanical and anti-vibration hold on the tube.
- B - Pressure seal by front ferrule on tube and body.
- C - Parker's high quality, silver plated nut ensures no galling of body threads.
- D - Deep tube abutment and close tolerance of nut and body for accurate tube alignment.



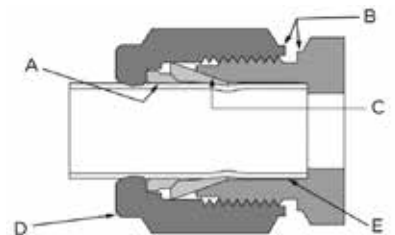
METRIC - CPI™

- A - The Parker Supercase® ferrule provides a strong mechanical and anti-vibration hold on the tube.
- B - Metric identification shoulder.
- C - Dynamic seal by ferrule on tube and body.
- D - Molybdenum disulfide coated nut with fine pitch threads ensure no galling.
- E - Close tolerance of nut and body dimensions for accurate tube alignment.

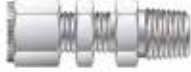
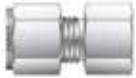
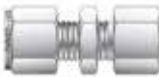
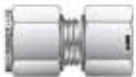


METRIC - A-LOK®

- A - The Parker Supercase® back ferrule provides a strong mechanical and anti-vibration hold on the tube.
- B - Metric identification shoulder.
- C - Pressure seal by front ferrule on tube and body.
- D - Parker's high quality, silver plated nut ensures no galling of body threads.
- E - Deep tube abutment and close tolerance of nut and body for accurate tube alignment.



Please Note: Dimensions for reference only, subject to change.

TUBE TO MALE PIPE	FITTING TYPE	PART NUMBER SERIES	PAGE
	Male Connector	FBZ, MSC	270
	Male Bulkhead Connector	FH2BZ, MBC	276
	Thermocouple Connector	FH4BZ, MTC	277
	Male Elbow	CBZ, MSEL	278
	NPT Male 45° Elbow	VBZ, MVEL	281
	NPT Male Run Tee	RBZ, MRT	281
	NPT Male Branch Tee	SBZ, MBT	282
TUBE TO FEMALE PIPE	FITTING TYPE	PART NUMBER SERIES	PAGE
	Female Connector	GBZ, FSC	284
	Female Bulkhead Connector	GH2BZ, FBC	287
	Gauge Connector	GBZ, FSC	288
	Female Elbow	DBZ, FEL	289
	Female Run Tee	MBZ, FRT	290
	Female Branch Tee	OBZ, FBT	291



Please Note: Dimensions for reference only, subject to change.

CPI™ / A-LOK®

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TUBE TO TUBE UNIONS	FITTING TYPE	PART NUMBER SERIES	PAGE
	Union	HBZ, SC	292
	Conversion Union	HBZ, CU	293
	Reducing Union	HBZ, RU	293
	Bulkhead Union	WBZ, BC	294
	Dielectric Union Adaptor, Dielectric Assembly	DEBTA, DELTA	295
	Union Elbow	EBZ, EE, ELZ	296
	Union Tee	JBZ, ET	298
	Drop Size Tee	JBZ, JLZ	299
	Union Cross	KBZ, ECR	300
PORT CONNECTORS	FITTING TYPE	PART NUMBER SERIES	PAGE
	Tube End Reducer	TRBZ, TUR, TUC	301
	Tube End Bulkhead Adaptor	T2H2BZ, TUBC	304
	Port Connector	ZPC, PC	304
	Tube End Male Adaptor	T2HF, MA	306
	Tube End Female Adaptor	T2HG, FA	309
	Push-Lok to Tube Adaptor	P2T2, P2TU	312



Please Note: Dimensions for reference only, subject to change.

37° FLARE (AN) TO CPI™ / A-LOK®	FITTING TYPE	PART NUMBER SERIES	PAGE
	37° Flare (AN) to CPI™ / A-LOK®	X6HBZ6, X6TU	313
	37° Flare Connector to CPI™ / A-LOK®	XHBZ, XASC	313
	37° Flare Bulkhead Connector to CPI™ / A-LOK®	XH2BZ, XABC	313

O-RING SEAL	FITTING TYPE	EXAMPLE	PAGE
	Male Connector SAE Straight Thread	ZHBA, M1SC	315
	Male SAE Straight Thread Elbow	C5BZ, M5SEL	316
	Male BSPP Straight Thread Elbow	CBZ, MSEL	316
	Male Run Tee SAE Straight Thread	R5BZ, M5RT	316
	Male BSPP Run Tee Straight Thread	RBZ, MRT	317
	Male Branch Tee SAE Straight Thread	S5BZ, M5BT	317
	Male BSPP Branch Tee Straight Thread	SBZ, MBT	317
	Long Male Connector SAE Straight Thread	ZH3BA, ZH3LA	318
	45° Positionable Male Elbow	V5BZ, M5VEL	318
	Male Connector to O-ring Straight Thread	ZHBA5, M2SC	318
	Male Connector to O-ring Pipe Thread	ZHBF5, M3SC	319
	Tube End to O-ring Straight Thread	T2HOA5, M2TU	319
	Tube End to O-ring Pipe Thread	T2HOF5, M3TU	320
	Pipe Thread to SAE Straight Thread Adaptor	FHOA	320
	Bulkhead to Conversion Adaptor	AH2BZ, AH2LZ	320



Please Note: Dimensions for reference only, subject to change.

CPI™ / A-LOK®

VISUAL INDEX

COMPONENTS	FITTING TYPE	PART NUMBER SERIES	PAGE
	Insert	TIZ	321
	Tube Nut	BZ, NU	322
	Inverted Tube Nut	BZI	322
	Knurled Nut	BZP	323
	Ferrules	TZ	323
	Front Ferrules	FF	324
	Back Ferrules	BF	325
	Ferrule Holder	-	326
	Plug	FNZ, BLP	327
	Cap	PNBZ, BLEN	328
	Vent Protector	MDF	329
	Sealing Washers Bonded Seal and Copper	-	329
	Bulkhead Locknut	WLZ, WLN, BN	330
	Accessory Locknut	L5NR	331



Please Note: Dimensions for reference only, subject to change.

TYPICAL RAW MATERIAL SPECIFICATIONS

TUBE FITTINGS

Basic fitting material	Material designator	Straights	Shapes	Common tubing specification
Brass	B	CA-360 QQ-B 626 Alloy 360 ASTM-B16 Alloy 360 CA-345 ASTM-B-453 Alloy 345	CA-377 QQ-B 626 Alloy 377 ASTM-B-124 Alloy 377 BS2872 CZ122	ASTM-B75 ASME-SB75 (TEMPER "O")
Stainless Steel (Type 316) ⁽¹⁾	A-LOK [®] = 316 ⁽¹⁾⁽²⁾ CPI [™] = SS	ASME-SA-479 Type 316-SS BS970 316-S31 DIN 4401 ASTM A276 Type 316 ASTM / ASME-SA-182	ASME-SA-182 316 BS970 316-S31 DIN 4401	ASME-SA-213 ASTM-A-213 ASTM-A-249 ASTM-A-269 ⁽³⁾ MIL T-8504 MIL T-8506
Steel	S	ASTM-A-108 QQ-S-637	ASTM-A-576	SAE J524b SAE J525b ASTM-A-179
Aluminum	A	2017-T4 or 2024-T4 ASTM-B211 QQ-A-225 / 5 or 6	2014T (as fabricated) ASTM-B-211 QQ-A-225 / 4	303, 6061T6 ASTM-B-210
Monel [®] 400 - Forgings Monel [®] 405 - Bar Stock	M	ASTM-B-164 QQ-N-281 BS3076 NA13	ASTM-B-164 QQ-N-281 BS3076 NA13	ASTM-B-165
Hastelloy [®] C-276	HC	ASTM-B-574 ASTMB575	ASTM-B-574	ASTM-B-622 ASTM-B-626
Inconel [®] Alloy 600	IN	ASTM B-166 ASME-SB-166	ASTM-B-564	ASTM-B-163
Carpenter [®] 20	SS20	ASTM-B-473	ASTM-B-462 ASTM-B-472	ASTM-B-468
Titanium	T	ASTM-B-348	ASTM-B-381	ASTM-B-338
Inconel [®] Alloy 625	625	BS3076 NA16 ASTMB425	BS3076 NA16 ASTMB425	ASTM-B-625 ASTM-B-444 ASTM-B-423 ASTM-B-829
Incoloy [®] Alloy 825	825			
6MO	6MO	UNS S31254 UNS N08367 ASTM A479	UNS S31254 UNS N08367 ASTM A 479	ASTM-A-269

1 - If more specific information, including heat code traceability is required please contact Abdex.

2 - If an "L" appears in the A-LOK[®] fitting description, then the material designator will be "SS" (e.g. JLZ drop size tee).

3 - Stainless steel CPI[™] / A-LOK[®] tube fittings work reliably on both seamless and welded-redrawn, fully annealed type 304, 316 and 316L tubing.

Note: Hastelloy[®] is a registered trademark of Haynes International. Inconel[®], Incoloy[®] and Monel[®] are registered trademarks of Special Metals Corporation. Carpenter[®] is a registered trademark of CRS Holdings Inc.

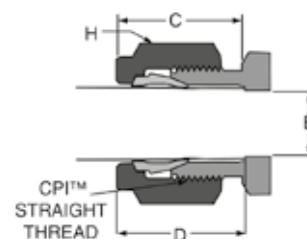


Please Note: Dimensions for reference only, subject to change.

TUBE END DIMENSIONAL DATA

CPI

Size No.			†C		E	†D
	inch		inch	inch	inch	inch
1	1/16	10 - 32	.43	5/16	.052	.34
2	1/8	5/16 - 20	.60	7/16	.093	.50
3	3/16	3/8 - 20	.64	1/2	.125	.54
4	1/4	7/16 - 20	.70	9/16	.187	.60
5	5/16	1/2 - 20	.73	5/8	.250	.64
6	3/8	9/16 - 20	.76	11/16	.281	.67
8	1/2	3/4 - 20	.87	7/8	.406	.90
10	5/8	7/8 - 20	.87	1	.500	.96
12	3/4	1 - 20	.87	1 - 1/8	.625	.96
14	7/8	1-1/8 - 20	.87	1 - 1/4	.750	1.03
16	1	1-5/16 - 20	1.05	1 - 1/2	.875	1.24
20	1 - 1/4	1-5/8 - 20	1.52	1 - 7/8	1.09	1.61
24	1 - 1/2	1-15/16 - 20	1.77	2 - 1/4	1.34	1.96
32	2	2-5/8 - 20	2.47	2 - 3/4	1.81	2.65

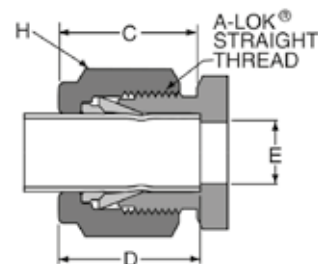


Note: Dimensions C and D are shown in the finger-tight position.

†Average Value

A-LOK

Size No.			†C		E	†D
	mm		mm	mm	mm	mm
2	2.0	5/16 - 20	15.3	12.0	1.7	12.9
3	3.0	5/16 - 20	15.3	12.0	2.4	12.9
4	4.0	3/8 - 20	16.1	12.0	2.4	13.7
6	6.0	7/16 - 20	17.7	14.0	4.8	15.3
8	8.0	1/2 - 20	18.6	15.0	6.4	16.2
10	10.0	5/8 - 20	19.5	18.0	7.9	17.2
12	12.0	3/4 - 20	22.0	22.0	9.5	22.8
14	14.0	7/8 - 20	22.0	24.0	11.1	24.4
15	15.0	7/8 - 20	22.0	24.0	11.9	24.4
16	16.0	7/8 - 20	22.0	24.0	12.7	24.4
18	18.0	1 - 20	22.0	27.0	15.1	24.4
20	20.0	1-1/8 - 20	22.0	30.0	15.9	26.0
22	22.0	1-1/8 - 20	22.0	30.0	18.3	16.0
25	25.0	1-5/16 - 20	26.5	35.0	21.8	31.3



Note: Dimensions C and D are shown in the finger-tight position.

†Average Value



Please Note: Dimensions for reference only, subject to change.

NOMENCLATURE / HOW TO ORDER

Parker CPI™ / A-LOK® tube fitting part numbers are constructed using alphanumeric characters to identify the size, style and material of the fitting.

CPI™ INCH PARTS

Port 1 Size Designator	Port 2 Size Designator	Thread Designator	Shape Designator	Material	Options
E.G 8 1/2" Tube O.D.	4 1/4" Pipe thread	(Blank see Note 1)	FBZ Male Connector	SS Stainless steel	(blank)

Part Number as it is ordered (without options): 8-4 FBZ-SS.

A-LOK® INCH PARTS

Port 1 Size Designator	Port 2 Size Designator	Thread Designator	Shape Designator	Material	Options
E.G 8 1/2" Tube O.D.	MSC Male Connector	4 1/4" Pipe thread	N NPT	316 Stainless steel	(blank)

Part Number as it is ordered (without options): 8MSC4N-316.

CPI™ METRIC PARTS

Port 1 Size Designator	Port 2 Size Designator	Thread Designator	Shape Designator	Material	Options
E.G GBZ Female Connector	12 12mm	1/4 1/4"	K BSP	SS Stainless steel	(blank)

Part Number as it is ordered (without options): GBZ 12-1/4K-SS.

A-LOK® METRIC PARTS

Port 1 Size Designator	Port 2 Size Designator	Thread Designator	Shape Designator	Material	Options
E.G M12 12mm	FSC Female Connector	1/4 1/4"	N NPT	316 Stainless steel	(blank)

Part Number as it is ordered (without options): M12FSC1/4N-316.



Please Note: Dimensions for reference only, subject to change.

CPI™ / A-LOK®

HOW TO ORDER

Body Designator: A letter or combination of letters and numbers are used to designate the type of fitting. See the visual index for body designator.

Fractional Size: Tube and pipe thread sizes are designed by the number of sixteenths of an inch (1/2" tube = 8/16" = 8) (1/4" pipe thread = 4/16" = 4).

Metric Size: Metric tube is designated in millimeters and prefixed "M" (i.e., 12mm tube - M12.) The pipe thread size is written as a fraction (i.e., 1/4 NPT = 1/4).

All Straights and Elbows: Call out largest CPI™ / A-LOK® tube end size first followed by the smaller CPI™ / A-LOK® tube end or pipe thread size.

Fractional Tees and Crosses: For drop size tees - first size the run (1 to 2) and then branch⁽³⁾. Example - the size designator for a male run tee for 3/8" O.D. tube and 1/4" male pipe thread would be 6-4-6. For crosses - first size the run (1 to 2) and then the branch (3 to 4). For tees with all ends the same, use the tube and size before and after the style designator; i.e. 4-4-4 JBZ (CPI™), 4ET4 (A-LOK®).

Metric Tees and Crosses: For drop size tees - first size the run (1 to 2) and then branch⁽³⁾. Example - the size designator for a male run tee for 6mm tube and 1/4" male pipe thread would be 6-4-6. For crosses - first size the run (1 to 2) and then the branch (3 to 4). For tees with all ends the same, use the tube end size after the style designator; i.e. JBZ 4-4-4 JBZ (CPI™), ETM4 (A-LOK®).

Material: See previous pages.

N = NPT(1) / National Pipe Taper	ANSI B1.20.1
K = BSP / ISO Taper	BS21, ISO7 / 1
R = BSP / ISO Parallel	BS2779, ISO 228 / 1+2, DIN 3852 FORM A ⁽²⁾
BR = BSP / ISO Parallel	BS2779, ISO 228 / 1+2, DIN 3852 FORM B ⁽³⁾
M = Metric Thread	ISO 6149-2
R-ED = BSPP / ISO Parallel	BS2779, ISO 228 / 1+2, DIN 3852 with elastic sealing washer ⁽⁴⁾
GC = BSPP Gauge Connector	B2779, ISO 228 / 1+2, DIN 3852

1 - N thread designator is only used for A-LOK® nomenclature.

2 - Form A requires the use of a bonded washer.

3 - Form B (cutting face) may be used with or without a sealing washer.

4 - ED fittings are supplied with Nitrile sealing washers as standard. Fluorocarbon seals are available upon request.

Special Fittings: Consult Abdex if there is any question as to the fitting desired, particularly for special fitting configurations, it is suggested that a customer print be submitted.

Special Options: See next table.



Please Note: Dimensions for reference only, subject to change.

CPI™ / A-LOK® OPTIONS

Parker CPI™ / A-LOK® fittings may be ordered with the following options.

How to order

After the complete CPI™ / A-LOK® number simply add a "dash" then the suffix for the option.

The following example is an A-LOK® male connector for 1/2" OD tube and 1/4" male pipe that has been cleaned for oxygen service. For additional options, please consult Abdex.

Suffix	Option	Additional information
ZYF	Assembled with nylon ferrule(s)	
SPF	Silver plated ferrule(s)	
TF	PTFE ferrule(s)	
BP'	Bulk packed	*Indicates the quantity i.e BP50 for a fifty count package
LWH	Lock wire hole	
BZP	Knurled nut	Replaces standard nut on CPI™ / A-LOK® fittings for use on soft plastic tubing
C	Silver plated nut	Replaces moly coated nut (BZ)
MI	Moly inside nut	
CNQ	Certified Nuclear Quality	
C1	Grade A Cleaning	Special cleaning, assembly, inspection and packaging for high purity applications
C3	Cleaned for oxygen service	Meets the requirements of ASTM G93-88; Standard Practice for Cleaning Methods for Materials and Equipment used in Oxygen-Enriched Environments
CNG	Compressed natural gas service	Assembled with a specific o-ring compound
NIC	Nickel plated	
CRM	Chrome plated	
VO	Viton o-ring	
NC	NACE	MRO175-2003
NACE	NACE	MRO175-2002
DFARS	Defense Acquisition Regulations System	All components and raw material must be of US origin or from an approved country



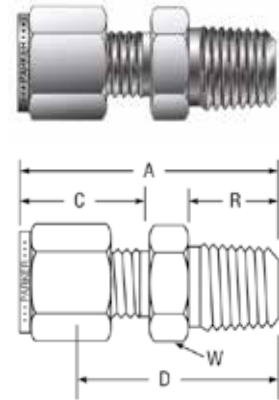
Please Note: Dimensions for reference only, subject to change.

CPI™ / A-LOK®

TUBE TO MALE PIPE

NPT Male connector for fractional tube

#	#	Inter changes with			A	C	D	R	W
CPI™	A-LOK®		inch		inch	inch	inch	inch	inch
1-1 FBZ	1MSC1N	100-1-1	1/16	1/16	.93	.43	.78	.38	5/16
1-2 FBZ	1MSC2N	100-1-2	1/16	1/8	1.03	.43	.88	.38	7/16
1-4 FBZ	1MSC4N	100-1-4	1/16	1/4	1.23	.43	1.08	.56	9/16
2-1 FBZ	2MSC1N	200-1-1	1/8	1/16	1.17	.60	.91	.38	3/8
2-2 FBZ	2MSC2N	200-1-2	1/8	1/8	1.20	.60	.94	.38	7/16
2-4 FBZ	2MSC4N	200-1-4	1/8	1/4	1.40	.60	1.14	.56	9/16
2-6 FBZ	2MSC6N	200-1-6	1/8	3/8	1.42	.60	1.16	.56	11/16
2-8 FBZ	2MSC8N	200-1-8	1/8	1/2	1.67	.60	1.41	.75	7/8
3-1 FBZ	3MSC1N	300-1-1	3/16	1/16	1.23	.64	.97	.38	7/16
3-2 FBZ	3MSC2N	300-1-2	3/16	1/8	1.23	.64	.97	.38	7/16
3-4 FBZ	3MSC4N	300-1-4	3/16	1/4	1.43	.64	1.17	.56	9/16
4-1 FBZ	4MSC1N	400-1-1	1/4	1/16	1.29	.70	1.00	.38	1/2
4-2 FBZ	4MSC2N	400-1-2	1/4	1/8	1.29	.70	1.00	.38	1/2
4-4 FBZ	4MSC4N	400-1-4	1/4	1/4	1.49	.70	1.20	.56	9/16
4-6 FBZ	4MSC6N	400-1-6	1/4	3/8	1.51	.70	1.22	.56	11/16
4-8 FBZ	4MSC8N	400-1-8	1/4	1/2	1.76	.70	1.47	.75	7/8
4-12 FBZ	4MSC12N	400-1-12	1/4	3/4	1.82	.70	1.53	.75	1-1/16
5-2 FBZ	5MSC2N	500-1-2	5/16	1/8	1.34	.73	1.05	.38	9/16
5-4 FBZ	5MSC4N	500-1-4	5/16	1/4	1.52	.73	1.23	.56	9/16
5-6 FBZ	5MSC6N	500-1-6	5/16	3/8	1.55	.73	1.25	.56	11/16
5-8 FBZ	5MSC8N	500-1-8	5/16	1/2	1.79	.73	1.5	.75	7/8
6-2 FBZ	6MSC2N	600-1-2	3/8	1/8	1.38	.76	1.09	.38	5/8
6-4 FBZ	6MSC4N	600-1-4	3/8	1/4	1.57	.76	1.28	.56	5/8
6-6 FBZ	6MSC6N	600-1-6	3/8	3/8	1.57	.76	1.28	.56	11/16
6-8 FBZ	6MSC8N	600-1-8	3/8	1/2	1.82	.76	1.53	.75	7/8
6-12 FBZ	6MSC12N	600-1-12	3/8	3/4	1.88	.76	1.59	.75	1-1/16
8-2 FBZ	8MSC2N	810-1-2	1/2	1/8	1.53	.87	1.13	.38	13/16
8-4 FBZ	8MSC4N	810-1-4	1/2	1/4	1.71	.87	1.31	.56	13/16
8-6 FBZ	8MSC6N	810-1-6	1/2	3/8	1.71	.87	1.31	.56	13/16
8-8 FBZ	8MSC8N	810-1-8	1/2	1/2	1.93	.87	1.53	.75	7/8
8-12 FBZ	8MSC12N	810-1-12	1/2	3/4	1.99	.87	1.59	.75	1-1/16
8-16 FBZ	8MSC16N	810-1-16	1/2	1	2.28	.87	1.88	.94	1-3/8
10-6 FBZ	10MSC6N	1010-1-6	5/8	3/8	1.74	.87	1.34	.56	15/16
10-8 FBZ	10MSC8N	1010-1-8	5/8	1/2	1.93	.87	1.53	.75	15/16
10-12 FBZ	10MSC12N	1010-1-12	5/8	3/4	1.99	.87	1.59	.75	1-1/16
12-8 FBZ	12MSC8N	1210-1-8	3/4	1/2	1.99	.87	1.59	.75	1-1/16
12-12 FBZ	12MSC12N	1210-1-12	3/4	3/4	1.99	.87	1.59	.75	1-1/16
12-16 FBZ	12MSC16N	1210-1-16	3/4	1	2.28	.87	1.88	.94	1-3/8
14-12 FBZ	14MSC12N	1410-1-12	7/8	3/4	1.99	.87	1.59	.75	1-3/16
14-16 FBZ	14MSC16N	1410-1-16	7/8	1	2.28	.87	1.88	.94	1-3/8
16-8 FBZ	16MSC8N	1610-1-8	1	1/2	2.27	1.05	1.78	.75	1-3/8
16-12 FBZ	16MSC12N	1610-1-12	1	3/4	2.27	1.05	1.78	.75	1-3/8
16-16 FBZ	16MSC16N	1610-1-16	1	1	2.46	1.05	1.97	.94	1-3/8
20-20 FBZ	20MSC20N	2010-1-20	1-1/4	1-1/4	3.03	1.52	2.17	.97	1-3/4
24-24 FBZ	20MSC20N	2410-1-24	1-1/2	1-1/2	3.50	1.77	2.44	1.00	2-1/8
32-32 FBZ	32MSC32N	3210-1-32	2	2	4.47	2.47	3.00	1.04	2-3/4



Note: A and C dimensions are typical finger-tight.
 Sizes 20, 24, 32 require additional lubrication prior to assembly.



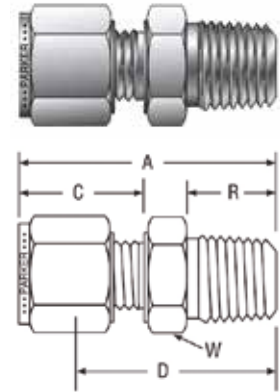
Please Note: Dimensions for reference only, subject to change.

CPI™ / A-LOK®

TUBE TO MALE PIPE

NPT Male connector for metric tube

#	#	Inter changes with			A	C	D	R	W
CPI™	A-LOK®		mm		mm	mm	mm	mm	mm
FBZ 2-1/8	M2MSC1/8N	2MO-1-2	2.0	1/8	29.7	15.3	23.1	9.5	12.0
FBZ 3-1/8	M3MSC1/8N	3MO-1-2	3.0	1/8	29.7	15.3	23.1	9.5	12.0
FBZ 3-1/4	M3MSC1/4N	3MO-1-4	3.0	1/4	35.3	15.3	28.7	14.3	14.0
FBZ 4-1/8	M4MSC1/8N	4MO-1-2	4.0	1/8	31.2	16.1	24.6	9.5	12.0
FBZ 4-1/4	M4MSC1/4N	4MO-1-4	4.0	1/4	36.3	16.1	29.7	14.3	14.0
FBZ 6-1/8	M6MSC1/8N	6MO-1-2	6.0	1/8	32.9	17.7	25.4	9.5	14.0
FBZ 6-1/4	M6MSC1/4N	6MO-1-4	6.0	1/4	38.1	17.7	30.6	14.3	14.0
FBZ 6-3/8	M6MSC3/8N	6MO-1-6	6.0	3/8	38.5	17.7	31.0	14.3	18.0
FBZ 6-1/2	M6MSC1/2N	6MO-1-8	6.0	1/2	44.8	17.7	37.3	19.1	22.0
FBZ 8-1/8	M8MSC1/8N	8MO-1-2	8.0	1/8	34.2	18.6	26.7	9.5	15.0
FBZ 8-1/4	M8MSC1/4N	8MO-1-4	8.0	1/4	38.8	18.6	31.3	14.3	15.0
FBZ 8-3/8	M8MSC3/8N	8MO-1-6	8.0	3/8	39.3	18.6	31.8	14.3	18.0
FBZ 8-1/2	M8MSC1/2N	8MO-1-8	8.0	1/2	45.6	18.6	38.1	19.1	22.0
FBZ 10-1/8	M10MSC1/8N	10MO-1-2	10.0	1/8	36.1	19.5	28.6	9.5	18.0
FBZ 10-1/4	M10MSC1/4N	10MO-1-4	10.0	1/4	40.9	19.5	33.3	14.3	18.0
FBZ 10-3/8	M10MSC3/8N	10MO-1-6	10.0	3/8	40.9	19.5	33.3	14.3	18.0
FBZ 10-1/2	M10MSC1/2N	10MO-1-8	10.0	1/2	47.5	19.5	38.9	19.1	22.0
FBZ 10-3/4	M10MSC3/4N	10MO-1-12	10.0	3/4	46.4	19.5	38.9	19.1	27.0
FBZ 10-1	M10MSC1N	10MO-1-16	10.0	1	55.0	19.5	47.5	23.8	35.0
FBZ 12-1/4	M12MSC1/4N	12MO-1-4	12.0	1/4	43.4	22.0	33.3	14.3	22.0
FBZ 12-3/8	M12MSC3/8N	12MO-1-6	12.0	3/8	43.4	22.0	33.3	14.3	22.0
FBZ 12-1/2	M12MSC1/2N	12MO-1-8	12.0	1/2	49.0	22.0	38.9	19.1	22.0
FBZ 12-3/4	M12MSC3/4N	12MO-1-12	12.0	3/4	50.5	22.0	40.4	19.1	27.0
FBZ 14-1/4	M14MSC1/4N	14MO-1-4	14.0	1/4	44.2	22.0	34.1	14.3	24.0
FBZ 14-3/8	M14MSC3/8N	14MO-1-6	14.0	3/8	44.2	22.0	34.1	14.3	24.0
FBZ 14-1/2	M14MSC1/2N	14MO-1-8	14.0	1/2	49.0	22.0	38.9	19.1	24.0
FBZ 15-1/2	M15MSC1/2N	15MO-1-8	15.0	1/2	49.0	22.0	38.9	19.1	24.0
FBZ 16-3/8	M16MSC3/8N	16MO-1-6	16.0	3/8	44.1	22.0	34.01	14.3	24.0
FBZ 16-3/4	M16MSC3/4N	16MO-1-12	16.0	3/4	50.5	22.0	40.5	19.1	27.0
FBZ 18-1/2	M18MSC1/2N	18MO-1-8	18.0	1/2	50.6	20.0	40.5	19.1	27.0
FBZ 18-3/4	M18MSC3/4N	18MO-1-12	18.0	3/4	50.6	22.0	40.5	19.1	27.0
FBZ 20-1/2	M20MSC1/2N	20MO-1-8	20.0	1/2	50.6	22.0	42.2	19.1	30.0
FBZ 20-3/4	M20MSC3/4N	20MO-1-12	20.0	3/4	52.3	22.0	42.2	19.1	30.0
FBZ 20-1	M20MSC1N	20MO-1-16	20.0	1	57.7	22.0	47.6	23.8	35.0
FBZ 22-3/4	M22MSC3/4N	22MO-1-12	22.0	3/4	52.3	22.0	42.2	19.1	35.0
FBZ 24-1/2	M25MSC1/2N	25MO-1-8	25.0	1/2	57.5	26.5	45.3	19.1	35.0
FBZ 25-3/4	M25MSC3/4N	25MO-1-12	25.0	3/4	57.5	26.5	45.2	19.1	35.0
FBZ 25-1	M25MSC1N	25MO-1-16	25.0	1	62.3	26.5	50.0	23.8	35.0



Note: A and C dimensions are typical finger-tight.



Please Note: Dimensions for reference only, subject to change.

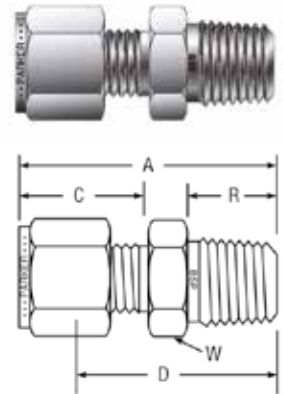
CPI™ / A-LOK®

TUBE TO MALE PIPE

BSP Taper male connector for fractional tube

#	#	Inter changes with			A	C	D	R	W	Bore
CPI™	A-LOK®		inch		inch	inch	inch	inch	inch	inch
2-2K FBZ	2MSC2K	200-1-2RT	1/8	1/8	1.20	.60	0.94	.38	7/16	.19
2-4K FBZ	2MSC4K	200-1-4RT	1/8	1/4	1.40	.60	1.14	.56	9/16	.19
4-2K FBZ	4MSC2K	400-1-2RT	1/4	1/8	1.30	.70	1.00	.38	1/2	.19
4-4K FBZ	4MSC4K	400-1-4RT	1/4	1/4	1.50	.70	1.20	.56	9/16	.19
4-6K FBZ	4MSC6K	400-1-6RT	1/4	3/8	1.52	.70	1.22	.56	11/16	.19
4-8K FBZ	4MSC8K	400-1-8RT	1/4	1/2	1.77	.70	1.47	.75	7/8	.19
5-2K FBZ	5MSC2K	500-1-2RT	5/16	1/8	1.34	.73	1.05	.38	9/16	.19
5-4K FBZ	5MSC4K	500-1-4RT	5/16	1/4	1.52	.73	1.23	.56	9/16	.19
6-2K FBZ	6MSC2K	600-1-2RT	3/8	1/8	1.39	.76	1.09	.38	5/8	.19
6-4K FBZ	6MSC4K	600-1-4RT	3/8	1/4	1.57	.76	1.28	.56	5/8	.28
6-6K FBZ	6MSC6K	600-1-6RT	3/8	3/8	1.57	.76	1.28	.56	11/16	.28
6-8K FBZ	6MSC8K	600-1-8RT	3/8	1/2	1.82	.76	1.53	.75	7/8	.28
8-4K FBZ	8MSC4K	810-1-4RT	1/2	1/4	1.69	.86	1.31	.56	13/16	.28
8-6K FBZ	8MSC6K	810-1-6RT	1/2	3/8	1.69	.86	1.31	.56	13/16	.38
8-8K FBZ	8MSC8K	810-1-8RT	1/2	1/2	1.91	.66	1.53	.75	7/8	.41

Note: A and C dimensions are typical finger-tight.



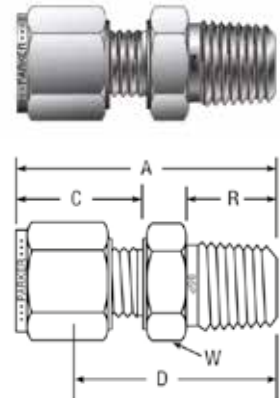
Please Note: Dimensions for reference only, subject to change.

CPI™ / A-LOK®

TUBE TO MALE PIPE

BSP Taper male connector for metric tube

#	#	Inter changes with			A	C	D	R	W
CPI™	A-LOK®		mm	BSPT	mm	mm	mm	mm	mm
FBZ 2-1/8K	M2MSC1/8K	2MO-1-2RT	2.0	1/8	29.7	15.3	23.1	9.5	12.0
FBZ 3-1/8K	M3MSC1/8K	3MO-1-2RT	3.0	1/8	29.7	15.3	23.1	9.7	12.0
FBZ 3-1/4K	M3MSC1/4K	3MO-1-4RT	3.0	1/4	35.3	15.3	28.7	14.2	14.0
FBZ 4-1/8K	M4MSC1/8K	4MO-1-2RT	4.0	1/8	31.2	16.1	24.6	9.7	12.0
FBZ 4-1/4K	M4MSC1/4K	4MO-1-4RT	4.0	1/4	36.3	16.1	29.7	14.2	14.0
FBZ 6-1/8K	M6MSC1/8K	6MO-1-2RT	6.0	1/8	32.9	17.7	25.4	9.7	14.0
FBZ 6-1/4K	M6MSC1/4K	6MO-1-4RT	6.0	1/4	40.0	17.7	30.5	14.2	14.0
FBZ 6-3/8K	M6MSC3/8K	6MO-1-6RT	6.0	3/8	38.5	17.7	31.0	14.2	18.0
FBZ 6-1/2K	M6MSC1/2K	6MO-1-8RT	6.0	1/2	45.6	17.7	38.1	19.1	22.0
FBZ 8-1/8K	M8MSC1/8K	8MO-1-2RT	8.0	1/8	33.9	18.6	26.4	9.5	15.0
FBZ 8-1/4K	M8MSC1/4K	8MO-1-4RT	8.0	1/4	38.7	18.6	31.2	14.2	15.0
FBZ 8-3/8K	M8MSC3/8K	8MO-1-6RT	8.0	3/8	39.3	18.6	31.8	14.2	18.0
FBZ 8-1/2K	M8MSC1/2K	8MO-1-8RT	8.0	1/2	45.6	18.6	38.1	19.1	22.0
FBZ 10-1/8K	M10MSC1/8K	10MO-1-2RT	10.0	1/8	36.2	19.5	28.6	9.5	18.0
FBZ 10-1/4K	M10MSC1/4K	10MO-1-4RT	10.0	1/4	40.9	19.5	33.3	14.2	18.0
FBZ 10-3/8K	M10MSC3/8K	10MO-1-6RT	10.0	3/8	40.9	19.5	33.3	14.2	18.0
FBZ 10-1/2K	M10MSC1/2K	10MO-1-8RT	10.0	1/2	46.5	19.5	38.9	19.1	22.0
FBZ 12-1/4K	M12MSC1/4K	12MO-1-4RT	12.0	1/4	43.3	22.0	33.3	14.2	22.0
FBZ 12-3/8K	M12MSC3/8K	12MO-1-6RT	12.0	3/8	43.4	22.0	33.3	14.2	22.0
FBZ 12-1/2K	M12MSC1/2K	12MO-1-8RT	12.0	1/2	49.0	22.0	38.9	19.1	22.0
FBZ 12-3/4K	M12MSC3/4K	12MO-1-12RT	12.0	3/4	49.5	22.0	40.4	19.1	27.0
FBZ 15-1/2K	M15MSC1/2K	15MO-1-8RT	15.0	1/2	49.0	22.0	38.9	19.1	24.0
FBZ 16-3/8K	M16MSC3/8K	16MO-1-6RT	16.0	3/8	44.2	22.0	34.1	14.2	24.0
FBZ 16-1/2K	M16MSC1/2K	16MO-1-8RT	16.0	1/2	49.0	22.0	38.9	19.1	24.0
FBZ 18-1/2K	M18MSC1/2K	18MO-1-8RT	18.0	1/2	50.6	22.0	40.4	19.1	27.0
FBZ 18-3/4K	M18MSC3/4K	18MO-1-12RT	18.0	3/4	50.6	22.0	40.4	19.1	27.0
FBZ 20-1/2K	M20MSC1/2K	20MO-1-8RT	20.0	1/2	52.3	22.0	42.2	19.1	30.0
FBZ 20-3/4K	M20MSC3/4K	20MO-1-12RT	20.0	3/4	52.3	22.0	42.2	19.1	30.0
FBZ 22-3/4K	M22MSC3/4K	22MO-1-12RT	22.0	3/4	52.3	22.0	42.2	19.1	30.0
FBZ 25-3/4K	M25MSC3/4K	25MO-1-12RT	25.0	3/4	57.5	26.5	45.2	19.1	35.0
FBZ 25-1K	M25MSC1K	25MO-1-16RT	25.0	1	62.3	26.5	50.0	23.9	35.0



Note: A and C dimensions are typical finger-tight.

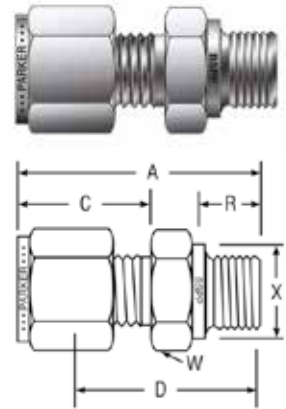


Please Note: Dimensions for reference only, subject to change.

BSPP connector for fractional tube

#	#	Inter changes with			A	C	D	R	W	X	Bore
CPI™	A-LOK®		inch		inch	inch	inch	inch	inch	inch	inch
2-2R FBZ	2MSC2R	200-1-2RS	1/8	1/8	1.18	.60	0.92	.28	0.54	9/16	.16
2-4R FBZ	2MSC4R	200-1-4RS	1/8	1/4	1.27	.60	1.13	.44	0.70	3/4	.09
2-6R FBZ	2MSC6R	200-1-6RS	1/8	3/8	1.46	.60	1.17	.44	0.86	7/8	.28
4-2R FBZ	4MSC2R	400-1-2RS	1/4	1/8	1.28	.70	0.98	.28	0.54	9/16	.16
4-4R FBZ	4MSC4R	400-1-4RS	1/4	1/4	1.49	.70	1.19	.44	0.70	3/4	.19
4-6R FBZ	4MSC6R	400-1-6RS	1/4	3/8	1.55	.70	1.25	.44	0.86	7/8	.19
4-8R FBZ	4MSC8R	400-1-8RS	1/4	1/2	1.77	.70	1.47	.56	1.01	1-1/16	.19
6-2R FBZ	6MSC2R	600-1-2RS	3/8	1/8	1.35	.76	1.06	.28	0.54	5/8	.16
6-4R FBZ	6MSC4R	600-1-4RS	3/8	1/4	1.54	.76	1.25	.44	0.70	3/4	.25
6-6R FBZ	6MSC6R	600-1-6RS	3/8	3/8	1.57	.76	1.28	.44	0.86	7/8	.28
6-8R FBZ	6MSC8R	600-1-8RS	3/8	1/2	1.82	.76	1.53	.56	1.01	1-1/16	.28
8-4R FBZ	8MSC4R	810-1-4RS	1/2	1/4	1.66	.86	1.28	.44	0.70	13/16	.25
8-6R FBZ	8MSC6R	810-1-6RS	1/2	3/8	1.69	.86	1.31	.44	0.86	7/8	.31
8-8R FBZ	8MSC8R	810-1-8RS	1/2	1/2	1.91	.86	1.53	.56	1.01	1-1/16	.41
12-8R FBZ	12MSC8R	1210-1-8RS	3/4	1/2	1.93	.86	1.53	.56	1.01	1-1/16	.41
12-12R FBZ	12MSC12R	1210-1-12RS	3/4	3/4	2.07	.86	1.69	.63	1.25	1-3/8	.63
16-8R FBZ	16MSC8R	1610-1-8RS	1	1/2	2.21	1.04	1.72	.56	1.01	1-3/8	.41
16-16R FBZ	16MSC16R	1610-1-16RS	1	1	2.35	1.04	1.88	.72	1.52	1-5/8	.88

Note: A and C dimensions are typical finger-tight.



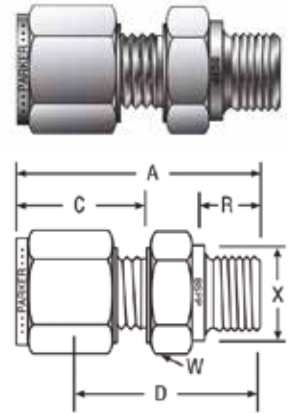
Please Note: Dimensions for reference only, subject to change.

CPI™ / A-LOK® TUBE TO MALE PIPE

BSPP Male connector for metric tube

#	#	Inter changes with			A	C	D	R	X	W
CPI™	A-LOK®		mm		mm	mm	mm	mm	mm	mm
FBZ 2-1/8R	M2MSC1/8R	2MO-1-2RS	2.0	1/8	28.4	15.3	21.8	7.1	14.0	13.7
FBZ 3-1/8R	M3MSC1/8R	3MO-1-2RS	3.0	1/8	30.0	15.3	23.4	7.1	13.7	14.0
FBZ 3-1/4R	M3MSC1/4R	3MO-1-4RS	3.0	1/4	35.3	15.3	28.7	11.2	17.8	1.0
FBZ 6-1/8R	M6MSC1/8R	6MO-1-2RS	6.0	1/8	32.5	17.7	25.0	7.1	13.7	14.0
FBZ 6-1/4R	M6MSC1/4R	6MO-1-4RS	6.0	1/4	37.7	17.7	30.2	11.2	17.8	19.0
FBZ 6-3/8R	M6MSC3/8R	6MO-1-6RS	6.0	3/8	39.0	17.7	31.5	11.2	21.8	22.0
FBZ 6-1/2R	M6MSC1/2R	6MO-1-8RS	6.0	1/2	45.6	17.7	38.1	14.2	25.7	27.0
FBZ 8-1/8R	M8MSC1/8R	6MO-1-2RS	8.0	1/8	33.1	18.6	25.6	7.1	15.0	13.7
FBZ 8-3/8R	M8MSC3/8R	6MO-1-6RS	8.0	3/8	39.8	18.6	32.3	11.2	21.8	22.0
FBZ 8-1/2R	M8MSC1/2R	6MO-1-8RS	8.0	1/2	45.6	18.6	38.1	14.2	25.7	27.0
FBZ 10-1/4R	M10MSC1/4R	10MO-1-4RS	10.0	1/4	39.4	19.5	31.8	11.2	17.8	19.0
FBZ 10-3/8R	M10MSC3/8R	10MO-1-6RS	10.0	3/8	40.6	19.5	33.0	11.2	21.8	22.0
FBZ 10-1/2R	M10MSC1/2R	10MO-1-8RS	10.0	1/2	46.5	19.5	38.9	14.2	25.7	27.0
FBZ 12-1/4R	M12MSC1/4R	12MO-1-4RS	12.0	1/4	42.6	22.0	32.5	11.2	17.8	22.0
FBZ 12-3/8R	M12MSC3/8R	12MO-1-6RS	12.0	3/8	43.1	22.0	33.0	11.2	21.8	22.0
FBZ 12-1/2R	M12MSC1/2R	12MO-1-8RS	12.0	1/2	49.0	22.0	38.9	14.2	25.7	27.0
FBZ 12-3/4R	M12MSC3/4R	12MO-1-12RS	12.0	3/4	52.8	22.0	42.7	16.0	31.8	35.0
FBZ 16-3/8R	M16MSC3/8R	16MO-1-6RS	16.0	3/8	43.5	22.0	33.4	11.2	22.0	21.8
FBZ 16-1/2R	M16MSC1/2R	16MO-1-8RS	16.0	1/2	49.0	22.0	38.9	14.2	26.0	27.0
FBZ 18-1/2R	M18MSC1/2R	18MO-1-8RS	18.0	1/2	49.0	22.0	38.9	14.2	26.0	27.0
FBZ 18-3/4R	M18MSC3/4R	18MO-1-12RS	18.0	3/4	53.1	22.0	43.0	16.0	35.0	32.0
FBZ 20-1/2R	M20MSC1/2R	20MO-1-8RS	20.0	1/2	50.5	22.0	40.4	14.2	30.0	25.7
FBZ 20-3/4R	M20MSC3/4R	20MO-1-12RS	20.0	3/4	52.8	22.0	42.7	16.0	32.0	35.0
FBZ 22-3/4R	M22MSC3/4R	22MO-1-12RS	22.0	3/4	52.8	22.0	42.7	16.0	32.0	35.0
FBZ 25-3/4R	M25MSC3/4R	25MO-1-12RS	25.0	3/4	59.8	26.5	47.6	16.0	35.0	31.8
FBZ 25-1R	M25MSC1R	25MO-1-16RS	25.0	1	60.1	26.5	47.8	18.3	39.0	41.0

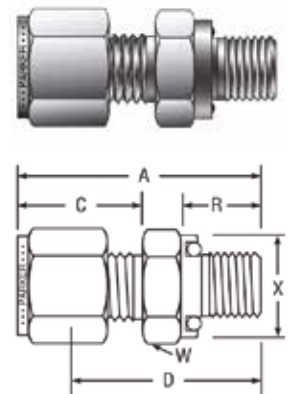
Note: A and C dimensions are typical finger-tight.



BSPP Male connector with ED seal for fractional tube

#	#			A	C	D	R	X	W	Bore
CPI™	A-LOK®	inch		inch	inch	inch	inch	inch	inch	inch
4-4R-ED FBZ	4MSC4R-ED	1/4	1/4	1.48	.70	1.19	.47	.74	3/4	.19
4-8R-ED FBZ	4MSC8R-ED	1/4	1/2	1.76	.70	1.38	.55	1.04	1-1/16	.19
6-6R-ED FBZ	6MSC6R-ED	3/8	3/8	3/8	.76	1.31	.47	.86	7/8	.28
8-4R-ED FBZ	8MSC4R-ED	1/2	1/4	1.69	.86	1.31	.47	.74	13/16	.25
8-6R-ED FBZ	8MSC6R-ED	1/2	3/8	1.69	.86	1.31	.47	.86	7/8	.31
8-8R-ED FBZ	8MSC8R-ED	1/2	1/2	1.85	.86	1.47	.55	1.04	1-1/16	.41
12-12R-ED FBZ	12MSC12R-ED	3/4	3/4	1.98	.86	1.59	.63	1.25	1-5/16	.63

Note: A and C dimensions are typical finger-tight.



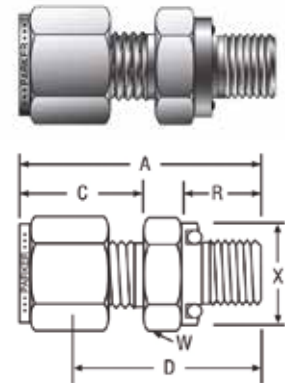
Please Note: Dimensions for reference only, subject to change.

CPI™ / A-LOK®

TUBE TO MALE PIPE

Male connector with ED seal for metric tube

#	#			A	C	D	R	X	W
CPI™	A-LOK®	mm	BSPP	mm	mm	mm	mm	mm	mm
FBZ6-1/8R-ED	M6MSC1/8R-ED	6.0	1/8	32.5	17.7	25.0	7.9	13.7	14.0
FBZ6-1/4R-ED	M6MSC1/4R-ED	6.0	1/4	38.2	17.7	30.7	11.9	18.8	19.0
FBZ6-3/8R-ED	M6MSC3/8R-ED	6.0	3/8	39.5	17.7	32.0	11.9	21.8	22.0
FBZ6-1/2R-ED	M6MSC1/2R-ED	6.0	1/2	44.5	17.7	37.0	14.0	26.4	27.0
FBZ10-1/4R-ED	M10MSC1/4R-ED	10.0	1/4	40.0	19.5	32.3	11.9	18.8	19.0
FBZ10-3/8R-ED	M10MSC3/8R-ED	10.0	3/8	41.1	19.5	38.1	11.9	21.8	22.0
FBZ10-1/2R-ED	M10MSC1/2R-ED	10.0	1/2	46.0	19.5	38.4	14.0	26.4	27.0
FBZ12-1/4R-ED	M12MSC1/4R-ED	12.0	1/4	43.1	22.0	33.0	11.9	18.8	22.0
FBZ12-3/8R-ED	M12MSC3/8R-ED	12.0	3/8	43.6	22.0	33.5	11.9	21.8	22.0
FBZ12-1/2R-ED	M12MSC1/2R-ED	12.0	1/2	48.5	22.0	38.4	14.0	26.4	27.0

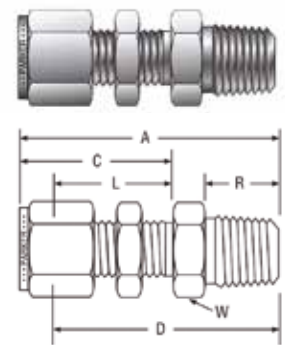


Note: A and C dimensions are typical finger-tight.

ED fittings are supplied with sealing washers in nitrile as standard, suitable for temperatures of between -35°C and +100°C (-31°F to +212°F). Fluorocarbon seals are available upon request which are suitable for temperatures of between -25°C and +120°C (-13°F to +248°F).

NPT Male bulkhead connector for fractional tube

#	#	Inter changes with			A	C	D	L	R	W
CPI™	A-LOK®		inch		inch	inch	inch	inch	inch	inch
1-1 FH2BZ	1MBC1N	100-11-1	1/16	1/16	1.19	0.68	1.038	.53	.38	5/16
1-2 FH2BZ	1MBC2N	100-11-2	1/16	1/8	1.27	0.68	1.116	.53	.38	7/16
2-2 FH2BZ	2MBC2N	200-11-2	1/8	1/8	1.83	1.23	1.571	.97	.38	1/2
3-2 FH2BZ	3MBC2N	300-11-2	3/16	1/8	1.89	1.26	1.634	1.00	.38	9/16
4-2 FH2BZ	4MBC2N	400-11-2	1/4	1/8	1.95	1.31	1.655	1.02	.38	5/8
4-4 FH2BZ	4MBC4N	400-11-4	1/4	1/4	2.132	1.31	1.842	1.02	.56	5/8
4-6 FH2BZ	4MBC6N	400-11-6	1/4	3/8	2.162	1.31	1.872	1.02	.56	11/16
4-8 FH2BZ	4MBC8N	400-11-8	1/4	1/2	2.374	1.31	2.084	1.02	.75	7/8
5-2 FH2BZ	5MBC2N	500-11-2	5/16	1/8	2.08	1.42	1.779	1.12	.38	11/16
5-4 FH2BZ	5MBC4N	500-11-4	5/16	1/4	2.27	1.42	1.966	1.12	.56	11/16
6-2 FH2BZ	6MBC2N	600-11-2	3/8	1/8	2.08	1.44	1.788	1.15	.38	3/4
6-4 FH2BZ	6MBC4N	600-11-4	3/8	1/4	2.265	1.44	1.975	1.15	.56	3/4
6-6 FH2BZ	6MBC6N	600-11-6	3/8	3/8	2.265	1.44	1.975	1.15	.56	3/4
6-8 FH2BZ	6MBC8N	600-11-8	3/8	1/2	2.48	1.44	2.219	1.15	.75	7/8
8-4 FH2BZ	8MBC4N	810-11-4	1/2	1/4	2.494	1.65	2.094	1.25	.56	15/16
8-6 FH2BZ	8MBC6N	810-11-6	1/2	3/8	2.494	1.65	2.094	1.25	.56	15/16
8-8 FH2BZ	8MBC8N	810-11-8	1/2	1/2	2.712	1.65	2.312	1.25	.75	15/16
8-12 FH2BZ	8MBC12N	810-11-12	1/2	3/4	2.722	1.65	2.322	1.25	.75	1-1/8
10-6 FH2BZ	10MBC6N	1010-11-6	5/8	3/8	2.628	1.68	2.228	1.28	.56	1-1/16
10-8 FH2BZ	10MBC8N	1010-11-8	5/8	1/2	2.816	1.68	2.416	1.28	.75	1-1/16
12-8 FH2BZ	12MBC8N	1210-11-8	3/4	1/2	3.00	1.87	2.601	1.47	.75	1-3/16
12-12 FH2BZ	12MBC12N	1210-11-12	3/4	3/4	3.00	1.87	2.601	1.47	.75	1-3/16
14-12 FH2BZ	14MBC12N	1410-11-12	7/8	3/4	3.31	2.09	2.913	1.69	.75	1-3/8
16-12 FH2BZ	16MBC12N	1610-11-12	1	3/4	3.54	2.27	3.006	1.78	.75	1-5/8
16-16 FH2BZ	16MBC16N	1610-11-16	1	1	3.72	2.27	3.194	1.78	.94	1-5/8



Note: A and C dimensions are typical finger-tight.

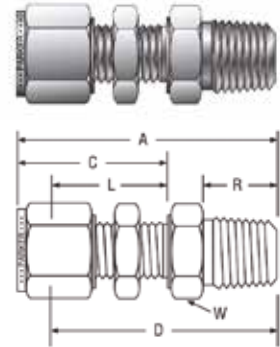
For bulkhead hole drill size and maximum bulkhead thickness, see page 276, Part BC.



Please Note: Dimensions for reference only, subject to change.

NPT Male bulkhead connector for metric tube

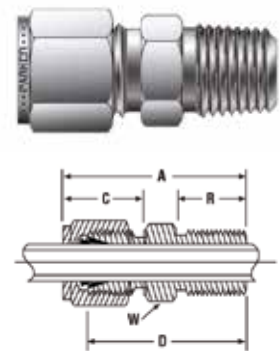
#	#	Inter changes with			A	C	D	L	R	W	B'head hole drill	Max b'head
CPI™	A-LOK®		mm		mm	mm	mm	mm	mm	mm	mm	mm
FH2BZ 6-1/8	M6MBC1/8N	6MO-11-2	6.0	1/8	49.6	33.7	42.1	26.2	9.5	16.0	11.5	10.2
FH2BZ 6-1/4	M6MBC1/4N	6MO-11-4	6.0	1/4	53.5	33.7	46.0	26.2	14.3	16.0	11.5	10.2
FH2BZ 8-1/8	M8MBC1/8N	8MO-11-2	8.0	1/8	52.3	36.0	44.8	28.5	9.5	18.0	13.1	11.2
FH2BZ 8-1/4	M8MBC1/4N	8MO-11-4	8.0	1/4	57.5	36.0	50.0	28.5	14.3	18.0	13.1	11.2
FH2BZ 10-1/4	M10MBC1/4N	10MO-11-4	10.0	1/4	58.4	37.0	50.8	29.4	14.3	22.0	16.3	11.2
FH2BZ 10-3/8	M10MBC3/8N	10MO-11-6	10.0	3/8	58.4	37.0	50.8	29.4	14.3	22.0	16.3	11.2
FH2BZ 10-1/2	M10MBC1/2N	10MO-11-8	10.0	1/2	63.1	37.0	55.5	29.4	19.0	22.0	16.3	11.2
FH2BZ 12-1/4	M12MBC1/4N	12MO-11-4	12.0	1/4	63.3	10.1	53.2	31.8	14.3	24.0	19.5	12.7
FH2BZ 12-3/8	M12MBC3/8N	12MO-11-6	12.0	3/8	64.5	10.1	54.4	31.8	14.3	24.0	19.5	12.7
FH2BZ 12-1/2	M12MBC1/2N	12MO-11-8	12.0	1/2	67.5	10.1	57.4	31.8	19.0	24.0	19.5	12.7



Note: A and C dimensions are typical finger-tight.

Thermocouple connector for fractional tube

#	#	Inter changes with			A	C	D	R	W
CPI™	A-LOK®		inch	NPT	inch	inch	inch	inch	inch
1-1 FH4BZ	1MTC1N	100-1-1BT	1/16	1/16	0.93	.43	0.78	.38	5/16
1-2 FH4BZ	1MTC2N	100-1-2BT	1/16	1/8	1.03	.43	0.88	.38	7/16
1-4 FH4BZ	1MTC4N	100-1-4BT	1/16	1/4	1.23	.43	1.08	.56	9/16
2-1 FH4BZ	2MTC1N	200-1-1BT	1/8	1/16	1.17	.60	0.91	.38	3/8
2-2 FH4BZ	2MTC2N	200-1-2BT	1/8	1/8	1.20	.60	0.94	.38	7/16
2-4 FH4BZ	2MTC4N	200-1-4BT	1/8	1/4	1.40	.60	1.14	.56	9/16
3-2 FH4BZ	3MTC2N	300-1-2BT	3/16	1/8	1.23	.64	0.97	.38	7/16
3-4 FH4BZ	3MTC4N	300-1-4BT	3/16	1/4	1.43	.64	1.17	.56	9/16
4-2 FH4BZ	4MTC2N	400-1-2BT	1/4	1/8	1.29	.70	1.00	.38	1/2
4-4 FH4BZ	4MTC4N	400-1-4BT	1/4	1/4	1.49	.70	1.20	.56	9/16
4-6 FH4BZ	4MTC6N	400-1-6BT	1/4	3/8	1.60	.70	1.22	.56	11/16
4-8 FH4BZ	4MTC8N	400-1-8BT	1/4	1/2	1.87	.70	1.47	.75	7/8
5-4 FH4BZ	5MTC4N	500-1-4BT	5/16	1/4	1.52	.73	1.22	.56	9/16
6-4 FH4BZ	6MTC4N	600-1-4BT	3/8	1/4	1.57	.76	1.28	.56	5/8
6-6 FH4BZ	6MTC6N	600-1-6BT	3/8	3/8	1.57	.76	1.28	.56	11/16
6-8 FH4BZ	6MTC8N	600-1-8BT	3/8	1/2	1.82	.76	1.53	.75	7/8
6-12 FH4BZ	6MTC12N	600-1-12BT	3/8	3/4	1.88	.76	1.59	.75	1-1/16
8-8 FH4BZ	8MTC8N	810-1-8BT	1/2	1/2	1.93	.87	1.53	.76	7/8
8-12 FH4BZ	8MTC12N	810-1-12BT	1/2	3/4	1.99	.87	1.59	.75	1-1/16
10-12 FH4BZ	10MTC12N	1010-1-12BT	5/8	3/4	1.99	.87	1.59	.75	1-1/16
12-12 FH4BZ	12MTC12N	1210-1-12BT	3/4	3/4	1.99	.87	1.59	.75	1-1/16
16-16 FH4BZ	16MTC16N	1610-1-16BT	1	1	2.46	1.05	1.97	.94	1-3/8



Note: A and C dimensions are typical finger-tight.



Please Note: Dimensions for reference only, subject to change.

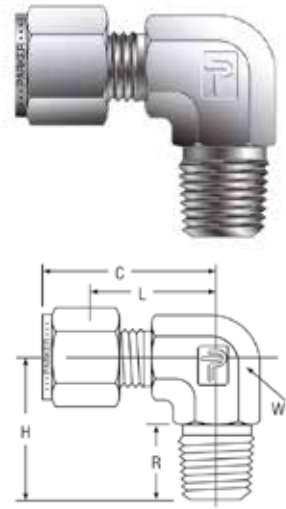
CPI™ / A-LOK®

TUBE TO MALE PIPE

NPT Male elbow for fractional tube

#	#	Inter changes with			C	H	L	R	W
CPI™	A-LOK®		mm		mm	mm	mm	mm	mm
1-1 CBZ	1MSEL1N	100-2-1	1/16	1/16	.75	0.70	.60	.38	7/16
1-2 CBZ	1MSEL2N	100-2-2	1/16	1/8	.75	0.70	.60	.38	7/16
2-1 CBZ	2MSEL1N	200-2-1	1/8	1/16	.93	0.70	.67	.38	7/16
2-2 CBZ	2MSEL2N	200-2-2	1/8	1/8	.93	0.70	.67	.38	7/16
2-4 CBZ	2MSEL4N	200-2-4	1/8	1/4	.97	0.93	.72	.56	9/16
3-2 CBZ	3MSEL2N	300-2-2	3/16	1/8	1.00	0.74	.74	.38	1/2
3-4 CBZ	3MSEL4N	300-2-4	3/16	1/4	1.00	0.93	.74	.56	9/16
4-1 CBZ	4MSEL1N	400-2-1	1/4	1/16	1.06	0.74	.77	.38	1/2
4-2 CBZ	4MSEL2N	400-2-2	1/4	1/8	1.06	0.74	.77	.38	1/2
4-4 CBZ	4MSEL4N	400-2-4	1/4	1/4	1.06	0.93	.77	.56	9/16
4-6 CBZ	4MSEL6N	400-2-6	1/4	3/8	1.17	1.04	.88	.56	11/16
4-8 CBZ	4MSEL8N	400-2-8	1/4	1/2	1.25	1.31	.96	.75	13/16
5-2 CBZ	5MSEL2N	500-2-2	5/16	1/8	1.13	0.79	.84	.38	9/16
5-4 CBZ	5MSEL4N	500-2-4	5/16	1/4	1.13	0.97	.84	.56	9/16
6-2 CBZ	6MSEL2N	600-2-2	3/8	1/8	1.20	0.82	.91	.38	5/8
6-4 CBZ	6MSEL4N	600-2-4	3/8	1/4	1.20	1.01	.91	.56	5/8
6-6 CBZ	6MSEL6N	600-2-6	3/8	3/8	1.23	1.13	.97	.56	11/16
6-8 CBZ	6MSEL8N	600-2-8	3/8	1/2	1.31	1.31	1.02	.75	13/16
6-12 CBZ	6MSEL12N	600-2-12	3/8	3/4	1.46	1.46	1.17	.75	1-1/16
8-4 CBZ	8MSEL4N	810-2-4	1/2	1/4	1.42	1.12	1.02	.56	13/16
8-6 CBZ	8MSEL6N	810-2-6	1/2	3/8	1.42	1.12	1.02	.56	13/16
8-8 CBZ	8MSEL8N	810-2-8	1/2	1/2	1.42	1.31	1.02	.75	13/16
8-12 CBZ	8MSEL12N	810-2-12	1/2	3/4	1.57	1.46	1.17	.75	1-1/16
10-6 CBZ	10MSEL6N	1010-2-6	5/8	3/8	1.50	1.20	1.10	.56	15/16
10-8 CBZ	10MSEL8N	1010-2-8	5/8	1/2	1.50	1.39	1.10	.75	15/16
10-12 CBZ	10MSEL12N	1010-2-12	5/8	3/4	1.57	1.46	1.17	.75	1-1/16
12-8 CBZ	12MSEL8N	1210-2-8	3/4	1/2	1.57	1.46	1.17	.75	1-1/16
12-12 CBZ	12MSEL12N	1210-2-12	3/4	3/4	1.57	1.46	1.17	.75	1-1/16
14-12 CBZ	14MSEL12N	1410-2-12	7/8	3/4	1.76	1.65	1.36	.75	1-3/8
16-12 CBZ	16MSEL12N	1610-2-12	1	3/4	1.93	1.65	1.45	.75	1-3/8
16-16 CBZ	16MSEL16N	1610-2-16	1	1	1.93	1.84	1.45	.94	1-3/8
20-20 CBZ	20MSEL20N	2010-2-20	1-1/4	1-1/4	2.61	1.88	1.75	.97	1-5/8
24-24 CBZ	24MSEL24N	2410-2-24	1-1/2	1-1/2	3.06	2.38	2.00	1.00	1-7/8
32-32 CBZ	32MSEL32N	3200-2-32	2	2	4.22	2.79	2.75	1.04	2-13/16

Note: C dimensions are typical finger-tight.
 Sizes 20, 24 require additional lubrication prior to assembly.



Please Note: Dimensions for reference only, subject to change.

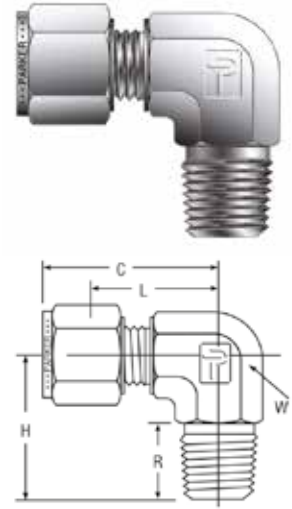
CPI™ / A-LOK®

TUBE TO MALE PIPE

NPT Male metric elbow for metric tube

#	#	Inter changes with			C	H	L	R	W
CPI™	A-LOK®		mm		mm	mm	mm	mm	mm
CBZ 3-1/8	M3MSEL1/8N	3MO-2-2	3.0	1/8	23.6	17.8	17.0	9.7	7/16
CBZ 3-1/4	M3MSEL1/4N	3MO-2-4	3.0	1/4	24.6	23.4	18.0	14.2	1/2
CBZ 4-1/8	M4MSEL1/8N	4MO-2-2	4.0	1/8	25.4	18.8	19.2	9.7	1/2
CBZ 4-1/4	M4MSEL1/4N	4MO-2-4	4.0	1/4	26.2	25.4	19.6	14.2	1/2
CBZ 6-1/8	M6MSEL1/8N	6MO-2-2	6.0	1/8	27.0	18.8	19.6	9.7	1/2
CBZ 6-1/4	M6MSEL1/4N	6MO-2-4	6.0	1/4	27.0	23.4	19.6	14.2	1/2
CBZ 6-3/8	M6MSEL3/8N	6MO-2-6	6.0	3/8	29.8	26.2	22.4	14.2	11/16
CBZ 6-1/2	M6MSEL1/2N	6MO-2-8	6.0	1/2	31.8	33.0	24.4	19.0	13/16
CBZ 8-1/8	M8MSEL1/8N	8MO-2-2	8.0	1/8	28.8	19.8	21.3	9.7	9/16
CBZ 8-1/4	M8MSEL1/4N	8MO-2-4	8.0	1/4	28.8	24.4	21.3	14.2	9/16
CBZ 8-3/8	M8MSEL3/8N	8MO-2-6	8.0	3/8	30.6	26.2	23.1	14.2	11/16
CBZ 8-1/2	M8MSEL1/2N	8MO-2-8	8.0	1/2	32.7	33.0	25.2	19.1	13/16
CBZ 10-1/8	M10MSEL1/2N	10MO-2-8	10.0	1/8	31.5	21.6	23.9	9.7	11/16
CBZ 10-1/4	M10MSEL1/4N	10MO-2-4	10.0	1/4	31.5	26.2	23.9	14.2	11/16
CBZ 10-3/8	M10MSEL3/8N	10MO-2-6	10.0	3/8	31.5	26.2	23.9	14.2	11/16
CBZ 10-1/2	M10MSEL1/2N	10MO-2-8	10.0	1/2	33.5	33.0	25.9	19.0	13/16
CBZ 12-1/4	M12MSEL1/4N	12MO-2-4	12.0	1/4	36.0	28.2	25.9	14.2	13/16
CBZ 12-3/8	M12MSEL3/8N	12MO-2-6	12.0	3/8	36.0	28.2	25.9	14.2	13/16
CBZ 12-1/2	M12MSEL1/2N	12MO-2-8	12.0	1/2	36.0	33.0	25.9	19.0	13/16
CBZ 12-3/4	M12MSEL3/4N	12MO-2-12	12.0	3/4	39.8	36.8	29.7	19.0	1-1/16
CBZ 15-1/2	M15MSEL1/2N	15MO-2-8	15.0	1/2	38.0	35.1	27.9	19.0	15/16
CBZ 16-3/8	M16MSEL3/8N	16MO-2-6	16.0	3/8	38.0	30.2	27.9	14.2	15/16
CBZ 16-1/2	M16MSEL1/2N	16MO-2-8	16.0	1/2	38.0	35.1	27.9	19.0	15/16
CBZ 16-3/4	M16MSEL3/4N	16MO-2-12	16.0	3/4	39.8	36.8	29.7	19.0	1-1/16
CBZ 18-1/2	M18MSEL1/2N	18MO-2-8	18.0	1/2	39.8	36.8	29.7	19.0	1-1/16
CBZ 18-3/4	M18MSEL3/4N	18MO-2-12	18.0	3/4	39.8	36.8	29.7	19.0	1-1/16
CBZ 20-1/2	M20MSEL1/2N	20MO-2-8	20.0	1/2	44.6	41.7	34.5	19.0	1-3/8
CBZ 20-3/4	M20MSEL3/4N	20MO-2-12	20.0	3/4	44.6	41.7	34.5	19.0	1-3/8
CBZ 22-3/4	M22MSEL3/4N	22MO-2-12	22.0	3/4	44.6	41.7	34.5	19.0	1-3/8
CBZ 25-3/4	M25MSEL3/4N	25MO-2-12	25.0	3/4	49.1	41.7	36.8	19.0	1-3/8
CBZ 25-1	M25MSEL1N	25MO-2-16	25.0	1	49.1	46.5	36.8	23.9	1-3/8

Note: C dimensions are typical finger-tight.



Please Note: Dimensions for reference only, subject to change.

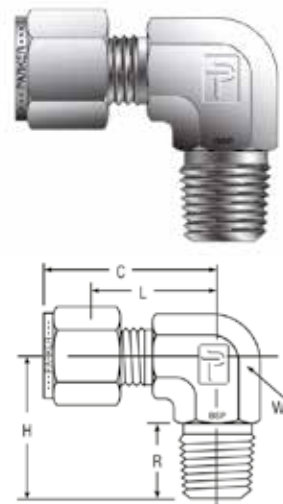
CPI™ / A-LOK®

TUBE TO MALE PIPE

BSP Taper male elbow for fractional tube

#	#	Inter changes with			C	H	L	R	W
CPI™	A-LOK®		inch	BSPT	inch	inch	inch	inch	inch
4-2K CBZ	4MSEL2K	400-2-2RT	1/4	1/8	1.06	0.75	0.77	.38	1/2
4-4K CBZ	4MSEL4K	400-2-4RT	1/4	1/4	1.06	0.94	0.77	.56	9/16
4-6K CBZ	4MSEL6K	400-2-6RT	1/4	3/8	1.17	1.05	0.88	.56	11/16
4-8K CBZ	4MSEL8K	400-2-8RT	1/4	1/2	1.25	1.32	0.96	.75	13/16
5-4K CBZ	5MSEL4K	500-2-4RT	5/16	1/4	1.13	0.98	0.84	.38	9/16
6-4K CBZ	6MSEL4K	600-2-4RT	3/8	1/4	1.20	1.02	0.91	.56	5/8
6-6K CBZ	6MSEL6K	600-2-4RT	3/8	3/8	1.23	1.05	0.97	.56	11/16
8-6K CBZ	8MSEL6K	810-2-6RT	1/2	3/8	1.42	1.13	1.02	.56	13/16
8-8K CBZ	8MSEL8K	810-2-8RT	1/2	1/2	1.42	1.32	1.02	.75	13/16

Note: C dimensions are typical finger-tight.



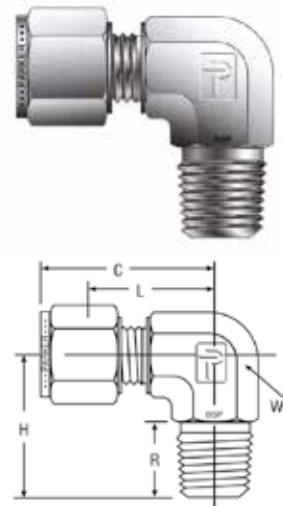
BSP Taper male elbow for metric tube

#	#	Inter changes with			C	H	L	R	W
CPI™	A-LOK®		mm	BSPT	mm	mm	mm	mm	inch
CBZ 3-1/8K	M3MSEL1/8K	3MO-2-2RT	3.0	1/8	23.6	17.8	17.0	9.7	7/16
CBZ 3-1/4K	M3MSEL1/4K	3MO-2-4RT	3.0	1/4	24.6	23.4	18.0	14.2	1/2
CBZ 4-1/8K	M4MSEL1/8K	4MO-2-2RT	4.0	1/8	25.4	18.8	18.8	9.7	1/2
CBZ 4-1/4K	M4MSEL1/4K	4MO-2-4RT	4.0	1/4	24.6	23.4	18.8	14.2	1/2
CBZ 6-1/8K	M6MSEL1/8K	6MO-2-2RT	6.0	1/8	27.0	18.8	19.6	14.2	1/2
CBZ 6-1/4K	M6MSEL1/4K	6MO-2-4RT	6.0	1/4	27.0	23.4	19.6	14.2	1/2
CBZ 6-3/8K	M6MSEL3/8K	6MO-2-6RT	6.0	3/8	29.8	26.2	22.4	14.2	11/16
CBZ 6-1/2K	M6MSEL1/2K	6MO-2-8RT	6.0	1/2	31.8	33.0	24.4	19.0	13/16
CBZ 8-1/8K	M8MSEL1/8K	8MO-2-2RT	8.0	1/8	28.8	19.8	21.3	9.7	9/16
CBZ 8-1/4K	M8MSEL1/4K	8MO-2-4RT	8.0	1/4	28.8	24.4	21.3	14.2	9/16
CBZ 8-3/8K	M8MSEL3/8K	8MO-2-6RT	8.0	3/8	30.6	26.2	23.1	14.2	11/16
CBZ 8-1/2K	M8MSEL1/2K	8MO-2-8RT	8.0	1/2	32.7	33.0	25.2	19.1	13/16
CBZ 10-1/8K	M10MSEL1/8K	10MO-2-2RT	10.0	1/8	31.5	21.6	23.9	9.7	11/16
CBZ 10-1/4K	M10MSEL1/4K	10MO-2-4RT	10.0	1/4	31.5	26.2	23.9	14.2	11/16
CBZ 10-3/8K	M10MSEL3/8K	10MO-2-6RT	10.0	3/8	31.5	26.2	23.9	14.2	11/16
CBZ 10-1/2K	M10MSEL1/2K	10MO-2-8RT	10.0	1/2	33.5	33.0	25.9	19.0	13/16
CBZ 12-1/4K	M12MSEL1/4K	12MO-2-4RT	12.0	1/4	36.0	28.2	25.9	14.2	13/16
CBZ 12-3/8K	M12MSEL3/8K	12MO-2-6RT	12.0	3/8	36.0	28.2	25.9	14.2	13/16
CBZ 12-1/2K	M12MSEL1/2K	12MO-2-8RT	12.0	1/2	36.0	33.0	25.9	19.0	13/16
CBZ 12-3/4K	M12MSEL3/4K	12MO-2-12RT	12.0	3/4	39.8	36.8	19.7	19.1	1-1/16
CBZ 16-3/8K	M16MSEL3/8K	16MO-2-6RT	16.0	3/8	38.0	30.2	27.9	14.2	15/16
CBZ 16-1/2K	M16MSEL1/2K	16MO-2-8RT	16.0	1/2	38.0	35.1	27.9	19.0	15/16
CBZ 18-1/2K	M18MSEL1/2K	18MO-2-8RT	18.0	1/2	39.8	36.8	29.7	19.0	1-1/16
CBZ 18-3/4K	M18MSEL3/4K	18MO-2-12RT	18.0	3/4	39.8	36.8	29.7	19.0	1-1/16
CBZ 20-3/4K	M20MSEL3/4K	20MO-2-12RT	20.0	3/4	44.6	41.7	34.5	19.0	1-3/8
CBZ 25-3/4K	M25MSEL3/4K	25MO-2-12RT	25.0	3/4	49.0	41.7	36.8	19.1	1-3/8
CBZ 25-1K	M25MSEL1K	25MO-2-16RT	25.0	1	49.1	46.5	36.8	23.9	1-3/8

Note: C dimensions are typical finger-tight.



Please Note: Dimensions for reference only, subject to change.



NPT Male 45° elbow for fractional tube

#	#	Inter changes with			C	L	P	R	W
CPI™	A-LOK®		inch		inch	inch	inch	inch	inch
1-1VBZ	1MVEL1N	100-5-1	1/16	1/16	0.43	0.47	0.57	.38	7/16
2-2VBZ	2MVEL2N	200-5-2	1/8	1/8	0.60	0.53	0.57	.38	7/16
3-2VBZ	3MVEL2N	300-5-2	3/16	1/8	0.64	0.56	0.58	.38	7/16
4-2VBZ	4MVEL2N	400-5-2	1/4	1/8	0.70	0.66	0.66	.38	9/16
4-4VBZ	4MVEL4N	400-5-4	1/4	1/4	0.70	0.66	0.86	.56	9/16
5-2VBZ	5MVEL2N	500-5-2	5/16	1/8	0.73	0.66	0.66	.38	9/16
6-2VBZ	6MVEL2N	600-5-2	3/8	1/8	0.76	0.72	0.67	.38	9/16
6-4VBZ	6MVEL4N	600-5-4	3/8	1/4	0.76	0.72	0.86	.56	9/16
6-6VBZ	6MVEL6N	600-5-6	3/8	3/8	0.76	0.75	0.95	.56	3/4
8-6VBZ	8MVEL6N	810-5-6	1/2	3/8	0.87	0.75	0.95	.56	3/4
10-8VBZ	10MVEL8N	1010-5-8	5/8	1/2	0.87	0.84	1.20	.75	1-1/16
12-12VBZ	12MVEL12N	1210-5-12	3/4	3/4	0.87	0.84	1.20	.75	1-1/16
14-12VBZ	14MVEL12N	1410-5-12	7/8	3/4	0.87	1.36	1.27	.75	1-5/16
16-16VBZ	16MVEL16N	1610-5-16	1	1	1.05	1.19	1.14	.94	1-5/16

Note: C dimensions are typical finger-tight.

NPT Male 45° Elbow For metric tube

#	#			C	L	P	R	W
CPI™	A-LOK®	mm		mm	mm	mm	mm	mm
VBZ 6-1/8	M6MVEL1/8N	6.0	1/8	17.7	16.0	16.8	9.5	14.0
VBZ 6-1/4	M6MVEL1/4N	6.0	1/4	17.7	16.0	21.8	14.3	14.0
VBZ 8-1/8	M8MVEL1/8N	8.0	1/8	18.6	16.8	16.8	9.5	14.0
VBZ 10-1/4	M10MVEL1/4N	10.0	1/4	19.5	19.0	24.1	14.3	19.0
VBZ 12-3/8	M12MVEL3/8N	12.0	3/8	22.0	19.0	24.1	14.3	19.0
VBZ 12-1/2	M12MVEL1/2N	12.0	1/2	22.0	20.6	29.7	19.0	22.0
VBZ 16-1/2	M16MVEL1/2N	16.0	1/2	22.0	20.6	29.7	19.0	22.0

Note: C dimensions are typical finger-tight.

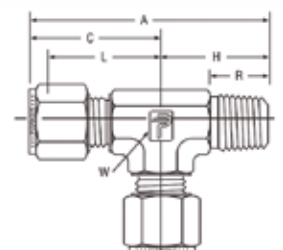
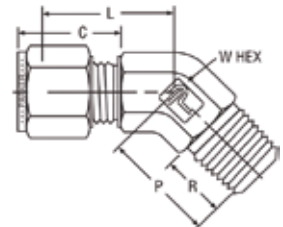
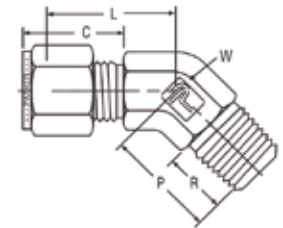
NPT Male run tee for metric tube

#	#	Inter changes with			A	C	H	L	R	W
CPI™	A-LOK®		mm		mm	mm	mm	mm	mm	inch
RBZ 6-1/8-6	M6MRT1/8N	6MO-3-2TMT	6.0	1/8	45.8	27.0	18.0	19.6	9.7	1/2
RBZ 6-1/4-6	M6MRT1/4N	6MO-3-4TMT	6.0	1/4	50.3	27.0	23.4	19.6	14.2	1/2
RBZ 8-1/8-8	M8MRT1/8N	8MO-3-2TMT	8.0	1/8	50.7	29.9	20.8	22.4	9.7	5/8
RBZ 8-1/4-8	M8MRT1/4N	8MO-3-4TMT	8.0	1/4	55.3	29.9	25.4	22.4	14.2	5/8
RBZ 10-1/4-10	M10MRT1/4N	10MO-3-4TMT	10.0	1/4	61.7	33.5	28.2	25.9	14.2	13/16
RBZ 10-1/2-10	M10MRT1/2N	10MO-3-8TMT	10.0	1/2	66.5	33.5	33.0	25.9	19.0	13/16
RBZ 12-1/4-12	M12MRT1/4N	12MO-3-4TMT	12.0	1/4	64.2	36.0	28.2	25.9	14.2	13/16
RBZ 12-3/8-12	M12MRT3/8N	12MO-3-6TMT	12.0	3/8	64.2	36.0	28.2	25.9	14.2	13/16
RBZ 12-1/2-12	M12MRT1/2N	12MO-3-8TMT	12.0	1/2	69.0	36.0	33.0	25.9	19.0	13/16
RBZ 16-1-16	M16MRT1N	16MO-3-16TMT	16.0	1	93.1	46.6	46.5	34.4	23.9	1-3/8

Note: A and C dimensions are typical finger-tight.



Please Note: Dimensions for reference only, subject to change.



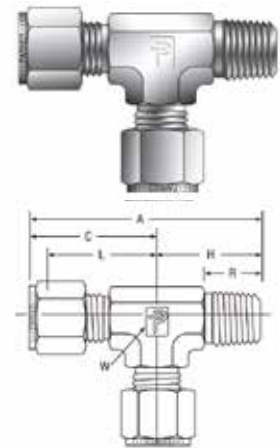
CPI™ / A-LOK®

TUBE TO MALE PIPE

NPT Male run tee for fractional tube

#	#	Inter changes with			A	C	H	L	R	W
CPI™	A-LOK®		inch		inch	inch	inch	inch	inch	inch
2-2-2 RBZ	2MRT2N	200-3-2TMT	1/8	1/8	1.63	0.93	0.71	0.66	.38	7/16
2-4-2 RBZ	2MRT4N	200-3-4TMT	1/8	1/4	1.89	0.97	0.93	0.70	.56	9/16
3-2-3 RBZ	3MRT2N	300-3-2TMT	3/16	1/8	1.66	0.96	0.70	0.70	.38	7/16
4-2-4 RBZ	4MRT2N	400-3-2TMT	1/4	1/8	1.80	1.06	0.74	0.77	.38	1/2
4-4-4 RBZ	4MRT4N	400-3-4TMT	1/4	1/4	1.98	1.06	0.93	0.77	.56	1/2
5-2-5 RBZ	5MRT2N	500-3-2TMT	5/16	1/8	1.99	1.17	0.82	0.88	.38	5/8
5-4-5 RBZ	5MRT4N	500-3-4TMT	5/16	1/4	2.18	1.17	1.01	0.88	.56	5/8
6-4-6 RBZ	6MRT4N	600-3-4TMT	3/8	1/4	2.20	1.20	1.01	0.91	.56	5/8
6-6-6 RBZ	6MRT6N	600-3-6TMT	3/8	3/8	2.42	1.31	1.12	1.02	.56	13/16
8-6-8 RBZ	8MRT6N	810-3-6TMT	1/2	3/8	2.53	1.42	1.12	1.02	.56	13/16
8-8-8 RBZ	8MRT8N	810-3-8TMT	1/2	1/2	2.72	1.42	1.31	1.02	.75	7/8
10-8-10 RBZ	10MRT8N	1010-3-8TMT	5/8	1/2	2.88	1.50	1.39	1.10	.75	15/16
12-12-12 RBZ	12MRT12N	1210-3-12TMT	3/4	3/4	3.02	1.57	1.46	1.17	.75	1-1/16
14-12-14 RBZ	14MRT12N	1410-3-12TMT	7/8	3/4	4.31	1.76	1.65	1.36	.75	1-3/8
16-12-16 RBZ	16MRT12N	1610-3-12TMT	1	3/4	3.59	1.94	1.65	1.45	.75	1-3/8
16-16-16 RBZ	16MRT16N	1610-3-16TMT	1	1	3.78	1.94	1.84	1.45	.94	1-3/8

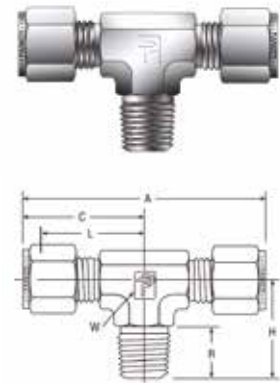
Note: A and C dimensions are typical finger-tight.



NPT Male branch tee for fractional tube

#	#	Inter changes with			A	C	H	L	R	W
CPI™	A-LOK®		inch		inch	inch	inch	inch	inch	inch
2-2-2 SBZ	2MBT2N	200-3-2TTM	1/8	1/8	1.84	0.92	0.70	0.66	.38	7/16
2-2-4 SBZ	2MBT4N	200-3-4TTM	1/8	1/4	1.96	0.98	0.93	0.72	.56	1/2
3-3-2 SBZ	3MBT2N	300-3-2TTM	3/16	1/8	2.00	1.00	0.74	0.74	.38	1/2
4-4-2 SBZ	4MBT2N	400-3-2TTM	1/4	1/8	2.12	1.06	0.74	0.77	.38	1/2
4-4-4 SBZ	4MBT4N	400-3-4TTM	1/4	1/4	2.12	1.07	0.93	0.77	.56	1/2
5-5-2 SBZ	5MBT2N	500-3-2TTM	5/16	1/8	2.34	1.17	0.82	0.88	.38	5/8
5-5-4 SBZ	5MBT4N	500-3-4TTM	5/16	1/4	2.34	1.17	1.01	0.88	.56	5/8
6-6-4 SBZ	6MBT4N	600-3-4TTM	3/8	1/4	2.40	1.20	1.01	0.91	.56	5/8
6-6-6 SBZ	6MBT6N	600-3-6TTM	3/8	3/8	2.62	1.31	1.12	1.02	.56	13/16
8-8-6 SBZ	8MBT6N	810-3-6TTM	1/2	3/8	2.84	1.42	1.12	1.02	.56	13/16
8-8-8 SBZ	8MBT8N	810-3-8TTM	1/2	1/2	2.86	1.43	1.31	1.02	.75	7/8
10-10-8 SBZ	10MBT8N	1010-3-8TTM	5/8	1/2	2.86	1.53	1.42	1.13	.75	1
12-12-12 SBZ	12MBT12N	1210-3-12TTM	3/4	3/4	3.14	1.57	1.46	1.17	.75	1-1/16
14-14-12 SBZ	14MBT12N	1410-3-12TTM	7/8	3/4	3.52	1.76	1.65	1.36	.75	1-3/8
16-16-12 SBZ	16MBT12N	1610-3-12TTM	1	3/4	3.88	1.94	1.65	1.45	.75	1-3/8
16-16-16 SBZ	16MBT16N	1610-3-16TTM	1	1	3.88	1.94	1.84	1.45	.94	1-3/8

Note: A and C dimensions are typical finger-tight.



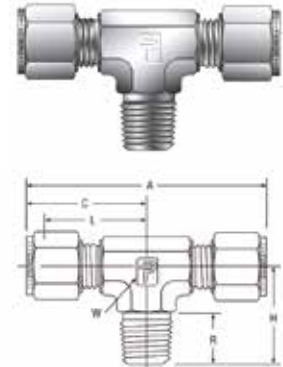
Please Note: Dimensions for reference only, subject to change.

CPI™ / A-LOK® TUBE TO MALE PIPE

NPT Male branch tee for metric tube

#	#	Inter changes with			A	C	H	L	R	W
CPI™	A-LOK®		mm		mm	mm	mm	mm	mm	inch
SBZ 6-6-1/8	M6MBT1/8N	6MO-3TTM	6.0	1/8	53.9	27.0	18.0	19.6	9.7	1/2
SBZ 6-6-1/4	M6MBT1/4N	6MO-3-4TTM	6.0	1/4	53.9	27.0	23.4	19.6	14.2	1/2
SBZ 8-8-1/8	M8MBT1/8N	6MO-3-2TTM	8.0	1/8	59.7	29.9	20.8	22.4	9.7	5/8
SBZ 8-8-1/4	M8MBT1/4N	6MO-3-4TTM	8.0	1/4	59.7	29.9	25.4	22.4	14.2	5/8
SBZ 10-10-1/4	M10MBT1/4N	10MO-3-4TTM	10.0	1/4	67.0	33.5	28.2	25.9	14.2	13/16
SBZ 10-10-3/8	M10MBT3/8N	10MO-3-6TTM	10.0	3/8	67.0	33.5	28.2	25.9	14.2	13/16
SBZ 12-12-1/3	M12MBT1/4N	12MO-3-4TTM	12.0	1/4	72.0	36.0	28.2	25.9	14.2	13/16
SBZ 12-12-3/8	M12MBT3/8N	12MO-3-6TTM	12.0	3/8	72.0	36.0	28.2	25.9	14.2	13/16
SBZ 12-12-1/2	M12MBT1/2N	12MO-3-8TTM	12.0	1/2	72.0	36.0	33.0	25.9	19.0	13/16
SBZ 16-16-1/2	M16MBT1/2N	16MO-3-8TTM	16.0	1/2	77.6	38.8	35.8	28.7	19.1	1

Note: A and C dimensions are typical finger-tight.



Please Note: Dimensions for reference only, subject to change.

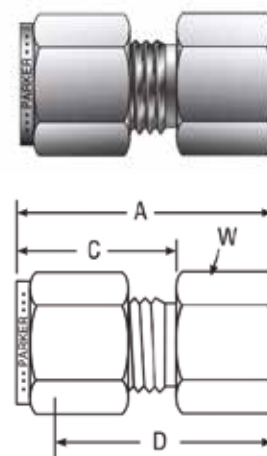
CPI™ / A-LOK®

TUBE TO FEMALE PIPE

NPT Female connector for fractional tube

#	#	Inter changes with			A	C	D	W
CPI™	A-LOK®		inch		inch	inch	inch	inch
1-1 GBZ	1FSC1N	100-7-1	1/16	1/16	0.93	0.43	0.78	7/16
1-2 GBZ	1FSC2N	100-7-2	1/16	1/8	0.95	0.43	0.81	9/16
2-2 GBZ	2FSC2N	200-7-2	1/8	1/8	1.14	0.60	0.88	9/16
2-4 GBZ	2FSC4N	200-7-4	1/8	1/4	1.32	0.60	1.06	3/4
3-2 GBZ	3FSC2N	300-7-2	3/16	1/8	1.17	0.64	0.91	9/16
3-4 GBZ	3FSC4N	300-7-4	3/16	1/4	1.35	0.64	1.09	3/4
4-2 GBZ	4FSC2N	400-7-2	1/4	1/8	1.23	0.70	0.94	9/16
4-4 GBZ	4FSC4N	400-7-4	1/4	1/4	1.42	0.70	1.13	3/4
4-6 GBZ	4FSC6N	400-7-6	1/4	3/8	1.48	0.70	1.19	7/8
4-8 GBZ	4FSC8N	400-7-8	1/4	1/2	1.67	0.70	1.38	1-1/16
5-2 GBZ	5FSC2N	500-7-2	5/16	1/8	1.27	0.73	0.97	9/16
5-4 GBZ	5FSC4N	500-7-4	5/16	1/4	1.46	0.73	1.16	3/4
5-6 GBZ	5FSC6N	500-7-6	5/16	3/8	1.51	0.73	1.22	7/8
6-2 GBZ	6FSC2N	600-7-2	3/8	1/8	1.29	0.76	1.00	5/8
6-4 GBZ	6FSC4N	600-7-4	3/8	1/4	1.48	0.76	1.19	3/4
6-6 GBZ	6FSC6N	600-7-6	3/8	3/8	1.54	0.76	1.25	7/8
6-8 GBZ	6FSC8N	600-7-8	3/8	1/2	1.73	0.76	1.44	1-1/16
6-12 GBZ	6FSC12N	600-7-12	3/8	3/4	1.85	0.76	1.56	1-1/4
8-4 GBZ	8FSC4N	810-7-4	1/2	1/4	1.59	0.87	1.19	13/16
8-6 GBZ	8FSC6N	810-7-6	1/2	3/8	1.65	0.87	1.25	7/8
8-8 GBZ	8FSC8N	810-7-8	1/2	1/2	1.84	0.87	1.44	1-1/16
8-12 GBZ	8FSC12N	810-7-12	1/2	3/4	1.96	0.87	1.56	1-1/4
10-6 GBZ	10FSC6N	1010-7-6	5/8	3/8	1.65	0.87	1.25	15/16
10-8 GBZ	10FSC8N	1010-7-8	5/8	1/2	1.84	0.87	1.44	1-1/16
10-12 GBZ	10FSC12N	1010-7-12	5/8	3/4	1.96	0.87	1.56	1-3/8
12-8 GBZ	12FSC8N	1210-7-8	3/4	1/2	1.84	0.87	1.44	1-1/16
12-12 GBZ	12FSC12N	1210-7-12	3/4	3/4	1.96	0.87	1.56	1-3/8
14-12 GBZ	14FSC12N	1410-7-12	7/8	3/4	1.96	0.87	1.56	1-3/8
16-12 GBZ	16FSC12N	1610-7-12	1	3/4	2.15	1.05	1.66	1-3/8
16-16 GBZ	16FSC16N	1610-7-16	1	1	2.46	1.05	1.97	1-5/8
20-20 GBZ	20FSC20N	2010-7-20	1-1/4	1-1/4	2.94	1.52	2.08	2
24-24 GBZ	24FSC24N	2410-7-24	1-1/2	1-1/2	3.28	1.77	2.22	2-3/8
32-32 GBZ	32FSC32N	3210-7-32	2	2	4.00	2.47	2.53	2-7/8

Note: A and C dimensions are typical finger-tight.
 Sizes 20, 24, 32 require additional lubrication prior to assembly.



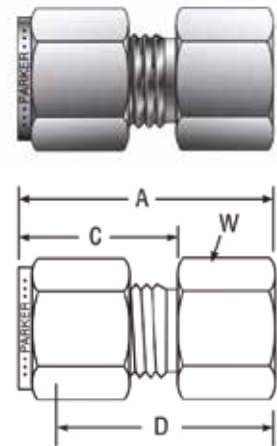
Please Note: Dimensions for reference only, subject to change.

CPI™ / A-LOK®

TUBE TO FEMALE PIPE

NPT Female connector for fractional tube

#	#	Inter changes with			A	C	D	W
CPI™	A-LOK®		inch		inch	inch	inch	inch
1-1 GBZ	1FSC1N	100-7-1	1/16	1/16	0.93	0.43	0.78	7/16
1-2 GBZ	1FSC2N	100-7-2	1/16	1/8	0.95	0.43	0.81	9/16
2-2 GBZ	2FSC2N	200-7-2	1/8	1/8	1.14	0.60	0.88	9/16
2-4 GBZ	2FSC4N	200-7-4	1/8	1/4	1.32	0.60	1.06	3/4
3-2 GBZ	3FSC2N	300-7-2	3/16	1/8	1.17	0.64	0.91	9/16
3-4 GBZ	3FSC4N	300-7-4	3/16	1/4	1.35	0.64	1.09	3/4
4-2 GBZ	4FSC2N	400-7-2	1/4	1/8	1.23	0.70	0.94	9/16
4-4 GBZ	4FSC4N	400-7-4	1/4	1/4	1.42	0.70	1.13	3/4
4-6 GBZ	4FSC6N	400-7-6	1/4	3/8	1.48	0.70	1.19	7/8
4-8 GBZ	4FSC8N	400-7-8	1/4	1/2	1.67	0.70	1.38	1-1/16
5-2 GBZ	5FSC2N	500-7-2	5/16	1/8	1.27	0.73	0.97	9/16
5-4 GBZ	5FSC4N	500-7-4	5/16	1/4	1.46	0.73	1.16	3/4
5-6 GBZ	5FSC6N	500-7-6	5/16	3/8	1.51	0.73	1.22	7/8
6-2 GBZ	6FSC2N	600-7-2	3/8	1/8	1.29	0.76	1.00	5/8
6-4 GBZ	6FSC4N	600-7-4	3/8	1/4	1.48	0.76	1.19	3/4
6-6 GBZ	6FSC6N	600-7-6	3/8	3/8	1.54	0.76	1.25	7/8
6-8 GBZ	6FSC8N	600-7-8	3/8	1/2	1.73	0.76	1.44	1-1/16
6-12 GBZ	6FSC12N	600-7-12	3/8	3/4	1.85	0.76	1.56	1-1/4
8-4 GBZ	8FSC4N	810-7-4	1/2	1/4	1.59	0.87	1.19	13/16
8-6 GBZ	8FSC6N	810-7-6	1/2	3/8	1.65	0.87	1.25	7/8
8-8 GBZ	8FSC8N	810-7-8	1/2	1/2	1.84	0.87	1.44	1-1/16
8-12 GBZ	8FSC12N	810-7-12	1/2	3/4	1.96	0.87	1.56	1-1/4
10-6 GBZ	10FSC6N	1010-7-6	5/8	3/8	1.65	0.87	1.25	15/16
10-8 GBZ	10FSC8N	1010-7-8	5/8	1/2	1.84	0.87	1.44	1-1/16
10-12 GBZ	10FSC12N	1010-7-12	5/8	3/4	1.96	0.87	1.56	1-3/8
12-8 GBZ	12FSC8N	1210-7-8	3/4	1/2	1.84	0.87	1.44	1-1/16
12-12 GBZ	12FSC12N	1210-7-12	3/4	3/4	1.96	0.87	1.56	1-3/8
14-12 GBZ	14FSC12N	1410-7-12	7/8	3/4	1.96	0.87	1.56	1-3/8
16-12 GBZ	16FSC12N	1610-7-12	1	3/4	2.15	1.05	1.66	1-3/8
16-16 GBZ	16FSC16N	1610-7-16	1	1	2.46	1.05	1.97	1-5/8
20-20 GBZ	20FSC20N	2010-7-20	1-1/4	1-1/4	2.94	1.52	2.08	2
24-24 GBZ	24FSC24N	2410-7-24	1-1/2	1-1/2	3.28	1.77	2.22	2-3/8
32-32 GBZ	32FSC32N	3210-7-32	2	2	4.00	2.47	2.53	2-7/8



Note: A and C dimensions are typical finger-tight.
 Sizes 20, 24, 32 require additional lubrication prior to assembly.



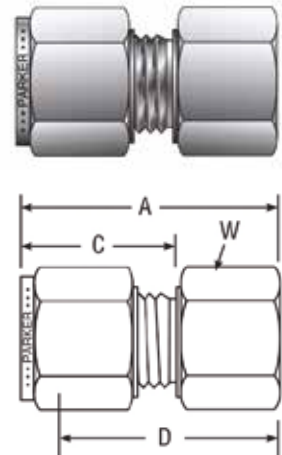
Please Note: Dimensions for reference only, subject to change.

CPI™ / A-LOK®

TUBE TO FEMALE PIPE

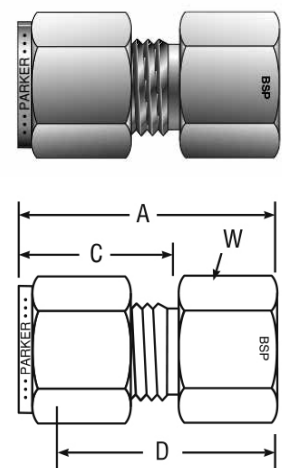
NPT Female connector for metric tube

#	#	Inter changes with			A	C	W	A
CPI™	A-LOK®		mm	BSPT	mm	mm	mm	mm
GBZ 3-1/8	M3FSC1/8N	3MO-7-2	3.0	1/8	28.8	15.3	22.2	14.0
GBZ 3-1/4	M3FSC1/4N	3MO-7-4	3.0	1/4	33.6	15.3	27.0	19.0
GBZ 4-1/8	M4FSC1/8N	4MO-7-2	4.0	1/8	29.6	16.1	23.0	14.0
GBZ 6-1/8	M6FSC1/8N	6MO-7-2	6.0	1/8	31.3	17.7	23.8	14.0
GBZ 6-1/4	M6FSC1/4N	6MO-7-4	6.0	1/4	36.1	17.7	28.6	19.0
GBZ 6-3/8	M6FSC3/8N	6MO-7-6	6.0	3/8	37.7	17.7	30.2	22.0
GBZ 6-1/2	M6FSC1/2N	6MO-7-8	6.0	1/2	42.5	17.7	35.0	27.0
GBZ 8-1/8	M8FSC1/8N	8MO-7-2	8.0	1/8	32.1	18.6	24.6	14.0
GBZ 8-1/4	M8FSC1/4N	8MO-7-4	8.0	1/4	36.9	18.6	29.4	19.0
GBZ 8-3/8	M8FSC3/8N	8MO-7-6	8.0	3/8	38.5	18.6	31.0	22.0
GBZ 10-1/4	M10FSC1/4N	10MO-7-4	10.0	1/4	37.8	19.5	30.2	19.0
GBZ 10-3/8	M10FSC3/8N	10MO-7-6	10.0	3/8	39.4	19.5	31.8	22.0
GBZ 10-1/2	M10FSC1/2N	10MO-7-8	10.0	1/2	44.1	19.5	36.5	27.0
GBZ 12-1/4	M12FSC1/4N	12MO-7-4	12.0	1/4	41.9	22.0	31.8	22.0
GBZ 12-3/8	M12FSC3/8N	12MO-7-6	12.0	3/8	41.9	22.0	31.8	22.0
GBZ 12-1/2	M12FSC1/2N	12MO-7-8	12.0	1/2	46.6	22.0	36.5	27.0
GBZ 16-3/8	M16FSC3/8N	16MO-7-6	16.0	3/8	41.9	22.0	31.8	27.0
GBZ 16-1/2	M16FSC1/2N	16MO-7-8	16.0	1/2	46.9	22.0	36.5	27.0
GBZ 20-1/2	M20FSC1/2N	20MO-7-8	20.0	1/2	47.9	22.0	37.8	30.0
GBZ 20-3/4	M20FSC3/4N	20MO-7-12	20.0	3/4	49.7	22.0	39.6	35.0
GBZ 22-3/4	M22FSC3/4N	22MO-7-12	22.0	3/4	49.7	22.0	39.6	35.0
GBZ 25-3/4	M25FSC3/4N	25MO-7-12	25.0	3/4	53.6	26.5	41.3	35.0
GBZ 25-1	M25FSC1N	25MO-7-16	25.0	1	62.3	26.5	50.0	41.0



BSP Taper female connector for fractional tube

#	#	Inter changes with			A	C	D	W	Bore
CPI™	A-LOK®		inch		inch	inch	inch	inch	inch
4-2K GBZ	4FSC2K	400-7-2RT	1/4	1/8	1.24	.70	0.94	9/16	.19
4-4K GBZ	4FSC4K	400-7-4RT	1/4	1/4	1.42	.70	1.13	3/4	.19
4-6K GBZ	4FSC6K	400-7-6RT	1/4	3/8	1.49	.70	1.19	7/8	.19
4-8K GBZ	4FSC8K	400-7-8RT	1/4	1/2	1.68	.70	1.38	1-1/16	.19
6-4K GBZ	6FSC4K	600-7-4RT	3/8	1/4	1.48	.76	1.19	3/4	.28
6-6K GBZ	6FSC6K	600-7-6RT	3/8	3/8	1.54	.76	1.25	7/8	.28
6-8K GBZ	6FSC8K	600-7-8RT	3/8	1/2	1.73	.76	1.44	1-1/16	.28
8-4K GBZ	8FSC4K	810-7-4RT	1/2	1/4	1.59	.87	1.19	13/16	.406
8-6K GBZ	8FSC6K	810-7-6RT	1/2	3/8	1.65	.87	1.25	7/8	.406
8-8K GBZ	8FSC8K	810-7-8RT	1/2	1/2	1.84	.87	1.44	1-1/16	.406



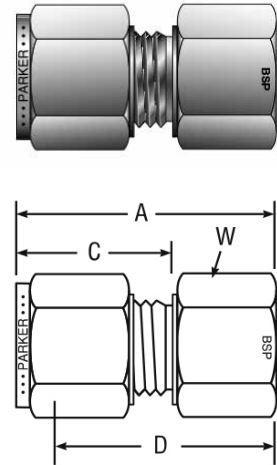
Please Note: Dimensions for reference only, subject to change.

CPI™ / A-LOK®

TUBE TO FEMALE PIPE

BSP Taper female connector for metric tube

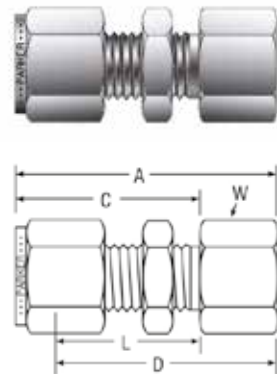
#	#	Inter changes with			A	C	D	W
CPI™	A-LOK®		mm	BSPT	mm	mm	mm	mm
GBZ 3-1/8K	M3FSC1/8K	3MO-7-2RT	3.0	1/8	29.2	15.3	22.6	14.0
GBZ 6-1/8K	M6FSC1/8K	6MO-7-2RT	6.0	1/8	31.3	17.7	23.8	14.0
GBZ 6-1/4K	M6FSC1/4K	6MO-7-4RT	6.0	1/4	35.8	17.7	28.3	19.0
GBZ 6-3/8K	M6FSC3/8K	6MO-7-6RT	6.0	3/8	37.6	17.7	30.1	22.0
GBZ 6-1/2K	M6FSC1/2K	6MO-7-8RT	6.0	1/2	42.5	17.7	35.0	27.0
GBZ 8-1/8K	M8FSC1/8K	8MO-7-2RT	8.0	1/8	32.8	18.6	25.3	15.0
GBZ 8-1/4K	M8FSC1/4K	8MO-7-4RT	8.0	1/4	37.0	18.6	29.5	19.0
GBZ 8-3/8K	M8FSC3/8K	8MO-7-6RT	8.0	3/8	38.5	18.6	31.0	22.0
GBZ 8-1/2K	M8FSC1/2K	8MO-7-8RT	8.0	1/2	43.4	18.6	35.8	27.0
GBZ 10-1/8K	M10FSC1/8K	10MO-7-2RT	10.0	1/8	33.0	19.5	25.4	18.0
GBZ 10-1/4K	M10FSC1/4K	10MO-7-4RT	10.0	1/4	37.8	19.5	30.2	19.0
GBZ 10-3/8K	M10FSC3/8K	10MO-7-6RT	10.0	3/8	39.4	19.5	31.8	22.0
GBZ 10-1/2K	M10FSC1/2K	10MO-7-8RT	10.0	1/2	44.2	19.5	36.6	27.0
GBZ 12-1/4K	M12FSC1/4K	12MO-7-4RT	12.0	1/4	40.3	22.0	30.2	22.0
GBZ 12-3/8K	M12FSC3/8K	12MO-7-6RT	12.0	3/8	41.9	22.0	31.8	22.0
GBZ 12-1/2K	M12FSC1/2K	12MO-7-8RT	12.0	1/2	46.7	22.0	36.6	27.0
GBZ 16-1/2K	M16FSC1/2K	16MO-7-8RT	16.0	1/2	48.4	22.0	38.3	18.0
GBZ 20-1/2K	M20FSC1/2K	20MO-7-8RT	20.0	1/2	54.7	22.0	44.6	30.0
GBZ 20-3/4K	M20FSC3/4K	20MO-7-12RT	20.0	3/4	49.7	22.0	39.6	35.0
GBZ 22-1K	M22FSC1K	22MO-7-16RT	22.0	1	57.9	22.0	47.8	41.0
GBZ 25-3/4K	M25FSC3/4K	25MO-7-12RT	25.0	3/4	54.3	26.5	42.1	35.0
GBZ 25-1K	M25FSC1K	25MO-7-16RT	25.0	1	61.5	26.5	49.3	41.0



Note: A and C dimensions are typical finger-tight.

NPT Female bulkhead connector for fractional tube

#	#	Inter changes with			A	C	D	L	W
CPI™	A-LOK®		mm		mm	mm	mm	mm	inch
2-2 GH2BZ	2FBC2N	200-71-2	1/8	1/8	1.76	1.23	1.50	0.97	9/16
3-2 GH2BZ	3FBC2N	300-71-2	3/16	1/8	1.79	1.26	1.53	1.00	9/16
4-2 GH2BZ	4FBC2N	400-71-2	1/4	1/8	1.85	1.31	1.56	1.02	5/8
4-4 GH2BZ	4FBC4N	400-71-4	1/4	1/4	2.04	1.31	1.75	1.02	3/4
5-2 GH2BZ	5FBC2N	500-71-2	5/16	1/8	1.96	1.42	1.66	1.12	11/16
5-8 GH2BZ	5FBC8N	500-71-8	5/16	1/2	2.38	1.42	2.08	1.12	1-1/16
6-4 GH2BZ	6FBC4N	600-71-4	3/8	1/4	2.17	1.44	1.88	1.15	3/4
8-6 GH2BZ	8FBC6N	810-71-6	1/2	3/8	2.43	1.65	2.03	1.25	15/16
8-8 GH2BZ	8FBC8N	810-71-8	1/2	1/2	2.62	1.65	2.22	1.25	1-1/16
10-8 GH2BZ	10FBC8N	1010-71-8	5/8	1/2	2.65	1.68	2.25	1.28	1-1/16
12-12 GH2BZ	12FBC12N	1210-71-12	3/4	3/4	2.90	1.87	2.50	1.47	1-3/8
14-12 GH2BZ	14FBC12N	1410-71-12	7/8	3/4	3.18	2.09	2.78	1.69	1-3/8
16-16 GH2BZ	16FBC16N	1610-71-16	1	1	3.68	2.27	3.19	1.78	1-5/8



Note: A and C dimensions are typical finger-tight.



Please Note: Dimensions for reference only, subject to change.

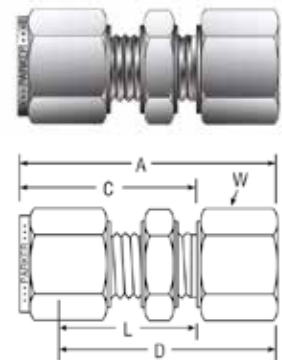
CPI™ / A-LOK®

TUBE TO FEMALE PIPE

NPT Female bulkhead connector for metric tube

#	#	Inter changes with			A	C	D	L	W	B'head hole drill	Max b'head
CPI™	A-LOK®		mm		mm	mm	mm	mm	mm	mm	mm
GH2BZ 6-1/8	M6FBC1/8N	6MO-71-2	6.0	1/8	47.2	33.7	39.7	26.2	16.0	11.5	10.2
GH2BZ 6-1/4	M6FBC1/4N	6MO-71-4	6.0	1/4	52.0	33.7	44.5	26.2	19.0	11.5	10.2
GH2BZ 8-1/8	M8FBC1/8N	8MO-71-2	8.0	1/8	49.6	36.1	42.1	28.5	18.0	13.1	11.2
GH2BZ 10-1/4	M10FBC1/4N	10MO-71-4	10.0	1/4	55.2	37.0	47.6	29.4	19.0	16.3	11.2
GH2BZ 12-3/8	M12FBC3/8N	12MO-71-6	12.0	3/8	60.9	41.9	50.8	31.8	24.0	19.5	12.7
GH2BZ 12-1/2	M12FBC1/2N	12MO-71-8	12.0	1/2	66.4	41.9	56.3	31.8	27.0	19.5	12.7

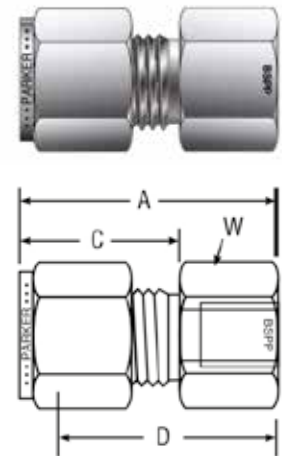
Note: A and C dimensions are typical finger-tight.



BSPP Gauge connector for fractional tube

#	#	Inter changes with			A	C	D	W	Bore
CPI™	A-LOK®		inch		inch	inch	inch	inch	inch
4-4GC GBZ	4FSC4GC	400-7-4RG	1/4	1/4	1.48	.70	1.19	3/4	.19
4-6GC GBZ	4FSC6GC	400-7-6RG	1/4	3/8	1.48	.70	1.19	7/8	.19
4-8GC GBZ	4FSC8GC	400-7-8RG	1/4	1/2	1.70	.70	1.41	1-1/16	.19
5-4GC GBZ	5FSC4GC	500-7-4RG	5/16	1/4	1.51	.73	1.22	3/4	.21
5-8GC GBZ	5FSC8GC	500-7-8RG	5/16	1/2	1.59	.73	1.30	1-1/16	.28
6-4GC GBZ	6FSC4GC	600-7-4RG	3/8	1/4	1.55	.76	1.25	3/4	.21
6-6GC GBZ	6FSC6GC	600-7-6RG	3/8	3/8	1.55	.76	1.25	7/8	.26
8-4GC GBZ	8FSC4GC	810-7-4RG	1/2	1/4	1.65	.86	1.25	13/16	.21
8-6GC GBZ	8FSC6GC	810-7-6RG	1/2	3/8	1.75	.86	1.35	7/8	.26
8-8GC GBZ	8FSC8GC	810-7-8RG	1/2	1/2	1.90	.86	1.50	1-1/16	.28

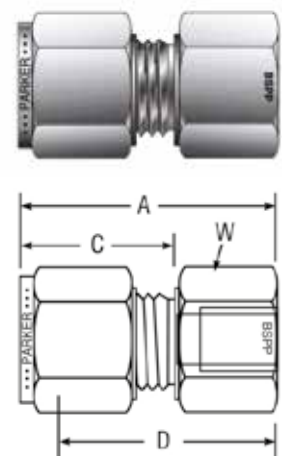
Note: A and C dimensions are typical finger-tight.



BSPP Gauge connector for metric tube

#	#	Inter changes with			A	C	D	W
CPI™	A-LOK®		mm		mm	mm	mm	inch
GBZ 3-1/4GC	M3GC1/4R	3MO-7-4RG	3.0	1/4	35.3	15.3	28.7	19.0
GBZ 6-1/4GC	M6GC1/4R	6MO-7-4RG	6.0	1/4	37.7	17.7	30.2	19.0
GBZ 6-3/8GC	M6GC3/8R	6MO-7-6RG	6.0	3/8	37.7	17.7	30.2	22.0
GBZ 6-1/2GC	M6GC1/2R	6MO-7-8RG	6.0	1/2	43.2	17.7	35.7	27.0
GBZ 8-1/4GC	M8GC1/4R	8MO-7-4RG	8.0	1/4	38.5	18.6	31.0	19.0
GBZ 8-3/8GC	M8GC3/8R	8MO-7-6RG	8.0	3/8	40.8	18.6	33.3	22.0
GBZ 8-1/2GC	M8GC1/2R	8MO-7-8RG	8.0	1/2	44.0	18.6	36.5	27.0
GBZ 10-1/4GC	M10GC1/4R	10MO-7-4RG	10.0	1/4	39.4	19.5	31.8	19.0
GBZ 10-3/8GC	M10GC3/8R	10MO-7-6RG	10.0	3/8	38.8	19.5	31.2	22.0
GBZ 10-1/2GC	M10GC1/2R	10MO-7-8RG	10.0	1/2	41.3	19.5	33.7	27.0
GBZ 12-1/4GC	M12GC1/4R	12MO-7-4RG	12.0	1/4	41.9	22.0	31.8	22.0
GBZ 12-3/8GC	M12GC3/8R	12MO-7-6RG	12.0	3/8	44.4	22.0	34.3	22.0
GBZ 12-1/2GC	M12GC1/2R	12MO-7-8RG	12.0	1/2	48.2	22.0	38.1	27.0

Note: A and C dimensions are typical finger-tight.

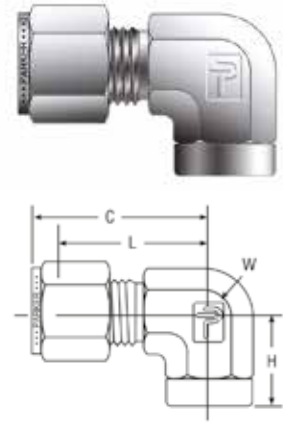


Please Note: Dimensions for reference only, subject to change.

NPT Female elbow for fractional tube

#	#	Inter changes with			C	H	L	W
CPI™	A-LOK®		inch		inch	inch	inch	inch
1-1 DBZ	1FEL1N	100-8-1	1/16	1/16	0.75	0.50	0.60	7/16
1-2 DBZ	1FEL2N	100-8-2	1/16	1/8	0.79	0.75	0.64	9/16
2-2 DBZ	2FEL2N	200-8-2	1/8	1/8	0.97	0.75	0.71	9/16
2-4 DBZ	2FEL4N	200-8-4	1/8	1/4	1.10	0.88	0.84	3/4
3-2 DBZ	3FEL2N	300-8-2	3/16	1/8	1.00	0.75	0.74	9/16
4-2 DBZ	4FEL2N	400-8-2	1/4	1/8	1.06	0.75	0.77	9/16
4-4 DBZ	4FEL4N	400-8-4	1/4	1/4	1.20	0.88	0.91	11/16
4-6 DBZ	4FEL6N	400-8-6	1/4	3/8	1.25	0.88	0.96	13/16
4-8 DBZ	4FEL8N	400-8-8	1/4	1/2	1.36	1.13	1.07	1
5-2 DBZ	5FEL2N	500-8-2	5/16	1/8	1.13	0.75	0.84	9/16
5-4 DBZ	5FEL4N	500-8-4	5/16	1/4	1.24	0.88	0.94	11/16
6-2 DBZ	6FEL2N	600-8-2	3/8	1/8	1.20	0.75	0.91	5/8
6-4 DBZ	6FEL4N	600-8-4	3/8	1/4	1.26	0.88	0.97	11/16
6-6 DBZ	6FEL6N	600-8-6	3/8	3/8	1.31	0.88	1.02	13/16
6-8 DBZ	6FEL8N	600-8-8	3/8	1/2	1.42	1.13	1.13	1
8-4 DBZ	8FEL4N	810-8-4	1/2	1/4	1.42	0.88	1.02	13/16
8-6 DBZ	8FEL6N	810-8-6	1/2	3/8	1.42	0.88	1.02	13/16
8-8 DBZ	8FEL8N	810-8-8	1/2	1/2	1.53	1.13	1.13	1
10-6 DBZ	10FEL6N	1010-8-6	5/8	3/8	1.50	0.88	1.10	15/16
10-8 DBZ	10FEL8N	1010-8-8	5/8	1/2	1.57	1.13	1.17	1-1/16
12-8 DBZ	12FEL8N	1210-8-8	3/4	1/2	1.57	1.13	1.17	1-1/16
12-12 DBZ	12FEL12N	1210-8-12	3/4	3/4	1.76	1.25	1.36	1-3/8
14-12 DBZ	14FEL12N	1410-8-12	7/8	3/4	1.76	1.25	1.36	1-3/8
16-12 DBZ	16FEL12N	1610-8-12	1	3/4	1.93	1.25	1.45	1-3/8
16-16 DBZ	16FEL16N	1610-8-16	1	1	2.02	1.50	1.53	1-5/8

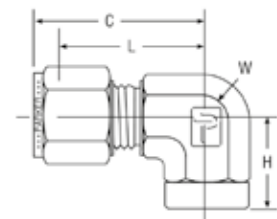
Note: C dimensions are typical finger-tight.



NPT Female elbow for metric tube

#	#	Inter changes with			C	H	L	W
CPI™	A-LOK®		mm		mm	mm	mm	inch
DBZ 6-1/8	M6FEL1/8N	6MO-8-2	6.0	1/8	27.0	19.0	19.6	1/2
DBZ 6-1/4	M6FEL1/4N	6MO-8-4	6.0	1/4	29.8	22.4	22.4	11/16
DBZ 8-1/8	M8FEL1/8N	8MO-8-2	8.0	1/8	22.8	19.1	21.3	9/16
DBZ 8-1/4	M8FEL1/4N	8MO-8-4	8.0	1/4	30.6	22.4	23.1	11/16
DBZ 10-1/4	M10FEL1/4N	10MO-8-4	10.0	1/4	33.5	22.4	25.9	13/16
DBZ 10-3/8	M10FEL3/8N	10MO-8-6	10.0	3/8	33.5	22.4	25.9	13/16
DBZ 10-1/2	M10FEL1/2N	10MO-8-8	10.0	1/2	36.3	28.5	28.7	1
DBZ 12-1/4	M12FEL1/4N	12MO-8-4	12.0	1/4	36.0	22.4	25.9	13/16
DBZ 12-3/8	M12FEL3/8N	12MO-8-6	12.0	3/8	36.0	22.4	25.9	13/16
DBZ 12-1/2	M12FEL1/2N	12MO-8-8	12.0	1/2	38.8	28.4	28.7	1
DBZ 16-3/8	M12FEL3/8N	16MO-8-6	16.0	3/8	39.5	23.6	29.7	1-1/16
DBZ 16-1/2	M12FEL1/2N	16MO-8-8	16.0	1/2	39.5	28.4	29.7	1-1/16

Note: C dimensions are typical finger-tight.



Please Note: Dimensions for reference only, subject to change.

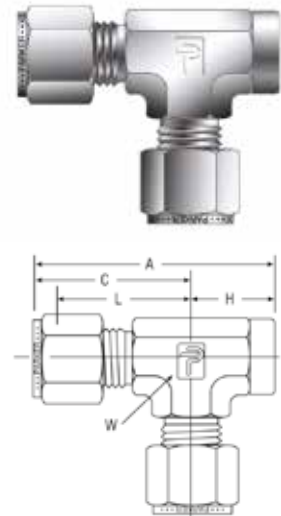
CPI™ / A-LOK®

TUBE TO FEMALE PIPE

NPT Female run tee for fractional tube

#	#	Inter changes with			A	C	H	L	W
CPI™	A-LOK®		inch		inch	inch	inch	inch	inch
2-2-2 MBZ	2FRT2N	200-3-2TFT	1/8	1/8	1.72	0.96	0.75	0.70	1/2
3-2-3 MBZ	3FRT2N	300-3-2TFT	3/16	1/8	1.76	1.01	0.75	0.74	1/2
4-2-4 MBZ	4FRT2N	400-3-2TFT	1/4	1/8	1.81	1.06	0.75	0.77	1/2
4-4-4 MBZ	4FRT4N	400-3-4TFT	1/4	1/4	2.05	1.17	0.88	0.88	11/16
5-2-5 MBZ	5FRT2N	500-3-2TFT	5/16	1/8	1.92	1.17	0.75	0.88	5/8
6-4-6 MBZ	6FRT4N	600-3-4TFT	3/8	1/4	2.11	1.23	0.88	0.94	11/16
8-4-8 MBZ	8FRT4N	810-3-4TFT	1/2	1/4	2.56	1.42	0.88	1.02	13/16
8-6-8 MBZ	8FRT6N	810-3-6TFT	1/2	3/8	2.30	1.42	0.88	1.02	7/8
8-8-8 MBZ	8FRT8N	810-3-8TFT	1/2	1/2	2.66	1.53	1.13	1.13	1
10-8-10 MBZ	10FRT8N	1010-3-8TFT	5/8	1/2	2.70	1.57	1.13	1.17	1-1/16
12-12-12 MBZ	12FRT12N	1210-3-12TFT	3/4	3/4	3.01	1.76	1.25	1.36	1-3/8
14-8-14 MBZ	14FRT8N	1410-3-8TFT	7/8	1/2	3.01	1.76	1.25	1.36	1-3/8
14-12-14 MBZ	14FRT12N	1410-3-12TFT	7/8	3/4	3.01	1.76	1.25	1.36	1-3/8
16-12-16 MBZ	16FRT12N	1610-3-12TFT	1	3/4	3.18	1.93	1.25	1.45	1-3/8
16-16-16 MBZ	16FRT16N	1610-3-16TFT	1	1	3.52	2.02	1.50	1.65	1-5/8

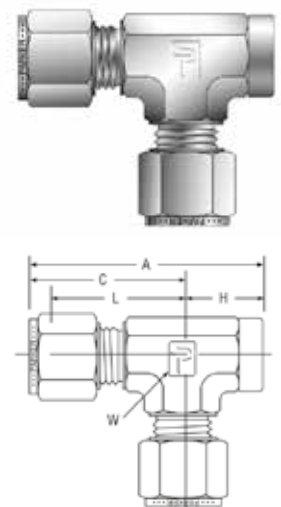
Note: A and C dimensions are typical finger-tight.



NPT Female run tee for metric tube

#	#	Inter changes with			A	C	H	L	W
CPI™	A-LOK®		mm		mm	mm	mm	mm	Inch
MBZ 6-1/8-6	M6FRT1/8N	6MO-3TFT	6.0	1/8	46.0	27.0	19.0	19.6	1/2
MBZ 6-1/4-6	M6FRT1/4N	6MO-3-4TFT	6.0	1/4	52.1	29.8	22.4	22.4	11/16
MBZ 6-1/8-6	M8FRT1/8N	8MO-3TFT	8.0	1/8	48.9	29.9	19.0	22.4	5/8
MBZ 10-1/4-10	M10FRT1/4N	10MO-3TFT	10.0	1/4	55.9	33.5	22.4	25.9	13/16
MBZ 12-1/4-12	M12FRT1/4N	12MO-3-4TFT	12.0	1/4	58.4	36.0	22.4	25.9	13/16
MBZ 12-3/8-12	M12FRT3/8N	12MO-3TFT	12.0	3/8	58.4	36.0	22.4	25.9	13/16
MBZ 12-1/2-12	M12FRT1/2N	12MO-3-8TFT	12.0	1/2	67.3	38.8	28.5	28.7	1
MBZ 16-1/2-16	M16FRT1/2N	16MO-3TFT	16.0	1/2	68.2	39.8	28.4	29.7	1-1/16

Note: A and C dimensions are typical finger-tight.



Please Note: Dimensions for reference only, subject to change.

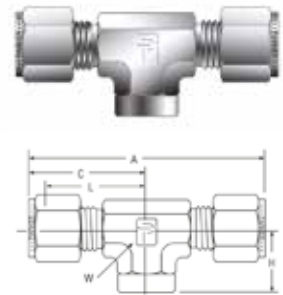
CPI™ / A-LOK®

TUBE TO FEMALE PIPE

NPT Female branch tee for fractional tube

#	#	Inter changes with			A	C	H	L	W
CPI™	A-LOK®		inch		inch	inch	inch	inch	inch
2-2-2 OBZ	2FBT2N	200-3-2TTF	1/8	1/8	1.91	1.01	0.75	0.70	1/2
3-3-2 OBZ	3FBT2N	300-3-2TTF	3/16	1/8	2.02	1.01	0.75	0.74	1/2
4-4-2 OBZ	4FBT2N	400-3-2TTF	1/4	1/8	2.12	1.06	0.75	0.77	1/2
4-4-4 OBZ	4FBT4N	400-3-4TTF	1/4	1/4	2.34	1.17	0.88	0.88	11/16
5-5-2 OBZ	5FBT2N	500-3-2TTF	5/16	1/8	2.34	1.17	0.75	0.88	5/8
6-6-4 OBZ	6FBT4N	600-3-4TTF	3/8	1/4	2.46	1.23	0.88	0.94	11/16
8-8-4 OBZ	8FBT4N	810-3-4TTF	1/2	1/4	2.84	1.42	0.88	1.02	13/16
8-8-6 OBZ	8FBT6N	810-3-6TTF	1/2	3/8	2.84	1.42	0.88	1.02	7/8
8-8-8 OBZ	8FBT8N	810-3-8TTF	1/2	1/2	3.06	1.53	1.13	1.13	1
10-10-8 OBZ	10FBT8N	1010-3-8TTF	5/8	1/2	3.06	1.53	1.13	1.13	1
12-12-12 OBZ	12FBT12N	1210-3-12TTF	3/4	3/4	3.52	1.76	1.25	1.36	1-3/8
14-14-12 OBZ	14FBT12N	1410-3-12TTF	7/8	3/4	3.52	1.76	1.25	1.36	1-3/8
16-16-12 OBZ	16FBT12N	1610-3-12TTF	1	3/4	3.86	1.94	1.25	1.45	1-3/8
16-16-16 OBZ	16FBT16N	1610-3-16TTF	1	1	4.28	2.14	1.50	1.65	1-5/8

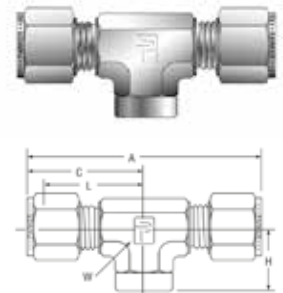
Note: A and C dimensions are typical finger-tight.



NPT Female branch tee for metric tube

#	#	Inter changes with			A	C	H	L	W
CPI™	A-LOK®		mm		mm	mm	mm	mm	inch
OBZ 6-6-1/8	M6FBT1/8N	6MO-3TTF	6.0	1/8	53.9	27.0	19.0	19.6	1/2
OBZ 6-6-1/4	M6FBT1/4N	6MO-3-4TTF	6.0	1/4	59.5	29.5	22.4	22.4	11/16
OBZ 8-8-1/8	M8FBT1/8N	8MO-3TTF	8.0	1/8	59.7	29.9	19.0	22.4	5/8
OBZ 10-10-1/4	M10FBT1/4N	10MO-3TTF	10.0	1/4	67.0	33.5	22.4	25.9	13/16
OBZ 12-12-1/8	M12FBT1/8N	12MO-3TTF	12.0	1/8	72.0	36.0	22.3	25.9	13/16
OBZ 12-12-1/4	M12FBT1/4N	12MO-3-4TTF	12.0	1/4	72.0	36.0	22.3	25.9	13/16
OBZ 12-12-3/8	M12FBT3/8N	12MO-3TTF	12.0	3/8	72.0	36.0	22.4	25.9	13/16
OBZ 12-12-1/2	M12FBT1/2N	12MO-3-8TTF	12.0	1/2	77.6	38.8	28.5	28.7	1
OBZ 16-16-1/2	M16FBT1/2N	16MO-3-8TTF	16.0	1/2	77.6	38.8	28.4	28.7	1

Note: C dimensions are typical finger-tight.



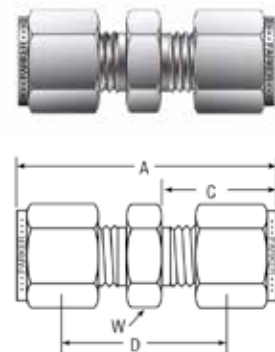
Please Note: Dimensions for reference only, subject to change.

CPI™ / A-LOK®

TUBE TO TUBE UNIONS

Union for fractional tube

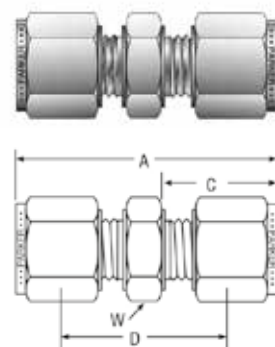
#	#	Inter changes with		A	C	D	W
CPI™	A-LOK®		inch	inch	inch	inch	inch
1-1 HBZ	1SC1	100-6	1/16	0.99	0.43	0.69	5/16
2-2 HBZ	2SC2	200-6	1/8	1.39	0.60	0.88	7/16
3-3 HBZ	3SC3	300-6	3/16	1.48	0.64	0.95	7/16
4-4 HBZ	4SC4	400-6	1/4	1.62	0.70	1.03	1/2
5-5 HBZ	5SC5	500-6	5/16	1.70	0.73	1.11	9/16
6-6 HBZ	6SC6	600-6	3/8	1.77	0.76	1.19	5/8
8-8 HBZ	8SC8	810-6	1/2	2.02	0.87	1.22	13/16
10-10 HBZ	10SC10	1010-6	5/8	2.05	0.87	1.25	15/16
12-12 HBZ	12SC12	1210-6	3/4	2.11	0.87	1.31	1-1/16
14-14 HBZ	14SC14	1410-6	7/8	2.18	0.87	1.36	1-3/16
16-16 HBZ	16SC16	1610-6	1	2.57	1.05	1.59	1-3/8
20-20 HBZ	20SC20	2010-6	1-1/4	3.61	1.52	1.89	1-3/4
24-24 HBZ	24SC24	2410-6	1-1/2	4.23	1.77	2.11	2-1/8
32-32 HBZ	32SC32	3210-6	2	5.88	2.47	2.94	2-3/4



Note: A and C dimensions are typical finger-tight.

Union for metric tube

#	#	Inter changes with		A	C	D	W
CPI™	A-LOK®		mm	mm	mm	mm	mm
HBZ 2-2	SCM2	2MO-6	2.0	35.6	15.3	22.4	12.0
HBZ 3-3	SCM3	3MO-6	3.0	35.3	15.3	22.1	12.0
HBZ 4-4	SCM4	4MO-6	4.0	37.4	16.1	24.2	12.0
HBZ 6-6	SCM6	6MO-6	6.0	41.2	17.7	26.2	14.0
HBZ 8-8	SCM8	8MO-6	8.0	43.2	18.6	28.2	15.0
HBZ 10-10	SCM10	10MO-6	10.0	46.2	19.5	31.0	18.0
HBZ 12-12	SCM12	12MO-6	12.0	51.2	22.0	31.0	22.0
HBZ 14-14	SCM14	14MO-6	14.0	52.0	22.0	31.8	24.0
HBZ 15-15	SCM15	15MO-6	15.0	52.0	22.0	31.8	24.0
HBZ 16-16	SCM16	16MO-6	16.0	52.0	22.0	31.8	24.0
HBZ 18-18	SCM18	18MO-6	18.0	53.5	22.0	33.3	27.0
HBZ 20-20	SCM20	20MO-6	20.0	55.0	22.0	34.8	30.0
HBZ 22-22	SCM22	22MO-6	22.0	55.0	22.0	24.8	30.0
HBZ 25-25	SCM25	25MO-6	25.0	65.1	26.5	40.5	35.0



Note: A and C dimensions are typical finger-tight.

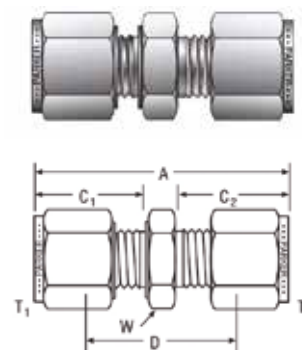


Please Note: Dimensions for reference only, subject to change.

Conversion Union - Metric tube to inch tube

#	#	Inter changes with			A	C ₁	C ₂	D	W
			T ₁ mm	T ₂ inch					
HBZ 3-1/8	M3CU2	3MO-6-2	3.0	1/8	36.3	15.3	15.3	22.6	12.0
HBZ 4-1/8	M4CU2	4MO-6-2	4.0	1/8	36.5	16.1	15.3	23.6	12.0
HBZ 4-1/4	M4CU4	4MO-6-4	4.0	1/4	39.3	16.1	17.7	26.4	14.0
HBZ 6-1/8	M6CU2	6MO-6-2	6.0	1/8	38.5	17.7	15.3	24.6	14.0
HBZ 6-1/4	M6CU4	6MO-6-4	6.0	1/4	41.1	17.7	17.7	25.9	14.0
HBZ 6-5/16	M6CU5	6MO-6-5	6.0	5/16	42.3	17.7	18.8	27.2	14.0
HBZ 8-1/4	M8CU4	8MO-6-4	8.0	1/4	42.3	18.6	17.7	27.2	15.0
HBZ 8-3/8	M8CU6	8MO-6-6	8.0	3/8	44.0	18.6	19.3	29.1	15.0
HBZ 10-1/8	M10CU2	10MO-6-2	10.0	1/8	41.8	19.5	15.3	27.9	18.0
HBZ 10-1/4	M10CU4	10MO-6-4	10.0	1/4	44.5	19.5	17.7	29.2	18.0
HBZ 10-3/8	M10CU6	10MO-6-6	10.0	3/8	46.0	19.5	19.3	30.7	18.0
HBZ 12-3/8	M12CU6	12MO-6-6	12.0	3/8	48.4	22.0	19.3	30.7	22.0
HBZ 12-1/2	M12CU8	12MO-6-8	12.0	1/2	51.1	22.0	21.8	31.0	22.0
HBZ 15-1/2	M15CU8	15MO-6-8	15.0	1/2	52.0	22.0	21.8	32.0	24.0
HBZ 16-3/8	M16CU6	16MO-6-6	16.0	3/8	52.0	22.0	19.3	34.3	24.0
HBZ 18-3/4	M18CU12	18MO-6-12	18.0	3/4	53.5	22.0	21.8	33.5	27.0

Note: A, C₁ and C₂ dimensions are typical finger-tight.



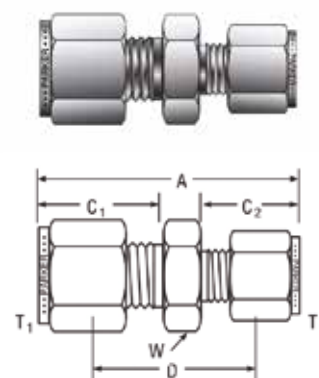
Reducing Union for fractional tube

#	#	Inter changes with			A	C ₁	C ₂	D	W
			T ₁ inch	T ₂ inch					
2-1 HBZ	2RU1	200-6-1	1/8	1/16	1.21	0.60	.43	0.81	7/16
3-1 HBZ	3RU1	300-6-1	3/16	1/16	1.27	0.64	.43	0.86	7/16
3-2 HBZ	3RU2	300-6-2	3/16	1/8	1.44	0.64	.60	0.92	7/16
4-1 HBZ	4RU1	400-6-1	1/4	1/16	1.38	0.70	.43	0.91	1/2
4-2 HBZ	4RU2	400-6-2	1/4	1/8	1.52	0.70	.60	0.97	1/2
4-3 HBZ	4RU3	400-6-3	1/4	3/16	1.55	0.70	.64	1.00	1/2
5-2 HBZ	5RU2	500-6-2	5/16	1/8	1.58	0.73	.60	1.03	9/16
5-4 HBZ	5RU4	500-6-4	5/16	1/4	1.67	0.73	.70	1.08	9/16
6-1 HBZ	6RU1	600-6-1	3/8	1/16	1.44	0.76	.43	1.00	5/8
6-2 HBZ	6RU2	600-6-2	3/8	1/8	1.61	0.76	.60	1.06	5/8
6-4 HBZ	6RU4	600-6-4	3/8	1/4	1.71	0.76	.70	1.13	5/8
6-5 HBZ	6RU5	600-6-5	3/8	5/16	1.75	0.76	.73	1.16	5/8
8-2 HBZ	8RU2	810-6-2	1/2	1/8	1.75	0.87	.60	1.09	13/16
8-4 HBZ	8RU4	810-6-4	1/2	1/4	1.85	0.87	.70	1.16	13/16
8-6 HBZ	8RU6	810-6-6	1/2	3/8	1.91	0.87	.76	1.22	13/16
10-6 HBZ	10RU6	1010-6-6	5/8	3/8	1.94	0.87	.76	1.25	15/16
10-8 HBZ	10RU8	1010-6-8	5/8	1/2	2.05	0.87	.87	1.25	15/16
12-4 HBZ	12RU4	1210-6-4	3/4	1/4	1.95	0.87	.76	1.25	1-1/16
12-6 HBZ	12RU6	1210-6-6	3/4	3/8	2.00	0.87	.76	1.31	1-1/16
12-8 HBZ	12RU8	1210-6-8	3/4	1/2	2.11	0.87	.87	1.31	1-1/16
12-10 HBZ	12RU10	1210-6-10	3/4	5/8	2.11	0.87	.87	1.31	1-1/16
16-8 HBZ	16RU8	1610-6-8	1	1/2	2.39	1.05	.87	1.50	1-3/8
16-12 HBZ	16RU12	1610-6-12	1	3/4	2.39	1.05	.87	1.50	1-3/8

Note: A, C₁ and C₂ dimensions are typical finger-tight.



Please Note: Dimensions for reference only, subject to change.

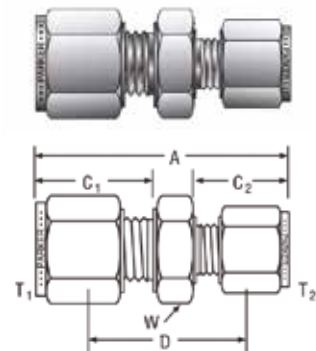


CPI™ / A-LOK®

TUBE TO TUBE UNIONS

Reducing Union for metric tube

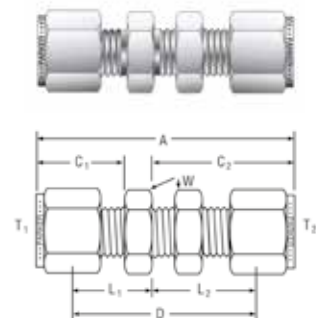
#	#	Inter changes with			A	C ₁	C ₂	D	W
CPI™	A-LOK®		T ₁ mm	T ₂ mm	mm	mm	mm	mm	mm
HBZ 3-2	M3RUM2	3M0-6-2M	3.0	2.0	35.8	15.3	15.3	22.6	12.0
HBZ 6-2	M6RUM2	6M0-6-2M	6.0	2.0	38.7	17.7	15.3	24.6	14.0
HBZ 6-3	M6RUM3	6M0-6-3M	6.0	3.0	38.7	17.7	15.3	24.6	14.0
HBZ 6-4	M6RUM4	6M0-6-4M	6.0	4.0	39.5	17.7	16.1	25.4	14.0
HBZ 8-6	M8RUM6	8M0-6-6M	8.0	6.0	42.4	18.6	17.7	27.4	15.0
HBZ 10-6	M10RUM6	10M0-6-6M	10.0	6.0	44.5	19.5	17.7	29.4	18.0
HBZ 10-8	M10RUM8	10M0-6-8M	10.0	8.0	44.5	19.5	18.6	29.4	18.0
HBZ 12-6	M12RUM6	12M0-6-6M	12.0	6.0	47.0	22.0	17.7	29.4	22.0
HBZ 12-8	M12RUM8	12M0-6-8M	12.0	8.0	47.8	22.0	18.6	30.2	22.0
HBZ 12-10	M12RUM10	12M0-6-10M	12.0	10.0	48.7	22.0	19.5	31.0	22.0
HBZ 16-10	M16RUM10	16M0-6-10M	16.0	10.0	49.5	22.0	19.5	31.8	24.0
HBZ 16-12	M16RUM12	16M0-6-12M	16.0	12.0	52.0	22.0	22.0	31.8	24.0
HBZ 18-12	M18RUM12	18M0-6-12M	18.0	12.0	53.5	22.0	22.0	33.3	27.0
HBZ 25-18	M25RUM18	25M0-6-18M	25.0	18.0	60.5	26.5	22.0	38.1	35.0
HBZ 25-20	M25RUM20	25M0-6-20M	25.0	20.0	62.3	26.5	22.0	39.9	35.0



Note: A, C₁ and C₂ dimensions are typical finger-tight.

Bulkhead Union for fractional tube

#	#	Inter changes with		A	C ₁	C ₂	D	L ₁	L ₂	W	Drill size	Max Thick
CPI™	A-LOK®		inch	inch	inch	inch	inch	inch	inch	inch	inch	inch
1-1 WBZ	1BC1	100-61	1/16	1.23	.43	0.68	0.94	.28	0.53	5/16	13/64	1/8
2-2 WBZ	2BC2	200-61	1/8	2.02	.60	1.23	1.50	.34	0.97	1/2	21/64	1/2
2-4 WBZ	2BC4	400-61-2	1/8 - 1/4	2.17	.60	1.62	1.31	.34	1.02	5/8	29/64	17/32
3-3 WBZ	3BC3	300-61	3/16	2.11	.64	1.26	1.59	.38	1.00	9/16	25/64	1/2
4-2 WBZ	4BC2	200-61-4	1/4 - 1/8	2.18	.70	1.23	1.62	.41	0.97	1/2	21/64	1/2
4-4 WBZ	4BC4	400-61	1/4	2.27	.70	1.31	1.69	.41	1.02	5/8	29/64	17/32
5-5 WBZ	5BC5	500-61	5/16	2.40	.73	1.42	1.81	.44	1.12	11/16	33/64	9/16
6-6 WBZ	6BC6	600-61	3/8	2.46	.76	1.44	1.88	.47	1.16	3/4	37/64	9/16
8-8 WBZ	8BC8	810-61	1/2	2.80	.87	1.65	2.00	.47	1.25	15/16	49/64	19/32
10-10 WBZ	10BC10	1010-61	5/8	2.86	.87	1.68	2.06	.47	1.28	1-1/16	57/64	19/32
12-12 WBZ	12BC12	1210-61	3/4	3.11	.87	1.87	2.31	.47	1.47	1-3/16	1-1/64	25/32
14-14 WBZ	14BC14	1410-61	7/8	3.33	.87	1.09	2.53	.47	1.69	1-3/8	1-9/64	15/16
16-16 WBZ	16BC16	1610-61	1	3.78	1.05	2.27	2.81	.56	1.78	1-5/8	1-21/64	15/16



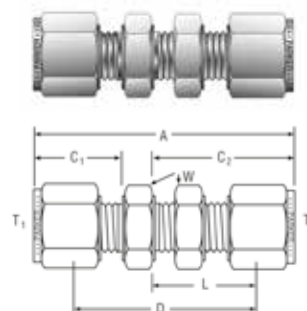
Note: A, C₁ and C₂ dimensions are typical finger-tight.



Please Note: Dimensions for reference only, subject to change.

Bulkhead Union for metric tube

#	#	Inter changes with		A	C ₁	C ₂	D	L ₁	W	Drill size	Max Thick.
CPI™	A-LOK®		mm	mm	mm	mm	mm	mm	mm	mm	mm
WBZ 3-3	BCM3	3MO-61	3.0	51.3	15.3	31.2	38.2	24.6	14.0	8.3	12.7
WBZ 4-4	BCM4	4MO-61	4.0	53.7	16.1	32.0	40.5	25.4	14.0	9.9	12.7
WBZ 6-6	BCM6	6MO-61	6.0	57.9	17.7	33.7	42.9	26.2	16.0	11.5	10.2
WBZ 8-8	BCM8	8MO-61	8.0	61.0	18.6	36.0	46.0	28.5	18.0	13.1	11.2
WBZ 10-10	BCM10	10MO-61	10.0	63.6	19.5	37.0	48.4	29.4	22.0	16.3	11.2
WBZ 12-12	BCM12	12MO-61	12.0	71.0	22.0	41.9	50.8	31.8	24.0	19.5	12.7
WBZ 15-15	BCM15	15MO-61	15.0	72.5	22.0	42.6	52.3	32.5	27.0	22.5	12.7
WBZ 16-16	BCM16	16MO-61	15.0	72.6	22.0	42.6	52.4	32.5	27.0	22.5	12.7
WBZ 18-18	BCM18	18MO-61	18.0	78.9	22.0	47.4	58.7	37.3	30.0	26.0	16.8
WBZ 20-20	BCM20	20MO-61	20.0	88.2	22.0	51.0	68.0	40.9	35.0	19.0	19.0
WBZ 25-25	BCM25	25MO-61	25.0	95.8	26.5	54.4	71.4	42.2	41.0	33.8	24.0



Note: A, C1 and C2 dimensions are typical finger-tight.

Dielectric Union adaptor for fractional tube

Includes nuts, machined tube with molded PEEK¹⁾ insulator, preset ferrule, and dielectric identification ring.

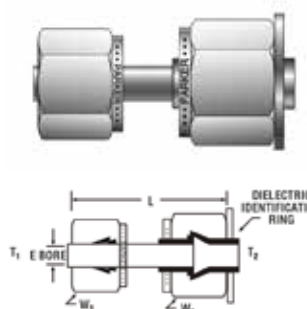
#	#	Tube end		L	E	W ₁	W ₂	Pressure rating 70°F
CPI™	A-LOK®	T ₁	T ₂	inch	inch	inch	inch	Liquid/gas (psi)
6-8 DEBTA-SS	6-8 DELTA	3/8	1/2	2.08	.30	11/16	7/8	4000 / 3000
8-10 DEBTA-SS	N/A	1/2	5/8	2.58	.38	7/8	1	3000 / 2000

*Other end connectors available upon request.

¹⁾ Polyether Ketone

Note: Makeup instructions included with parts in box when ordered as an Adaptor only.

Dielectric resistivity 10x10⁹ OHMS @ 500 volts DC (Tested on Mil-STD-202F)
Dielectric withstanding voltage less than 100 microamps leakage @ 1500 volts AC



Ambient temperature °F	-40	-20	0	20	40	60	80	100	120	140	160	180	200
Temperature derating factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.86	0.79	0.72	0.64	0.56



Please Note: Dimensions for reference only, subject to change.

CPI™ / A-LOK®

TUBE TO TUBE UNIONS

Dielectric assembly for fractional tube

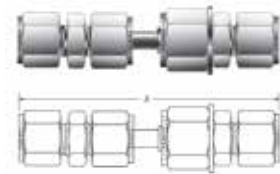
Includes dielectric union adaptor with assembled tube fitting unions

# CPI™	# A-LOK®	†A inch	End adaptors
4H DEBTA	4H DELTA	4.08	6RU4/8RU4
6H DEBTA	6H DELTA	4.20	6RU6/8RU6
8H DEBTA	8H DELTA	4.79	8RU8/10RU8

Female pipe	Female pipe	†A	End adaptors
4G DEBTA	4G DELTA	3.59	6FSC4N/8FSC4N
6G DEBTA	6G DELTA	3.71	6FSC6N/8FSC6N
8G DEBTA	8G DELTA	4.40	8FSC8N/10FSC8N

Male pipe	Male pipe	†A	End adaptors
4F DEBTA	4F DELTA	3.80	6MSC4N/8MSC4N
6F DEBTA	6F DELTA	3.80	6MSC6N/8MSC6N
8F DEBTA	8F DELTA	4.58	8MSC8N/10MSC8N

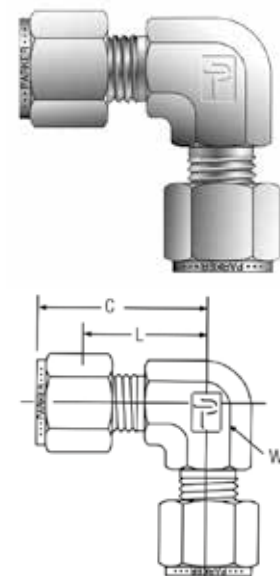
† Finger tight assembly dimensions.



Union elbow for fractional tube

# CPI™	# A-LOK®	Inter changes with	 inch	C inch	L inch	W inch
1-1 EBZ	1EE1	100-9	1/16	.70	.55	3/8
2-2 EBZ	2EE2	200-9	1/8	.88	.62	3/8
3-3 EBZ	3EE3	300-9	3/16	1.00	.74	1/2
4-4 EBZ	4EE4	400-9	1/4	1.06	.77	1/2
5-5 EBZ	5EE5	500-9	5/16	1.13	.84	9/16
6-6 EBZ	6EE6	600-9	3/8	1.20	.91	5/8
8-8 EBZ	8EE8	810-9	1/2	1.42	1.02	13/16
10-10 EBZ	10EE10	1010-9	5/8	1.50	1.10	15/16
12-12 EBZ	12EE12	1210-9	3/4	1.57	1.17	1-1/16
14-14 EBZ	14EE14	1410-9	7/8	1.76	1.36	1-3/8
16-16 EBZ	16EE16	1610-9	1	1.93	1.45	1-3/8
20-20 EBZ	20EE20	2010-9	1-1/4	2.61	1.75	1-5/8
24-24 EBZ	24EE24	2410-9	1-1/2	3.06	2.00	1-7/8
32-32 EBZ	32EE32	3210-9	2	4.22	2.75	2-13/16

Note: C dimensions are typical finger-tight.



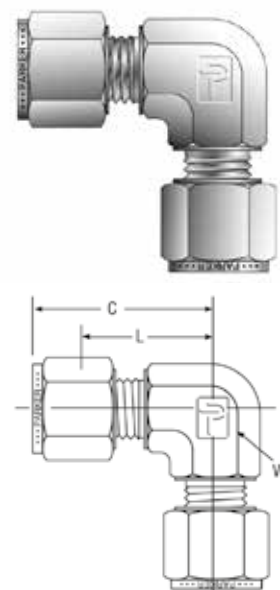
Please Note: Dimensions for reference only, subject to change.

CPI™ / A-LOK® TUBE TO TUBE UNIONS

Union elbow for metric tube

#	#	Inter changes with		C	L	W
CPI™	A-LOK®		mm	mm	mm	inch
EBZ 3-3	EEM3	3MO-9	3.0	22.3	15.7	3/8
EBZ 4-4	EEM4	4MO-9	4.0	25.4	18.8	1/2
EBZ 6-6	EEM6	6MO-9	6.0	27.0	19.6	1/2
EBZ 8-8	EEM8	8MO-9	8.0	28.8	21.3	9/16
EBZ 10-10	EEM10	10MO-9	10.0	31.5	23.9	11/16
EBZ 12-12	EEM12	12MO-9	12.0	36.0	25.9	13/16
EBZ 14-14	EEM14	14MO-9	14.0	38.1	28.0	15/16
EBZ 16-16	EEM16	16MO-9	16.0	38.0	27.9	15/16
EBZ 18-18	EEM18	18MO-9	18.0	39.8	29.7	1-1/16
EBZ 20-20	EEM20	20MO-9	20.0	44.6	34.5	1-3/8
EBZ 22-22	EEM22	22MO-9	22.0	44.6	34.5	1-3/8
EBZ 25-25	EEM25	25MO-9	25.0	49.1	36.8	1-3/8

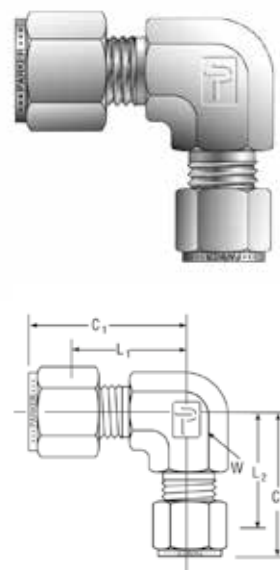
Note: C dimensions are typical finger-tight.



Drop size elbows for fractional tube

#	#	Inter changes with		L ₁	C ₁	L ₂	C ₁	W
CPI™	A-LOK®		inch	inch	inch	inch	inch	inch
3-2 EBZ	3-2 ELZ	300-9-2	3/16-1/8	0.74	1.01	0.70	0.96	1/2
4-2 EBZ	4-2 ELZ	400-9-2	1/4-1/8	0.77	1.06	0.70	0.96	1/2
5-2 EBZ	5-2 ELZ	500-9-2	5/16-1/8	0.88	1.17	0.78	1.04	5/8
5-4 EBZ	5-4 ELZ	500-9-4	5/16-1/4	0.88	1.17	0.85	1.14	5/8
6-2 EBZ	5-4 ELZ	600-9-2	3/8-1/8	0.91	1.20	0.78	1.04	5/8
6-4 EBZ	6-4 ELZ	600-9-4	3/8-1/4	0.91	1.20	0.85	1.17	5/8
6-5 EBZ	6-5 ELZ	600-9-5	3/8-5/16	0.91	1.20	0.88	1.17	5/8
8-4 EBZ	8-4 ELZ	810-9-4	1/2-1/4	1.02	1.42	0.96	1.25	13/16
8-5 EBZ	8-5 ELZ	810-9-5	1/2-5/16	1.02	1.42	0.99	1.28	13/16
8-6 EBZ	8-6 ELZ	810-9-6	1/2-3/8	1.02	1.42	1.02	1.31	13/16
10-6 EBZ	10-6 ELZ	1010-9-6	5/8-2/8	1.10	1.50	1.10	1.39	15/16
10-8 EBZ	10-8 ELZ	1010-9-8	5/8-1/2	1.10	1.50	1.10	1.50	15/16
12-4 EBZ	12-4 ELZ	1210-9-4	3/4-1/4	1.16	1.56	1.10	1.39	1-1/16
12-6 EBZ	12-6 ELZ	1210-9-6	3/4-3/8	1.16	1.56	1.16	1.45	1-1/16
12-8 EBZ	12-8 ELZ	1210-9-8	3/4-1/2	1.16	1.56	1.16	1.56	1-1/16
14-4 EBZ	14-4 ELZ	1410-9-4	7/8-1/4	1.36	1.76	1.30	1.59	1-3/8
16-8 EBZ	16-8 ELZ	1610-9-8	1-1/2	1.45	1.94	1.36	1.76	1-3/8
16-12 EBZ	16-12 ELZ	1610-9-12	1-3/4	1.45	1.94	1.36	1.76	1-3/8

Note: C dimensions are typical finger-tight.



Please Note: Dimensions for reference only, subject to change.

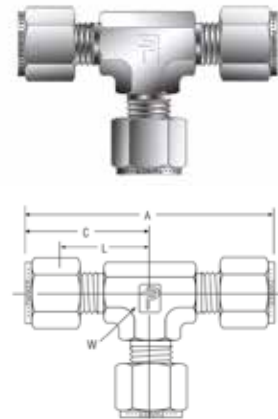
CPI™ / A-LOK®

TUBE TO TUBE UNIONS

Union tee for fractional tube

#	#	Inter changes with		A	C	L	W
CPI™	A-LOK®		inch	inch	inch	inch	inch
1-1-1 JBZ	1ET1	100-3	1/16	1.42	0.71	0.56	3/8
2-2-2 JBZ	2ET2	200-3	1/8	1.76	0.88	0.62	3/8
3-3-3 JBZ	3ET3	300-3	3/16	1.96	0.96	0.70	7/16
4-4-4 JBZ	4ET4	400-3	1/4	2.12	1.06	0.77	1/2
5-5-5 JBZ	5ET5	500-3	5/16	2.34	1.17	0.88	5/8
6-6-6 JBZ	6ET6	600-3	3/8	2.40	1.20	0.91	5/8
8-8-8 JBZ	8ET8	810-3	1/2	2.84	1.42	1.02	13/16
10-10-10 JBZ	10ET10	1010-3	5/8	3.06	1.53	1.13	1
12-12-12 JBZ	12ET12	1210-3	3/4	3.14	1.57	1.16	1-1/16
14-14-14 JBZ	14ET14	1410-3	7/8	3.52	1.76	1.36	1-3/8
16-16-16 JBZ	16ET16	1610-3	1	3.86	1.93	1.45	1-3/8
20-20-20 JBZ	20ET20	2010-3	1-1/4	5.22	2.61	1.75	1-5/8
24-24-24 JBZ	24ET24	2410-3	1-1/2	6.12	3.06	2.00	1-7/8
32-32-32 JBZ	32ET32	3210-3	2	8.44	4.22	2.75	2-13/16

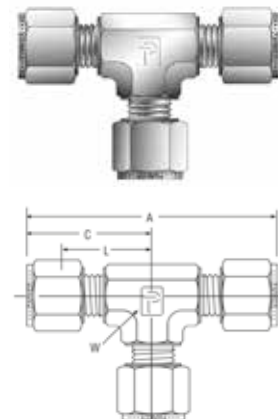
Note: A and C dimensions are typical finger-tight.



Union tee for metric tube

#	#	Inter changes with		A	C	L	W
CPI™	A-LOK®		mm	mm	mm	mm	inch
JBZ 2-2-2	ETM2	2MO-3	2.0	44.7	22.3	15.7	3/8
JBZ 3-3-3	ETM3	3MO-3	3.0	44.7	22.3	15.7	3/8
JBZ 4-4-4	ETM4	4MO-3	4.0	50.8	25.4	18.8	1/2
JBZ 6-6-6	ETM6	6MO-3	6.0	53.9	27.0	19.6	1/2
JBZ 8-8-8	ETM8	8MO-3	8.0	59.7	29.9	22.4	5/8
JBZ 10-10-10	ETM10	10MO-3	10.0	63.0	31.5	23.9	11/16
JBZ 12-12-12	ETM12	12MO-3	12.0	72.0	36.0	25.9	13/16
JBZ 14-14-14	ETM14	14MO-3	14.0	77.6	38.8	28.7	1
JBZ 15-15-15	ETM15	15MO-3	15.0	77.6	38.8	28.7	1
JBZ 16-16-16	ETM16	16MO-3	16.0	77.6	38.8	28.7	1
JBZ 18-18-18	ETM18	18MO-3	18.0	79.5	38.8	29.7	1-1/16
JBZ 20-20-20	ETM20	20MO-3	20.0	89.3	44.6	34.5	1-3/8
JBZ 22-22-22	ETM22	22MO-3	22.0	89.3	44.6	34.5	1-3/8
JBZ 25-25-25	ETM25	22MO-35	25.0	98.3	49.1	36.8	1-3/8

Note: A and C dimensions are typical finger-tight.



Please Note: Dimensions for reference only, subject to change.

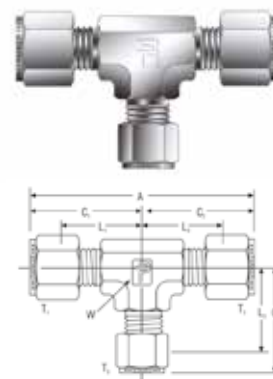
CPI™ / A-LOK®

TUBE TO TUBE UNIONS

Drop size tees for fractional tube

Eliminates the extra connection when adapting with a tube stub reducer.

#	#	Inter changes with				A	L ₁	C ₁	L ₂	C ₂	L ₃	C ₃	W
			T ₁ inch	T ₂ inch	T ₃ inch								
4-4-2 JBZ	4-4-2 JLZ	400-3-4-2	1/4	1/4	1/8	2.10	0.76	1.05	0.76	1.05	0.70	0.96	1/2
6-6-4 JBZ	6-6-4 JLZ	600-3-6-4	3/8	3/8	1/4	2.40	0.91	1.20	0.91	1.20	0.85	1.14	5/8
6-4-6 JBZ	6-4-6 JLZ	600-3-4-6	3/8	1/4	3/8	2.34	0.91	1.20	0.85	1.14	0.91	1.20	5/8
6-4-4 JBZ	6-4-4 JLZ	600-3-4-4	3/8	1/4	1/4	2.34	0.91	1.20	0.85	1.14	0.85	1.14	5/8
8-8-6 JBZ	8-8-6 JLZ	810-3-8-6	1/2	1/2	3/8	2.84	1.02	1.42	1.02	1.42	1.02	1.31	13/16
8-8-4 JBZ	8-8-4 JLZ	810-3-8-4	1/2	1/2	1/4	2.84	1.02	1.42	1.02	1.42	0.96	1.25	13/16
8-6-8 JBZ	8-6-8 JLZ	810-3-6-4	1/2	3/8	1/2	2.73	1.02	1.42	1.02	1.31	1.02	1.42	13/16
8-4-8 JBZ	8-4-8 JLZ	810-3-4-8	1/2	1/4	1/2	2.67	1.02	1.42	0.96	1.25	1.02	1.42	13/16
8-6-6 JBZ	8-6-6 JLZ	810-3-6-6	1/2	3/8	3/8	2.73	1.02	1.42	1.02	1.31	1.02	1.31	13.16
8-4-4 JBZ	8-4-4 JLZ	810-3-4-4	1/2	1/4	1/4	2.67	1.02	1.42	.96	1.25	.96	1.25	13/16
10-10-8 JBZ	10-10-8 JLZ	1010-3-10-8	5/8	5/8	1/2	3.06	1.13	1.53	1.13	1.53	1.13	1.53	7/8
10-10-6 JBZ	10-10-6 JLZ	1010-3-10-6	5/8	5/8	3/8	3.06	1.13	1.53	1.13	1.53	1.13	1.53	7/8
10-8-8 JBZ	10-8-8 JLZ	1010-3-8-8	5/8	1/2	1/2	3.06	1.13	1.53	1.13	1.53	1.13	1.53	7/8
10-8-6 JBZ	10-8-6 JLZ	1010-3-8-6	5/8	1/2	3/8	3.06	1.13	1.53	1.13	1.53	1.13	1.42	7/8
10-6-6 JBZ	10-6-6 JLZ	1010-3-6-6	5/8	3/8	3/8	2.95	1.13	1.53	1.13	1.42	1.13	1.42	7/8
10-6-8 JBZ	10-6-8 JLZ	1010-3-6-8	5/8	3/8	1/2	2.95	1.13	1.53	1.13	1.42	1.13	1.53	7/8
12-12-10 JBZ	12-12-10 JLZ	1210-3-12-10	3/4	3/4	5/8	3.12	1.16	1.56	1.16	1.56	1.16	1.56	1-1/16
12-12-8 JBZ	12-12-8 JLZ	1210-3-12-8	3/4	3/4	1/2	3.12	1.16	1.56	1.16	1.56	1.16	1.56	1-1/16
12-12-6 JBZ	12-12-6 JLZ	1210-3-12-6	3/4	3/4	3/8	3.12	1.16	1.56	1.16	1.56	1.16	1.45	1-1/16
12-12-4 JBZ	12-12-4 JLZ	1210-3-12-4	3/4	3/4	1/4	3.12	1.16	1.56	1.16	1.56	1.10	1.39	1-1/16
12-10-10 JBZ	12-10-10 JLZ	1210-3-10-10	3/4	5/8	5/8	3.12	1.16	1.56	1.16	1.56	1.16	1.56	1-1/16
12-8-8 JBZ	12-8-8 JLZ	1210-3-8-8	3/4	1/2	1/2	3.12	1.16	1.56	1.16	1.56	1.16	1.56	1-1/16
12-6-6 JBZ	12-6-6 JLZ	1210-3-6-6	3/4	3/8	3/8	3.01	1.16	1.56	1.16	1.45	1.16	1.45	1-1/16
12-10-8 JBZ	12-10-8 JLZ	1210-3-10-8	3/4	5/8	1/2	3.12	1.16	1.56	1.16	1.56	1.16	1.56	1-1/16
12-10-6 JBZ	12-10-6 JLZ	1210-3-10-6	3/4	5/8	3/8	3.12	1.16	1.56	1.16	1.56	1.16	1.45	1-1/16
12-8-6 JBZ	12-8-6 JLZ	1210-3-8-6	3/4	1/2	3/8	3.12	1.16	1.56	1.16	1.56	1.16	1.45	1-1/16
14-14-6 JBZ	14-14-6 JLZ	1410-3-14-6	7/8	7/8	3/8	3.52	1.36	1.76	1.36	1.76	1.36	1.65	1-3/8
14-14-4 JBZ	14-14-4 JLZ	1410-3-14-4	7/8	7/8	1/4	3.52	1.36	1.76	1.36	1.76	.130	1.59	1-3/8
14-14-12 JBZ	14-12-12 JLZ	1410-3-12-12	7/8	3/4	3/4	3.52	1.36	1.76	1.36	1.76	1.36	1.76	1-3/8
14-12-8 JBZ	14-12-8 JLZ	1410-3-12-8	7/8	3/4	1/2	3.52	1.36	1.76	1.36	1.76	1.36	1.76	1-3/8
14-12-6 JBZ	14-12-6 JLZ	1410-3-12-6	7/8	3/4	3/8	3.52	1.36	1.76	1.36	1.76	1.36	1.65	1-3/8
14-10-6 JBZ	14-10-6 JLZ	1410-3-10-6	7/8	5/8	3/8	3.52	1.36	1.76	1.36	1.76	1.36	1.65	1-3/8
14-8-12 JBZ	14-8-12 JLZ	1410-3-8-12	7/8	1/2	3/4	3.52	1.36	1.76	1.36	1.76	1.36	1.76	1-3/8
16-16-12 JBZ	16-16-12 JLZ	1610-3-16-12	1	1	3/4	3.88	1.45	1.94	1.45	1.94	1.36	1.76	1-3/8
16-16-10 JBZ	16-16-10 JLZ	1610-3-16-10	1	1	5/8	3.88	1.45	1.94	1.45	1.94	1.36	1.76	1-3/8
16-16-8 JBZ	16-16-8 JLZ	1610-3-16-8	1	1	1/2	3.88	1.45	1.94	1.45	1.94	1.36	1.76	1-3/8
16-16-6 JBZ	16-16-6 JLZ	1610-3-16-6	1	1	3/8	3.88	1.45	1.94	1.45	1.94	1.36	1.65	1-3/8
16-16-4 JBZ	16-16-4 JLZ	1610-3-16-4	1	1	1/4	3.88	1.45	1.94	1.45	1.94	1.30	1.59	1-3/8
16-12-16 JBZ	16-12-16 JLZ	1610-3-12-16	1	3/4	1	3.70	1.45	1.94	1.36	1.76	1.45	1.94	1-3/8
16-14-14 JBZ	16-14-14 JLZ	1610-3-14-14	1	7/8	7/8	3.70	1.45	1.94	1.36	1.76	1.36	1.76	1-3/8
16-14-12 JBZ	16-14-12 JLZ	1610-3-14-12	1	7/8	3/4	3.70	1.45	1.94	1.36	1.76	1.36	1.76	1-3/8
16-14-8 JBZ	16-14-8 JLZ	1610-3-14-8	1	7/8	1/2	3.70	1.45	1.94	1.36	1.76	1.36	1.76	1-3/8
16-14-6 JBZ	16-14-6 JLZ	1610-3-14-6	1	7/8	3/8	3.70	1.45	1.94	1.36	1.76	1.36	1.65	1-3/8
16-14-4 JBZ	16-14-4 JLZ	1610-3-14-4	1	7/8	1/4	3.70	1.45	1.94	1.36	1.76	1.30	1.59	1-3/8
16-16-14 JBZ	16-16-14 JLZ	1610-3-16-14	1	1	7/8	3.88	1.45	1.94	1.45	1.94	1.36	1.76	1-3/8
16-12-10 JBZ	16-12-10 JLZ	1610-3-12-10	1	3/4	5/8	3.70	1.45	1.94	1.36	1.76	1.36	1.76	1-3/8



Please Note: Dimensions for reference only, subject to change.

CPI™ / A-LOK®

TUBE TO TUBE UNIONS

Drop size tees for fractional tube

Eliminates the extra connection when adapting with a tube stub reducer.

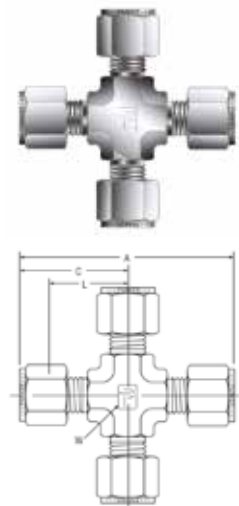
16-12-8 JBZ	16-12-8 JLZ	1610-3-12-8	1	3/4	1/2	3.70	1.45	1.94	1.36	1.76	1.36	1.76	1-3/8
16-10-6 JBZ	16-10-6 JLZ	1610-3-10-6	1	5/8	3/8	3.70	1.45	1.94	1.36	1.76	1.36	1.65	1-3/8
16-8-16 JBZ	16-8-16 JLZ	1610-3-8-16	1	1/2	1	3.70	1.45	1.94	1.36	1.76	1.45	1.94	1-3/8
16-8-8 JBZ	16-8-8 JLZ	1610-3-8-8	1	1/2	1/2	3.70	1.45	1.94	1.36	1.76	1.36	1.76	1-3/8
16-8-6 JBZ	16-8-6 JLZ	1610-3-8-6	1	1/2	3/8	3.70	1.45	1.94	1.36	1.76	1.36	1.65	1-3/8
16-8-4 JBZ	16-8-4 JLZ	1610-3-8-4	1	1/2	1/4	3.70	1.45	1.94	1.36	1.76	1.30	1.59	1-3/8
16-6-6 JBZ	16-6-6 JLZ	1610-3-6-6	1	3/8	3/8	3.59	1.45	1.94	1.36	1.65	1.36	1.65	1-3/8

Note: C dimensions are typical finger-tight.

Union cross for fractional tube

#	#	Inter changes with		A	C	L	W
CPI™	A-LOK®		inch	inch	inch	inch	inch
2 KBZ	2ECR2	200-4	1/8	1.76	0.98	1.62	7/16
3 KBZ	3ECR3	300-4	3/16	1.83	0.96	0.70	7/16
4 KBZ	4ECR4	400-4	1/4	2.12	1.06	0.76	1/2
5 KBZ	5ECR5	500-4	5/16	2.34	1.17	0.88	5/8
6 KBZ	6ECR6	600-4	3/8	2.40	1.20	0.91	5/8
8 KBZ	8ECR8	810-4	1/2	2.84	1.42	1.02	13/16
10 KBZ	10ECR10	1010-4	5/8	3.06	1.53	1.13	1-1/16
12 KBZ	12ECR12	1210-4	3/4	3.12	1.57	1.16	1-1/16
14 KBZ	14ECR14	1410-4	7/8	3.52	1.76	1.36	1-5/16
16 KBZ	16ECR16	1610-4	1	3.86	1.93	1.45	1-5/16

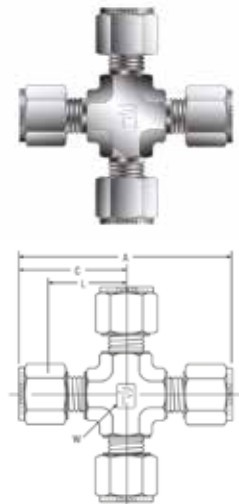
Note: A and C dimensions are typical finger-tight.



Union cross for metric tube

#	#	Inter changes with		A	C	L	W
CPI™	A-LOK®		mm	mm	mm	mm	inch
KBZ 3	ECRM3	3MO-4	3.0	44.7	22.3	15.7	7/16
KBZ 4	ECRM4	4MO-4	4.0	50.8	25.4	18.8	1/2
KBZ 6	ECRM6	6MO-4	6.0	53.9	27.0	19.6	1/2
KBZ 8	ECRM8	8MO-4	8.0	59.7	29.9	22.4	5/8
KBZ 10	ECRM10	10MO-4	10.0	67.0	33.5	25.9	13/16
KBZ 12	ECRM12	12MO-4	12.0	72.0	36.0	25.9	13/16
KBZ 16	ECRM16	16MO-4	16.0	74.0	37.0	26.9	15/16
KBZ 18	ECRM18	18MO-4	18.0	76.6	38.3	28.2	1-1/16

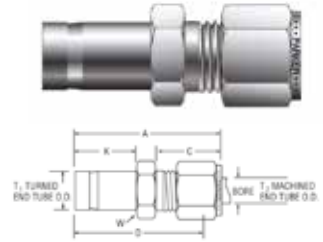
Note: A and C dimensions are typical finger-tight.



Please Note: Dimensions for reference only, subject to change.

Tube end reducer for fractional tube

# CPI™	# A-LOK®	Inter changes with		A	C	D	K
			T ₁ turned end tube T ₂ machined end tube	inch	inch	inch	inch
2-1 TRBZ	2TUR1	100-R-2	1/8 1/16	1.10	0.43	0.95	0.53
3-1 TRBZ	3TUR1	100-R-3	3/16 1/16	1.13	0.43	0.98	0.98
4-1 TRBZ	4TUR1	100-R-4	1/4 1/16	1.24	0.43	1.09	0.63
1-2 TRBZ	1TUR2	200-R-1	1/16 1/8	1.18	0.60	0.92	0.38
2-2 TRBZ	2TUR2	200-R-2	1/8 1/8	1.34	0.43	1.09	0.54
3-2 TRBZ	3TUR2	200-R-3	3/16 1/8	1.35	0.60	1.09	0.58
4-2 TRBZ	4TUR2	200-R-4	1/4 1/8	1.42	0.60	1.16	0.63
6-2 TRBZ	6TUR2	200-R-6	3/8 1/8	1.48	0.60	1.22	0.69
8-2 TRBZ	8TUR2	200-R-8	1/2 1/8	1.74	0.60	1.48	0.91
2-3 TRBZ	2TUR3	300-R-2	1/8 3/16	1.37	0.63	1.11	0.53
4-3 TRBZ	4TUR3	300-R-4	1/4 3/16	1.46	0.63	1.20	0.63
2-4 TRBZ	2TUR4	400-R-2	1/8 1/4	1.45	0.70	1.16	0.53
3-4 TRBZ	3TUR4	400-R-3	3/16 1/4	1.48	0.60	1.19	0.56
4-4 TRBZ	4TUR4	400-R-4	1/4 1/4	1.54	0.70	1.25	0.63
5-4 TRBZ	5TUR4	400-R-5	5/16 1/4	1.57	0.70	1.28	0.66
6-4 TRBZ	6TUR4	400-R-6	3/8 1/4	1.60	0.70	1.31	0.69
8-4 TRBZ	8TUR4	400-R-8	1/2 1/4	1.82	0.70	1.53	0.91
10-4 TRBZ	10TUR4	400-R-10	5/8 1/4	1.89	0.70	1.60	0.97
12-4 TRBZ	12TUR4	400-R-12	3/4 1/4	1.88	0.70	1.59	0.97
6-5 TRBZ	6TUR5	500-R-6	3/8 5/16	1.65	0.73	1.36	0.69
8-5 TRBZ	8TUR5	500-R-8	1/2 5/16	1.87	0.73	1.58	0.91
4-6 TRBZ	4TUR6	600-R-4	1/4 3/8	1.63	0.76	1.34	0.63
6-6 TRBZ	6TUR6	600-R-6	3/8 3/8	1.70	0.76	1.41	0.69
8-6 TRBZ	8TUR6	600-R-8	1/2 3/8	1.91	0.76	1.62	0.91
10-6 TRBZ	10TUR6	600-R-10	5/8 3/8	1.98	0.76	1.69	0.97
12-6 TRBZ	12TUR6	600-R-12	3/4 3/8	1.98	0.76	1.69	0.97
4-8 TRBZ	4TUR8	810-R-4	1/4 1/2	1.77	0.87	1.37	0.63
6-8 TRBZ	6TUR8	810-R-6	3/8 1/2	1.84	0.87	1.44	0.69
10-8 TRBZ	10TUR8	810-R-10	5/8 1/2	2.12	0.87	1.72	0.97
12-8 TRBZ	12TUR8	810-R-12	3/4 1/2	2.12	0.87	1.72	0.97
16-8 TRBZ	16TUR8	810-R-16	1 1/2	2.37	0.87	1.97	1.22
12-10 TRBZ	12TUR10	1010-R-12	3/4 5/8	2.15	0.87	1.75	0.97
14-10 TRBZ	14TUR10	1010-R-14	7/8 5/8	2.21	0.87	1.81	1.03
16-10 TRBZ	16TUR10	1010-R-16	1 5/8	2.40	0.87	2.00	1.22
8-12 TRBZ	8TUR12	1210-R-8	1/2 3/4	2.15	0.87	1.75	0.91
16-12 TRBZ	16TUR12	1210-R-16	1 3/4	2.46	0.87	2.06	1.22
24-16 TRBZ†	24TUR16	1610-R-24	1 1/2 1	3.519	1.05	3.03	2.05
24-20 TRBZ†	24TUR20	2010-R-24	1 1/2 1 1/4	4.10	1.52	3.23	2.05
32-24 TRBZ†	32TUR24	2410-R-32	2 1 1/2	5.17	1.52	4.10	2.74



Note: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.
 Size 1, 2, and 3 do not require a groove.
 Size 4 and above tube stub is pre-grooved as standard. Generic (non-grooved) can be ordered.
 Sizes 20, 24 require additional lubrication prior to assembly.
 Add -Z6 for assembly of nuts and ferrules on the tube stub end.
 †All tube stubs over 1" come standard with nuts and ferrule(s) pre-assembled (-Z6 option).



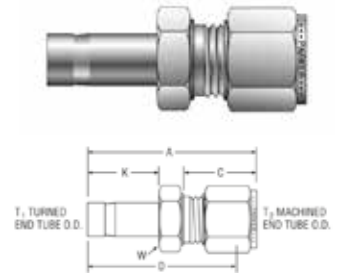
Please Note: Dimensions for reference only, subject to change.

CPI™ / A-LOK®

PORT CONNECTIONS

Tube end converter for fractional tube to metric tube

#	#	Inter changes with		A	C	D	K	W	Bore
CPI™	A-LOK®		T ₁ inch T ₂ mm	mm	mm	mm	mm	mm	mm
TRBZ 1/8-3	2TUCM3	3MO-R-2	1/8 3.0	34.3	15.3	27.7	13.5	12.0	1.4
TRBZ 1/4-3	4TUCM3	3MO-R-4	1/4 3.0	36.1	15.3	29.5	16.0	12.0	4.8
TRBZ 1/4-6	4TUCM6	6MO-R-4	1/4 6.0	39.3	17.7	31.8	16.0	14.0	4.8
TRBZ 5/16-6	5TUCM6	6MO-R-5	5/16 6.0	40.0	17.7	32.5	16.8	14.0	6.4
TRBZ 3/8-6	6TUCM6	6MO-R-6	3/8 6.0	40.8	17.7	33.3	17.5	14.0	7.1
TRBZ 1/2-6	8TUCM6	6MO-R-8	1/2 6.0	46.4	17.7	38.9	23.1	14.0	9.9
TRBZ 3/8-8	6TUCM8	8MO-R-6	3/8 8.0	42.0	18.6	34.5	17.5	15.0	7.1
TRBZ 1/2-8	8TUCM8	8MO-R-8	1/2 8.0	47.5	18.6	40.1	23.1	15.0	9.9
TRBZ 3/8-10	6TUCM10	10MO-R-6	3/8 10.0	44.4	19.5	36.8	17.5	18.0	7.1
TRBZ 1/2-10	8TUCM10	10MO-R-8	1/2 10.0	47.6	19.5	41.4	23.1	18.0	9.9
TRBZ 1/2-12	8TUCM12	12MO-R-8	1/2 12.0	52.3	22.0	42.2	23.1	22.0	9.9
TRBZ 3/4-12	12TUCM12	12MO-R-12	3/4 12.0	53.8	22.0	43.7	24.6	22.0	15.1
TRBZ 3/4-18	12TUCM18	18MO-R-12	3/4 18.0	57.5	22.0	47.5	24.6	27.0	15.1



Note: A and C dimensions are typical finger-tight.

Tube stub is pre-grooved as standard. Generic (non-grooved) can be ordered. Size 1, 2, and 3 do not require a groove.

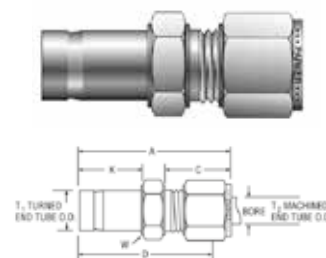
Add -Z6 for assembly of nuts and ferrules on the tube stub end.



Please Note: Dimensions for reference only, subject to change.

Tube end reducer for metric tube

#	#	Inter changes with			A	C	D	K	O	W	Bore
			T ₁ mm	T ₂ mm	mm	mm	mm	mm	mm	mm	mm
TRBZ 3-2	M3TURM2	2MO-R-3M	3.0	2.0	34.3	15.3	27.7	13.5	0.6	14.0	1.4
TRBZ 3-6	M3TURM6	6MO-R-3M	3.0	6.0	37.0	17.7	29.5	13.5	0.6	14.0	1.4
TRBZ 4-3	M4TURM3	3MO-R-4M	4.0	3.0	35.0	15.3	28.4	14.3	1.0	12.0	2.0
TRBZ 6-3	M6TURM3	3MO-R-6M	6.0	3.0	36.1	15.3	29.5	15.9	1.0	12.0	2.4
TRBZ 6-4	M6TURM4	4MO-R-6M	6.0	4.0	37.1	16.1	30.5	15.9	1.0	12.0	3.0
TRBZ 6-8	M6TURM8	8MO-R-6M	6.0	8.0	40.0	18.6	32.5	15.9	1.0	15.0	4.0
TRBZ 6-10	M6TURM10	10MO-R-6M	6.0	10.0	41.7	19.5	34.1	15.9	1.0	18.0	4.0
TRBZ 6-12	M6TURM12	12MO-R-6M	6.0	12.0	44.9	22.0	34.8	15.9	1.0	22.0	4.0
TRBZ 8-6	M8TURM6	6MO-R-8M	8.0	6.0	40.0	17.7	32.5	16.7	0.8	14.0	4.8
TRBZ 8-10	M8TURM10	10MO-R-8M	8.0	10.0	43.4	19.5	35.8	15.3	1.5	19.5	18.0
TRBZ 10-3	M10TURM3	3MO-R-10M	10.0	3.0	38.6	15.3	32.0	17.7	2.0	15.3	12.0
TRBZ 10-6	M10TURM6	6MO-R-10M	10.0	6.0	40.8	17.7	33.3	17.5	1.3	14.0	4.8
TRBZ 10-8	M10TURM8	8MO-R-10M	10.0	8.0	42.0	18.6	34.5	17.5	1.3	15.0	6.4
TRBZ 10-12	M10TURM12	12MO-R-10M	10.0	12.0	46.6	22.0	36.5	17.5	1.3	22.0	7.5
TRBZ 12-6	M12TURM6	6MO-R-12M	12.0	6.0	46.4	17.7	38.9	23.0	1.4	14.0	4.8
TRBZ 12-8	M12TURM8	8MO-R-12M	12.0	8.0	47.6	18.6	40.1	23.0	1.4	15.0	6.4
TRBZ 12-10	M12TURM10	10MO-R-12M	12.0	10.0	49.7	19.5	42.1	23.0	1.4	18.0	7.9
TRBZ 12-16	M12TURM16	16MO-R-12M	12.0	16.0	53.0	22.0	42.9	23.0	1.4	24.0	9.1
TRBZ 12-18	M12TURM18	18MO-R-12M	12.0	18.0	54.6	22.0	44.5	23.0	1.4	27.0	9.1
TRBZ 15-10	M15TURM10	10MO-R-15M	15.0	10.0	51.3	19.5	43.7	23.8	1.6	27.0	7.9
TRBZ 16-12	M16TURM12	12MO-R-16M	16.0	12.0	53.8	22.0	43.7	24.6	1.7	22.0	9.5
TRBZ 16-18	M16TURM18	18MO-R-16M	16.0	18.0	56.1	22.0	46.0	24.6	1.7	27.0	12.7
TRBZ 16-20	M16TURM20	20MO-R-16M	16.0	20.0	57.9	22.0	47.8	24.6	1.7	27.0	12.7
TRBZ 16-25	M16TURM25	25MO-R-16M	16.0	25.0	63.2	26.5	51.0	24.8	2.0	26.5	35.0
TRBZ 18-12	M18TURM12	12MO-R-18M	18.0	12.0	53.8	22.0	43.7	24.6	2.0	22.0	9.5
TRBZ 18-16	M18TURM16	16MO-R-18M	18.0	16.0	54.7	22.0	44.6	24.8	2.5	22.0	24.0
TRBZ 18-20	M18TURM20	20MO-R-18M	18.0	20.0	57.9	22.0	47.8	24.6	2.0	30.0	13.9
TRBZ 18-25	M18TURM25	25MO-R-18M	18.0	25.0	63.1	26.5	50.8	24.6	2.0	35.0	14.0
TRBZ 20-12	M20TURM12	12MO-R-20M	20.0	12.0	56.1	22.0	46.0	25.4	2.5	22.0	9.5
TRBZ 20-16	M20TURM16	16MO-R-20M	20.0	16.0	55.3	22.0	45.2	25.6	2.5	22.0	24.0
TRBZ 20-18	M20TURM18	18MO-R-20M	20.0	18.0	57.6	22.0	48.5	25.4	2.5	27.0	15.1
TRBZ 20-25	M20TURM25	25MO-R-20M	20.0	25.0	64.5	26.5	52.3	25.4	2.5	35.0	15.1
TRBZ 22-18	M22TURM18	18MO-R-22M	22.0	18.0	56.0	22.0	46.0	26.2	2.5	27.0	15.1
TRBZ 22-20	M22TURM20	20MO-R-22M	22.0	20.0	57.7	22.0	47.6	26.2	2.5	30.0	15.8
TRBZ 25-12	M25TURM12	12MO-R-25M	25.0	12.0	60.9	22.0	50.8	31.8	2.6	27.0	9.5
TRBZ 25-16	M25TURM16	16MO-R-25M	25.0	16.0	64.0	22.0	51.8	32.0	3.0	22.0	27.0
TRBZ 25-18	M25TURM18	18MO-R-25M	25.0	18.0	62.5	22.0	52.4	31.8	2.6	27.0	15.1
TRBZ 25-20	M25TURM20	20MO-R-25M	25.0	20.0	64.2	22.0	54.1	31.8	2.6	30.0	15.8



Note: A and C dimensions are typical finger-tight.
Tube stub is pre-grooved as standard.
Add -Z6 for assembly of nuts and ferrules on the tube stub end.



Please Note: Dimensions for reference only, subject to change.

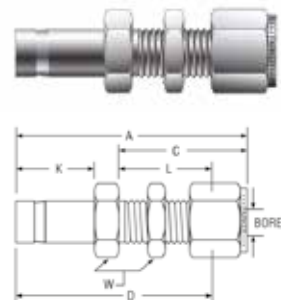
CPI™ / A-LOK®

PORT CONNECTIONS

Tube end bulkhead adaptor for fractional tube

#	#	Inter changes with		A	C	L	K	D	Bore	W
CPI™	A-LOK®		inch	inch	inch	inch	inch	inch	inch	inch
2-2 T2H2BZ	2TUBC2	200-R1-2	1/8	1.95	1.23	0.97	.53	1.69	.093	1/2
4-4 T2H2BZ	4TUBC4	400-R1-4	1/4	2.20	1.31	1.02	.063	1.91	.187	5/8
6-6 T2H2BZ	6TUBC6	600-R1-6	3/8	2.42	1.44	1.16	.69	2.13	.281	3/4
8-8 T2H2BZ	8TUBC8	810-R1-8	1/2	2.87	1.65	1.25	.91	2.47	.406	15/16

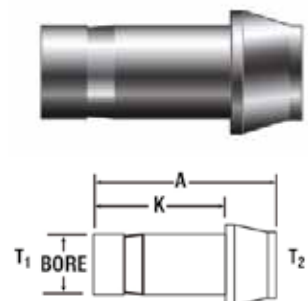
Note: A and C dimensions are typical finger-tight.
 Tube stub is pre-grooved as standard. Generic (non-grooved) can be ordered.
 Add -Z6 for assembly of nuts and ferrules on the tube stub end.



Port connector for fractional tube

#	#	Inter changes with		A	K	Bore
CPI™	A-LOK®		inch	inch	inch	inch
1-1 ZPC	1PC1	101-PC	1/16	0.63	0.44	.031
1-2 ZPC	1PC2	201-PC-1	1/16-1/8	0.84	0.44	.031
1-4 ZPC	1PC4	401-PC-1	1/16-1/4	0.91	0.44	.031
2-2 ZPC	2PC2	201-PC	1/8	0.95	0.54	.078
2-4 ZPC	2PC4	401-PC-2	1/8-1/4	1.05	0.54	.078
2-6 ZPC	2PC6	601-PC-2	1/8-3/8	1.09	0.54	.031
3-3 ZPC	3PC3	301-PC	3/16	0.98	0.67	.116
4-4 ZPC	4PC4	401-PC	1/4	1.07	0.76	.156
4-6 ZPC	4PC6	601-PC-4	1/4-3/8	1.15	0.64	.156
4-8 ZPC	4PC8	811-PC-4	1/4-1/2	1.36	0.64	.156
6-6 ZPC	6PC6	601-PC	3/8	1.16	0.84	.281
6-8 ZPC	6PC8	811-PC-6	3/8-1/2	1.40	0.72	.281
8-8 ZPC	8PC8	811-PC	1/2	1.59	1.11	.375
8-12 ZPC	8PC12	1211-PC-8	1/2-3/4	1.72	0.91	.375
12-12 ZPC	12PC12	1211-PC	3/4	1.65	1.16	.578
16-16 ZPC	16PC16	1611-PC	1	2.12	1.44	.813

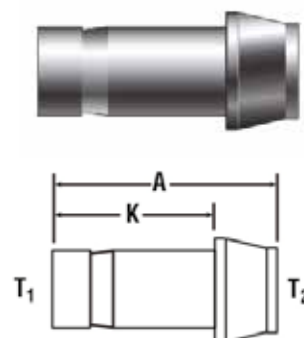
Note: Tube stub is pre-grooved as standard. (Size 1, 2, and 3 not grooved). Generic (non-grooved 4-16) can be ordered.
 The machined ferrule end (T2) requires only 1/4 turn from finger tight to assemble. Add -Z6 for assembly of nuts and ferrules on the tube stub end.



Please Note: Dimensions for reference only, subject to change.

Port connector for metric tube

#	#	Inter changes with			A	K	Bore
CPI™	A-LOK®		T ₁ mm	T ₂ mm	mm	mm	mm
ZPC 3-3	PCM3	3M1-PC	3.0	3.0	22.2	15.7	1.6
ZPC 6-6	PCM6	6M1-PC	6.0	6.0	24.6	18.7	3.0
ZPC 8-8	PCM8	8M1-PC	8.0	8.0	25.9	20.0	5.0
ZPC 10-10	PCM10	10M1-PC	10.0	10.0	26.1	20.0	6.0
ZPC 12-12	PCM12	12M1-PC	12.0	12.0	35.8	26.0	8.0
ZPC 16-16	PCM16	16M1-PC	16.0	16.0	40.5	27.7	12.0
ZPC 18-18	PCM18	18M1-PC	18.0	18.0	40.8	27.7	13.0
ZPC 3-6	M3PCM6	6M1-PC-3M	3.0	6.0	22.6	13.5	1.6
ZPC 6-8	M6PCM8	8M1-PC-6M	6.0	8.0	25.5	16.1	3.0
ZPC 6-10	M6PCM10	10M1-PC-6M	6.0	10.0	25.5	16.1	3.0
ZPC 6-12	M6PCM12	12M1-PC-6M	6.0	12.0	31.2	16.1	3.0
ZPC 8-10	M8PCM10	10M1-PC-8M	8.0	10.0	29.5	16.8	5.0
ZPC 8-12	M8PCM12	12M1-PC-8M	8.0	12.0	31.4	16.8	5.0



Note: Tube stub is pre-grooved as standard. (Size M2, M3, and M4 not grooved).
The machined ferrule end (T2) requires only 1/4 turn from finger tight to assemble.
Add -Z6 for assembly of nuts and ferrules on the tube stub end.



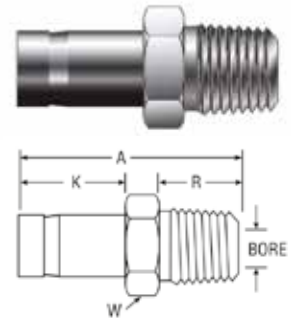
Please Note: Dimensions for reference only, subject to change.

CPI™ / A-LOK®

PORT CONNECTIONS

NPT Tube end male adaptor for fractional tube

#	#	Inter changes with			A	E	K	W	Bore
CPI™	A-LOK®		inch		inch	inch	inch	inch	inch
1-2 T2HF	1MA2N	1-TA-1-1	1/16	1/8	1.00	0.38	0.38	7/16	.031
2-2 T2HF	2MA2N	2-TA-1-2	1/8	1/8	1.16	0.38	0.54	7/16	.078
2-4 T2HF	2MA4N	2-TA-1-4	1/8	1/4	1.38	0.56	0.54	9/16	.078
3-2 T2HF	3MA2N	3-TA-1-2	3/16	1/8	1.20	0.38	0.58	7/16	.116
3-4 T2HF	3MA4N	3-TA-1-4	3/16	1/4	1.42	0.56	0.58	9/16	.116
4-2 T2HF	4MA2N	4-TA-1-2	1/4	1/8	1.25	0.38	0.63	7/16	.156
4-4 T2HF	4MA4N	4-TA-1-4	1/4	1/4	1.46	0.56	0.63	9/16	.156
4-6 T2HF	4MA6N	4-TA-1-6	1/4	3/8	1.49	0.56	0.63	11/16	.156
4-8 T2HF	4MA8N	4-TA-1-8	1/4	1/2	1.71	0.75	0.63	7/8	.156
5-2 T2HF	5MA2N	5-TA-1-2	5/16	1/8	1.29	0.38	0.66	7/16	.219
5-4 T2HF	5MA4N	5-TA-1-4	5/16	1/4	1.50	0.56	0.66	9/16	.219
5-6 T2HF	5MA6N	5-TA-1-6	5/16	3/8	1.53	0.56	0.66	11/16	.219
5-8 T2HF	5MA8N	5-TA-1-8	5/16	1/2	1.74	0.75	0.66	7/8	.219
6-2 T2HF	6MA2N	6-TA-1-2	3/8	1/8	1.32	0.38	0.69	7/16	.281
6-4 T2HF	6MA4N	6-TA-1-4	3/8	1/4	1.53	0.56	0.69	9/16	.281
6-6 T2HF	6MA6N	6-TA-1-6	3/8	3/8	1.56	0.56	0.69	11/16	.281
6-8 T2HF	6MA8N	6-TA-1-8	3/8	1/2	1.78	0.75	0.69	7/8	.281
8-4 T2HF	8MA4N	8-TA-1-4	1/2	1/4	1.75	0.56	0.91	9/16	.281
8-6 T2HF	8MA6N	8-TA-1-6	1/2	3/8	1.78	0.56	0.91	11/16	.375
8-8 T2HF	8MA8N	8-TA-1-8	1/2	1/2	2.00	0.75	0.91	7/8	.375
10-8 T2HF	10MA8N	10-TA-1-8	5/8	1/2	2.06	0.75	0.97	7/8	.469
12-8 T2HF	12MA8N	12-TA-1-8	3/4	1/2	2.06	0.75	0.97	7/8	.469
12-12 T2HF	12MA12N	12-TA-1-12	3/4	3/4	2.06	0.75	0.97	1-1/16	.578
12-16 T2HF	12MA16N	12-TA-1-16	3/4	1	2.41	0.94	0.97	1-3/8	.813
16-12 T2HF	16MA12N	16-TA-1-12	1	3/4	2.31	0.75	1.22	1-1/16	.813
16-16 T2HF	16MA16N	16-TA-1-16	1	1	2.68	0.94	1.22	1-3/8	.813
20-20 T2HF	20MA20N	20-TA-1-20	1-1/4	1-1/4	3.16	0.97	1.71	1-3/4	1.000
24-24 T2HF	24MA24N	24-TA-1-24	1-1/2	1-1/2	3.72	1.00	2.05	2-1/8	1.250
32-32 T2HF	32MA32N	32-TA-1-32	2	2	4.70	1.04	2.74	2-3/4	1.720



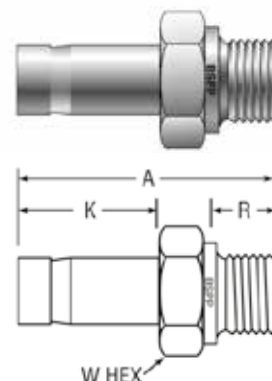
Note: Add -Z6 for assembly of nuts and ferrules on the tube stub end. Tube stub is pre-grooved as standard. Generic (non-grooved) can be ordered. Inch sizes 1, 2, and 3 and metric sizes 2, 3, and 4mm do not have grooves. Sizes 20, 24, 32 require additional lubrication prior to assembly.



Please Note: Dimensions for reference only, subject to change.

BSPP Tube end male adaptor for fractional tube

# CPI™	# A-LOK®	Inter changes with	 inch	 inch	A inch	K inch	R inch	W inch	Bore inch
2-2R T2HF	2MA2R	2TA-1-2RS	1/8	1/8	1.09	0.53	.28	9/16	.05
2-4R T2HF	2MA4R	2TA-1-4RS	1/8	1/4	1.31	0.53	.44	3/4	.05
4-2R T2HF	4MA2R	4TA-1-2RS	1/4	1/8	1.19	0.63	.28	9/16	.16
4-4R T2HF	4MA4R	4TA-1-4RS	1/4	1/4	1.50	0.63	.44	3/4	.18
6-2R T2HF	6MA2R	6TA-1-2RS	3/8	1/8	1.34	0.69	.28	3/4	.05
6-4R T2HF	6MA4R	6TA-1-4RS	3/8	1/4	1.47	0.69	.44	3/4	.25
6-6R T2HF	6MA6R	6TA-1-6RS	3/8	3/8	1.50	0.69	.44	7/8	.28
6-8R T2HF	6MA8R	6TA-1-8RS	3/8	1/2	1.69	0.69	.56	1-1/16	.28
8-4R T2HF	8MA4R	8TA-1-4RS	1/2	1/4	1.69	0.91	.44	3/4	.25
8-6R T2HF	8MA6R	8TA-1-6RS	1/2	3/8	1.72	0.91	.44	7/8	.31
8-8R T2HF	8MA8R	8TA-1-8RS	1/2	1/2	1.94	0.91	.56	1-1/16	.39
10-8R T2HF	10MA8R	10TA-1-8RS	5/8	1/2	1.97	0.97	.56	1-1/16	.47
12-12R T2HF	12MA12R	12TA-1-12RS	3/4	3/4	2.09	0.97	.63	1-5/16	.578
16-16R T2HF	16MA16R	16TA-1-16RS	1	1	2.53	1.22	.72	1-5/8	.80

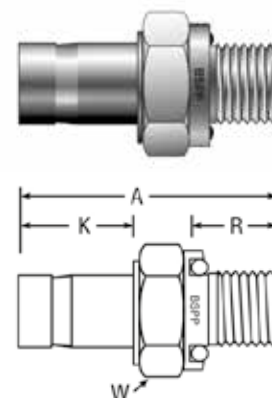


Note: Add -Z6 for assembly of nuts and ferrules on the tube stub end.

Tube stub is pre-grooved as standard. Generic (non-grooved) can be ordered. Bonded sealing washer must be used with this design.

BSPP Tube end male adaptor for metric tube

# CPI™	# A-LOK®	Inter changes with	 mm	 mm	A mm	K mm	Q mm	R mm	X mm	W mm	Bore mm
T2HF 3-1/8R	M3MA1/8R	3-MTA-1-2RS	3.0	1/8	31.0	13.5	0.6	7.1	13.7	14.0	1.8
T2HF 4-1/8R	M4MA1/8R	4-MTA-1-2RS	4.0	1/8	31.8	14.3	1.0	7.1	13.7	14.0	2.0
T2HF 6-1/8R	M6MA1/8R	6-MTA-1-2RS	6.0	1/8	33.3	15.9	1.0	7.1	13.7	14.0	4.0
T2HF 6-1/4R	M6MA1/4R	6-MTA-1-4RS	6.0	1/4	38.1	15.9	1.0	11.2	17.8	19.0	4.0
T2HF 8-1/4R	M8MA1/4R	8-MTA-1-4RS	8.0	1/4	38.9	16.7	0.8	11.2	17.8	19.0	6.4
T2HF 10-1/4R	M10MA1/4R	10-MTA-1-4RS	10.0	1/4	39.7	17.5	1.3	11.2	17.8	19.0	6.4
T2HF 10-3/8R	M10MA3/8R	10-MTA-1-6RS	10.0	3/8	38.9	17.5	1.3	11.2	21.8	22.0	7.5
T2HF 10-1/2R	M10MA1/2R	10-MTA-1-8RS	10.0	1/2	42.9	17.5	1.3	14.2	25.7	27.0	7.5
T2HF 12-1/4R	M12MA1/4R	12-MTA-1-4RS	12.0	1/4	43.7	23.0	1.4	11.2	17.8	19.0	6.4
T2HF 12-3/8R	M12MA3/8R	12-MTA-1-6RS	12.0	3/8	44.5	23.0	1.4	11.2	21.8	22.0	7.9
T2HF 12-1/2R	M12MA1/2R	12-MTA-1-8RS	12.0	1/2	49.2	23.0	1.4	14.2	25.7	27.0	9.1
T2HF 16-1/2R	M16MA1/2R	16-MTA-1-8RS	16.0	1/2	50.8	24.6	1.7	14.2	25.7	27.0	11.9
T2HF 18-3/4R	M18MA3/4R	18-MTA-1-12RS	18.0	3/4	53.2	24.6	2.0	16.0	31.8	33.0	14.0
T2HF 20-3/4R	M20MA3/4R	20-MTA-1-12RS	20.0	3/4	54.0	25.4	2.5	16.0	31.8	33.0	15.1
T2HF 25-1R	M25MA1R	25-MTA-1-16RS	15.0	1	65.1	31.8	2.6	18.3	38.6	41.0	19.8



Note: Tube stub is pre-grooved as standard. Generic (non-grooved) can be ordered.

Bonded sealing washer must be used with this design.

Add -Z6 for assembly of nuts and ferrules on the tube stub end.



Please Note: Dimensions for reference only, subject to change.

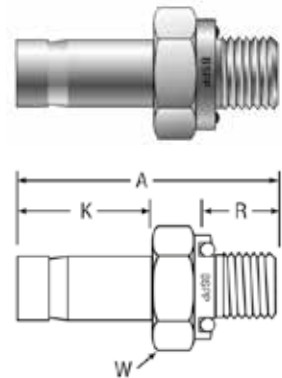
CPI™ / A-LOK®

PORT CONNECTIONS

BSPP Tube end male adaptor with ED seal for fractional tube

#	#			A	K	R	X	W	Bore
CPI™	A-LOK®	inch		inch	inch	inch	inch	inch	inch
4-4R-ED T2HF	4MA4R-ED	1/4	1/4	1.50	.63	.47	0.74	3/4	.18
4-6R-ED T2HF	4MA6R-ED	1/4	3/8	1.50	.63	.47	0.86	3/4	.18
8-4R-ED T2HF	8MA4R-ED	1/2	1/4	1.75	.91	.47	0.74	3/4	.25
8-6R-ED T2HF	8MA6R-ED	1/2	3/8	1.78	.91	.47	0.86	7/8	.31
8-8R-ED T2HF	8MA8R-ED	1/2	1/2	1.94	.1	.55	1.04	1-1/16	.39

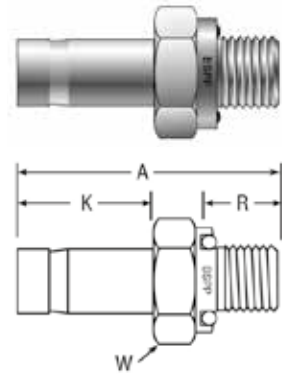
Note: Tube stub is pre-grooved as standard. Generic (non-grooved) can be ordered. ED fittings are supplied with sealing washers in nitrile as standard, suitable for temperatures between -35°C and +100°C (-31°F to +212°F). Fluorocarbon seals are available upon request which are suitable for temperatures between -25°C and +120°C (-13°F to +248°F). Add -Z6 for assembly of nuts and ferrules on the tube stub end.



BSPP Tube end male adaptor with ED seal for metric tube

#	#			A	K	R	W	Bore
CPI™	A-LOK®	mm		mm	mm	mm	mm	mm
T2HF 6-1/4R-ED	M6MA1/4R-ED	6.0	1/4	36.6	15.9	7.9	19.0	4.0
T2HF 6-1/2R-ED	M6MA1/2R-ED	6.0	1/2	42.7	15.9	14.0	27.0	4.0
T2HF 10-1/4R-ED	M10MA1/4R-ED	10.0	1/4	38.1	17.5	11.9	19.0	6.4
T2HF 10-1/2R-ED	M10MA1/2R-ED	10.0	1/2	44.2	17.5	14.0	27.0	7.5
T2HF 10-1/4R-ED	M10MA1/4R-ED	12.0	1/4	43.7	23.0	11.9	19.0	6.4
T2HF 12-3/8R-ED	M12MA3/8R-ED	12.0	3/8	45.0	23.0	11.9	22.0	7.9
T2HF 12-1/2R-ED	M12MA1/2R-ED	12.0	1/2	49.8	23.0	14.0	27.0	9.1

Note: Tube stub is pre-grooved as standard. Generic (non-grooved) can be ordered. ED fittings are supplied with sealing washers in nitrile as standard, suitable for temperatures between -35°C and +100°C (-31°F to +212°F). Fluorocarbon seals are available upon request which are suitable for temperatures between -25°C and +120°C (-13°F to +248°F). Add -Z6 for assembly of nuts and ferrules on the tube stub end.

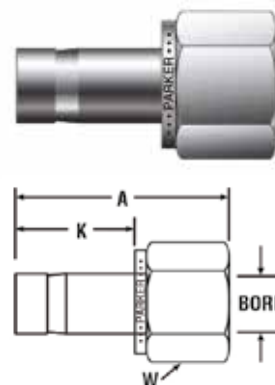


Please Note: Dimensions for reference only, subject to change.

Tube end NPT female adaptor for fractional tube

#	#	Inter changes with			A	K	W	Bore
CPI™	A-LOK®		inch		inch	inch	inch	inch
1-2 T2HG	1FA2N	1-TA-7-2	1/16	1/8	1.07	0.34	9/16	.031
2-2 T2HG	2FA2N	2-TA-7-2	1/8	1/8	1.23	0.53	9/16	.093
2-4 T2HG	2FA4N	2-TA-7-4	1/8	1/4	1.38	0.53	3/4	.093
3-2 T2HG	3FA2N	3-TA-7-2	3/16	1/8	1.25	0.56	9/16	.116
3-4 T2HG	3FA4N	3-TA-7-4	3/16	1/4	1.42	0.56	3/4	.116
4-2 T2HG	4FA2N	4-TA-7-2	1/4	1/8	1.31	0.63	9/16	.188
4-4 T2HG	4FA4N	4-TA-7-4	1/4	1/4	1.47	0.63	3/4	.188
4-6 T2HG	4FA6N	4-TA-7-6	1/4	3/8	1.56	0.63	7/8	.188
4-8 T2HG	4FA8N	4-TA-7-8	1/4	1/2	1.80	0.63	1-1/16	.188
5-2 T2HG	5FA2N	5-TA-7-2	5/16	1/8	1.34	0.66	9/16	.219
5-4 T2HG	5FA4N	5-TA-7-4	5/16	1/4	1.50	0.66	3/4	.219
5-6 T2HG	5FA6N	5-TA-7-6	5/16	3/8	1.59	0.66	7/8	.219
6-2 T2HG	6FA2N	6-TA-7-2	3/8	1/8	1.36	0.69	9/16	.281
6-4 T2HG	6FA4N	6-TA-7-4	3/8	1/4	1.55	0.69	3/4	.281
6-6 T2HG	6FA6N	6-TA-7-6	3/8	3/8	1.59	0.69	7/8	.281
6-8 T2HG	6FA8N	6-TA-7-8	3/8	1/2	1.84	0.69	1-1/16	.281
8-4 T2HG	8FA4N	8-TA-7-4	1/2	1/4	1.72	0.91	3/4	.391
8-6 T2HG	8FA6N	8-TA-7-6	1/3	3/8	1.80	0.91	7/8	.391
8-8 T2HG	8FA8N	8-TA-7-8	1/2	1/2	2.10	0.91	1-1/16	.390
10-6 T2HG	10FA6N	10-TA-7-6	5/8	3/8	1.86	0.97	7/8	.469
10-8 T2HG	10FA8N	10-TA-7-8	5/8	1/2	2.09	0.97	1-1/16	.469
12-8 T2HG	12FA8N	12-TA-7-8	3/4	1/2	2.10	0.97	1-1/16	.578
12-12 T2HG	12FA12N	12-TA-7-12	3/4	3/4	2.16	0.97	1-1/4	.578
12-16 T2HG	12FA16N	12-TA-7-16	3/4	1	2.30	0.97	1-5/8	.578
14-12 T2HG	14FA12N	14-TA-7-12	7/8	3/4	2.22	1.02	1-5/16	.578
16-12 T2HG	16FA12N	16-TA-7-12	1	3/4	2.41	1.22	1-5/16	.813
16-16 T2HG	16FA16N	16-TA-7-16	1	1	2.54	1.22	1-5/8	.813
20-20 T2HG	20FA20N	20-TA-7-20	1-1/4	1-1/4	3.06	1.71	2-1/8	1.000
24-24 T2HG	24FA24N	24-TA-7-24	1-1/2	1-1/2	3.50	2.05	2-3/8	1.250
32-32 T2HG	32FA32N	32-TA-7-32	2	2	2.74	2.74	2-7/8	1.720

Note: Tube stub is pre-grooved as standard. Generic (non-grooved) can be ordered.
Add -Z6 for assembly of nuts and ferrules on the tube stub end.

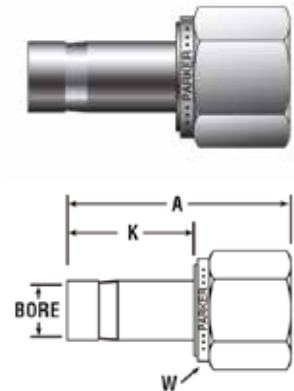


Please Note: Dimensions for reference only, subject to change.

CPI™ / A-LOK® PORT CONNECTIONS

Tube end NPT female adaptor for metric tube

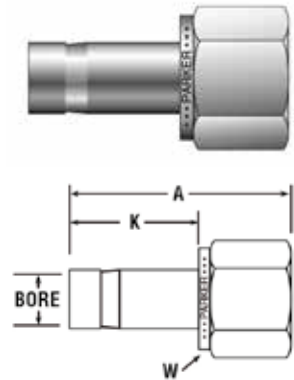
# CPI™	# A-LOK®	Inter changes with			A mm	K mm	W mm	Bore mm
T2HG 3-1/8	M3FA1/8N	3-MTA-7-2	3.0	1/8	31.3	13.5	14.0	1.3
T2HG 4-1/8	M4FA1/8N	4-MTA-7-2	4.0	1/8	29.4	14.3	14.0	2.0
T2HG 6-1/8	M6FA1/8N	6-MTA-7-2	6.0	1/8	29.4	15.9	14.0	4.0
T2HG 6-1/4	M6FA1/4N	6-MTA-7-4	6.0	1/4	34.1	15.9	19.9	4.0
T2HG 8-1/8	M8FA1/8N	8-MTA-7-2	8.0	1/8	35.5	16.7	14.0	6.4
T2HG 8-1/4	M8FA1/4N	8-MTA-7-4	8.0	1/4	35.1	16.7	19.0	6.4
T2HG 8-3/8	M8FA3/8N	8-MTA-7-6	8.0	3/8	36.5	16.7	22.0	6.4
T2HG 10-1/4	M10FA1/4N	10-MTA-7-4	10.0	1/4	37.3	17.5	19.0	7.5
T2HG 10-3/8	M10FA3/8N	10-MTA-7-6	10.0	3/8	37.3	17.5	22.0	7.5
T2HG 10-1/2	M10FA1/2N	10-MTA-7-8	10.0	1/2	42.1	17.5	27.0	7.5
T2HG 12-1/4	M12FA1/4N	12-MTA-7-4	12.0	1/4	41.3	23.0	19.0	9.1
T2HG 12-3/8	M12FA3/8N	12-MTA-7-6	12.0	3/8	42.9	23.0	22.0	9.1
T2HG 12-1/2	M12FA1/2N	12-MTA-7-8	12.0	1/2	47.6	23.0	27.0	9.1
T2HG 16-1/2	M16FA1/2N	16-MTA-7-8	16.0	1/2	49.2	24.6	27.0	12.7
T2HG 18-3/4	M18FA3/4N	18-MTA-7-12	18.0	3/4	52.4	24.6	33.0	14.0
T2HG 20-1/2	M20FA1/2N	20-MTA-7-8	20.0	1/2	50.0	25.6	27.0	15.0
T2HG 20-3/4	M20FA3/4N	20-MTA-7-12	20.0	3/4	53.2	25.4	33.0	15.1
T2HG 25-1	M25FA1N	25-MTA-7-16	25.0	1	66.7	31.8	41.0	19.8



Note: Tube stub is pre-grooved as standard.
Generic (non-grooved) can be ordered.
Add -Z6 for assembly of nuts and ferrules on the tube stub end.

BSP Taper female adaptor for fractional tube

# CPI™	# A-LOK®	Inter changes with			A inch	K inch	W inch	Bore inch
4-2K T2HG	4FA2K	4-TR-7-2RT	1/4	1/8-28	1.31	.64	9/16	.156
4-4K T2HG	4FA4K	4-TR-7-4RT	1/4	1/4-19	1.48	.64	3/4	.156
6-4K T2HG	6FA4K	6-TR-7-4RT	3/8	1/4-19	1.56	.72	3/4	.281
6-6K T2HG	6FA6K	6-TR-7-6RT	3/8	3/8-19	1.63	.72	7/8	.281
8-4K T2HG	8FA4K	8-TR-7-4RT	1/2	1/4-19	1.83	.93	3/4	.375
8-6K T2HG	8FA6K	8-TR-7-6RT	1/2	3/8-19	1.89	.98	7/8	.375
8-8K T2HG	8FA8K	8-TR-7-8RT	1/2	1/2-14	2.14	.98	1-1/16	.375



Note: Tube stub is pre-grooved as standard.
Generic (non-grooved) can be ordered.
Add -Z6 for assembly of nuts and ferrules on the tube stub end.



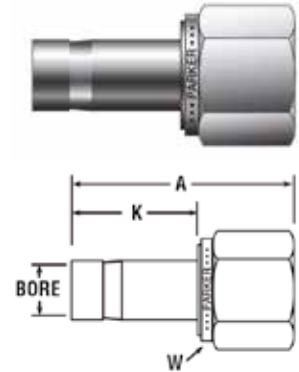
Please Note: Dimensions for reference only, subject to change.

CPI™ / A-LOK® PORT CONNECTIONS

BSP Taper female adaptor for metric tube

# CPI™	# A-LOK®	Inter changes with			A	K	W	Bore
			mm	BSPT	mm	mm	mm	mm
T2HG 3-1/8K	M3FA1/8K	3-MTA-7-2RT	3.0	1/8	27.8	13.5	14.0	1.8
T2HG 4-1/8K	M4FA1/8K	4-MTA-7-2RT	4.0	1/8	28.6	14.3	14.0	2.0
T2HG 6-1/8K	M6FA1/8K	6-MTA-7-2RT	6.0	1/8	30.2	15.9	14.0	4.0
T2HG 8-1/4K	M8FA1/4K	8-MTA-7-4RT	8.0	1/4	39.1	16.7	19.0	6.4
T2HG 10-1/4K	M10FA1/4K	10-MTA-7-4RT	10.0	1/4	36.5	17.5	19.0	7.5
T2HG 10-3/8K	M10FA3/8K	10-MTA-7-6RT	10.0	3/8	31.8	17.5	22.0	7.5
T2HG 10-1/2K	M10FA1/2K	10-MTA-7-8RT	10.0	1/2	41.3	17.5	27.0	7.5
T2HG 12-1/4K	M12FA1/4K	12-MTA-7-4RT	12.0	1/4	40.5	23.0	19.0	9.1
T2HG 12-3/8K	M12FA3/8K	12-MTA-7-6RT	12.0	3/8	43.7	23.0	22.0	9.1
T2HG 12-1/2K	M12FA1/2K	12-MTA-7-8RT	12.0	1/2	46.8	23.0	27.0	9.1
T2HG 16-1/2K	M16FA1/2K	16-MTA-7-8RT	16.0	1/2	48.4	24.6	27.0	12.7
T2HG 18-3/4K	M18FA3/4K	18-MTA-7-12RT	18.0	3/4	51.6	24.6	32.0	14.0
T2HG 20-3/4K	M20FA3/4K	20-MTA-7-12RT	20.0	3/4	52.4	25.4	32.0	15.1
T2HG 25-1K	M25FA1K	25-MTA-7-16RT	25.0	1	66.7	31.8	41.0	19.8

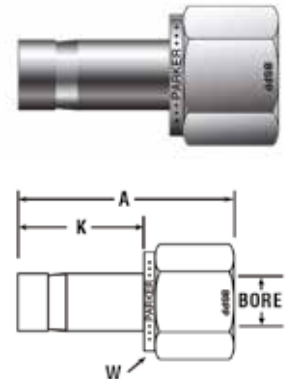
Note: Tube stub is pre-grooved as standard.
Add -Z6 for assembly of nuts and ferrules on the tube stub end.



BSPP Female adaptor for fractional tube

# CPI™	# A-LOK®	Inter changes with			A	K	W	Bore
			inch		inch	inch	inch	inch
4-4R T2HG	4FA4R	4-TA-7-4RP	1/4	1/4	1.68	.63	3/4	.18
6-6R T2HG	6FA6R	6-TA-7-6RP	3/8	3/8	1.53	.69	7/8	.28
8-8R T2HG	8FA8R	8-TA-7-8RP	1/2	1/2	1.91	.91	1-1/16	.39

Note: Copper washer must be used for this design.
Tube stub is pre-grooved as standard. Generic (non-grooved) can be ordered.
Add -Z6 for assembly of nuts and ferrules on the tube stub end.



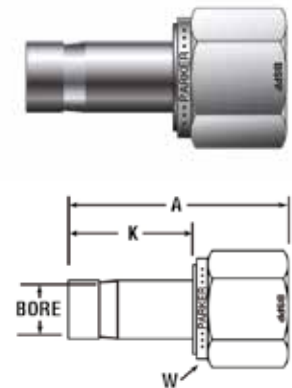
Please Note: Dimensions for reference only, subject to change.

CPI™ / A-LOK®

PORT CONNECTIONS

BSPP Female adaptor for metric tube

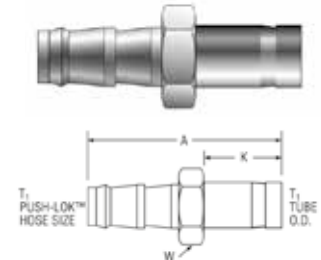
#	#	Inter changes with			A	K	W	Bore
CPI™	A-LOK®		mm		mm	mm	mm	mm
T2HG 3-1/8R	M3FA1/8R	3-MTA-7-2RP	3.0	1/8	28.6	13.5	14.0	1.8
T2HG 3-1/4R	M3FA1/4R	3-MTA-7-4RP	3.0	1/4	28.6	13.7	19.0	1.6
T2HG 4-1/8R	M4FA1/8R	4-MTA-7-2RP	4.0	1/8	29.4	14.3	14.0	2.0
T2HG 6-1/8R	M6FA1/8R	6-MTA-7-2RP	6.0	1/8	31.0	15.9	14.0	4.0
T2HG 6-1/4R	M6FA1/4R	6-MTA-7-4RP	6.0	1/4	37.3	15.9	19.0	4.0
T2HG 8-1/4R	M8FA1/4R	8-MTA-7-4RP	8.0	1/4	38.1	16.7	19.0	6.4
T2HG 10-1/4R	M10FA1/4R	10-MTA-7-4RP	10.0	1/4	38.9	17.5	19.0	7.5
T2HG 10-1/2R	M10FA1/2R	10-MTA-7-8RP	10.0	1/2	43.7	17.5	27.0	7.5
T2HG 12-3/8R	M12FA3/8R	12-MTA-7-6RP	12.0	3/8	44.5	23.0	22.0	9.1
T2HG 12-1/2R	M12FA1/2R	12-MTA-7-8RP	12.0	1/2	48.4	23.0	27.0	9.1
T2HG 16-1/2R	M16FA1/2R	16-MTA-7-8RP	16.0	1/2	50.0	24.6	27.0	12.7
T2HG 18-3/4R	M18FA3/4R	18-MTA-7-12RP	18.0	3/4	53.2	24.6	33.0	14.0
T2HG 20-3/4R	M20FA3/4R	20-MTA-7-12RP	20.0	3/4	54.0	25.4	33.0	15.1
T2HG 25-1R	M25FA1R	25-MTA-7-16RP	25.0	1	67.5	31.8	41.0	19.8



Note: Tube stub is pre-grooved as standard.
Tube stub is pre-grooved as standard. Generic (non-grooved) can be ordered.
Add -Z6 for assembly of nuts and ferrules on the tube stub end.

Push-Lok to tube adaptor for fractional tube

#	#	Inter changes with		A	K	W
CPI™	A-LOK®		T ₁ inch hose size	inch	inch	inch
4-4 P2T2	4P2TU4	PB4-TA4	1/4	1.80	.64	7/16
6-6 P2T2	6P2TU6	PB6-TA6	3/8	2.02	.72	9/16
8-8 P2T2	8P2TU8	PB8-TA8	1/2	2.42	.98	11/16



Note: Drawing does not show Push-Lok collar.
Tube stub is pre-grooved as standard. Generic (non-grooved) can be ordered.
Add -Z6 for assembly of nuts and ferrules on the tube stub end.



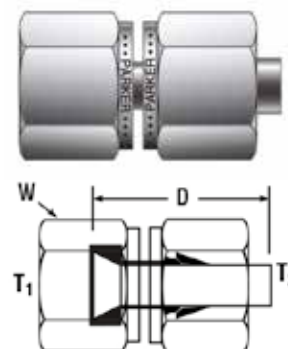
Please Note: Dimensions for reference only, subject to change.

CPI™ / A-LOK®

37° FLARE (AN) TO CPI™ / A-LOK®

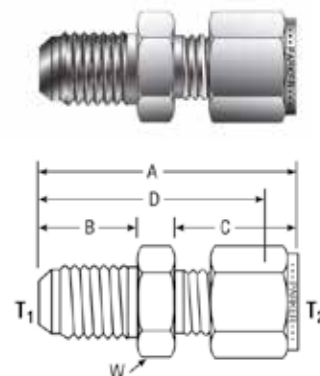
37° Flare (AN) to CPI™ / A-LOK® for fractional tube

# CPI™	# A-LOK®	Inter changes with	 inch	D inch	W inch
2-2 X6HBZ6	2X6TU2	200-A-2 ANF	1/8	0.88	3/8
4-4 X6HBZ6	4X6TU4	400-A-4 ANF	1/4	0.96	9/16
6-6 X6HBZ6	6X6TU6	600-A-6 ANF	3/8	1.07	11/16
8-8 X6HBZ6	8X6TU8	810-A-8 ANF	1/2	1.37	7/8
12-12 X6HBZ6	12X6TU12	1210-A-12 ANF	3/4	1.49	1-1/4
16-16 X6HBZ6	16X6TU16	1610-A-16 ANF	1	1.80	1-1/2



37° Flare connector for fractional tube

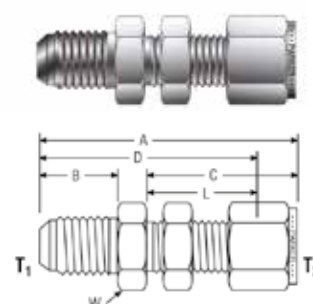
# CPI™	# A-LOK®	Inter changes with	Flare end inch	 inch	A inch	B inch	C inch	D inch	W inch
2-1 XHBZ	2XASC1	100-6-2 AN	1/8	1/16	1.07	.45	0.43	.92	7/16
2-2 XHBZ	2XASC2	200-6-2 AN	1/8	1/8	1.28	.45	0.60	1.02	7/16
4-2 XHBZ	4XASC2	200-6-4 AN	1/4	1/8	1.39	.55	0.60	1.13	1.2
3-3 XHBZ	3XASC3	300-6-3 AN	3/16	3/16	1.32	.48	0.64	1.06	7/16
4-4 XHBZ	4XASC4	400-6-4 AN	1/4	1/4	1.48	.55	0.70	1.19	1/2
5-5 XHBZ	5XASC5	500-6-5 AN	5/16	5/16	1.52	.55	0.73	1.22	9/16
4-6 XHBZ	4XASC6	600-6-4 AN	1/4	3/8	1.56	.55	0.76	1.27	5/8
6-6 XHBZ	6XASC6	600-6-6 AN	3/8	3/8	1.56	.56	0.76	1.27	5/8
8-8 XHBZ	8XASC8	810-6-8 AN	1/2	1/2	1.81	.66	0.87	1.41	13/16
10-10 XHBZ	10XASC10	1010-6-10 AN	5/8	5/8	1.93	.76	0.87	1.53	15/16
12-12 XHBZ	12XASC12	1210-6-12 AN	3/4	3/4	2.11	.86	0.87	1.70	1-1/8
16-16 XHBZ	16XASC16	1610-6-16 AN	1	1	2.43	.91	1.05	1.94	1-3/8



Note: A and C dimensions are typical finger-tight.

37° Flare bulkhead connector for fractional tube

# CPI™	# A-LOK®	Inter changes with	Flare end inch	 inch	A inch	D inch	C inch	L inch	B inch	W inch
2-2 XH2BZ	2XABC2	200-61-2 AN	1/8	1/8	1.91	1.65	1.23	0.97	.45	1/2
3-3 XH2BZ	3XABC3	300-61-3 AN	3/16	3/16	1.98	1.71	1.26	1.00	.48	9/16
4-2 XH2BZ	4XABC2	200-61-4 AN	1/4	1/8	2.04	1.78	1.23	0.97	.55	5/8
4-4 XH2BZ	4XABC4	400-61-4 AN	1/4	1/4	2.12	1.83	1.31	1.02	.55	5/8
5-5 XH2BZ	5XABC5	500-61-5 AN	5/16	5/16	2.21	1.92	1.41	1.12	.55	11/16
4-6 XH2BZ	4XABC6	600-61-4 AN	1/4	3/8	2.25	1.96	1.44	1.15	.55	3/4
6-6 XH2BZ	6XABC6	600-61-6 AN	3/8	3/8	2.25	1.96	1.44	1.15	.56	3/4
8-8 XH2BZ	8XABC8	810-61-8 AN	1/2	1/2	2.59	2.19	1.65	1.25	.66	15/16
10-10 XH2BZ	10XABC10	1010-61-10 AN	5/8	5/8	2.74	2.34	1.68	1.28	.76	1-1/16
12-12 XH2BZ	12XABC12	1210-61-12 AN	3/4	3/4	3.11	2.71	1.87	1.47	.86	1-3/16
16-16 XH2BZ	16XABC16	1610-61-16 AN	1	1	3.65	3.16	2.27	1.78	.91	1-9/16



Note: A and C dimensions are typical finger-tight.
For bulkhead hole drill size and maximum bulkhead thickness.



Please Note: Dimensions for reference only, subject to change.

TUBE TO O-RING SEAL

INTRODUCTION

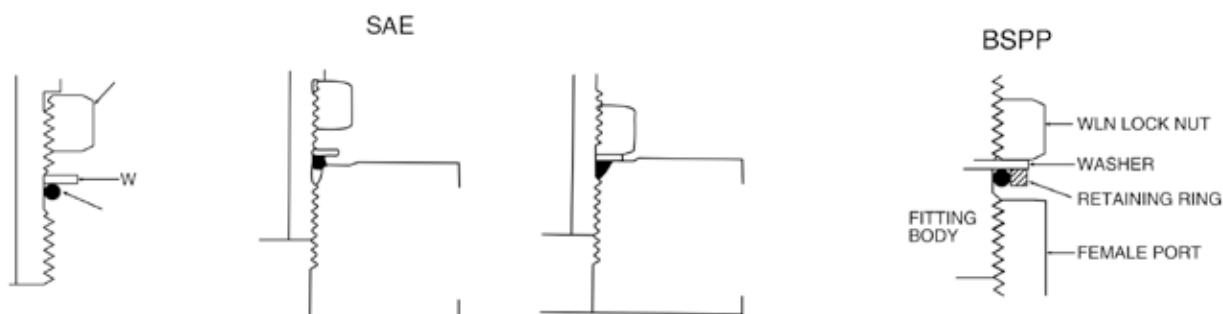
BSPP / SAE Straight Thread fittings installation procedure

1. Lubricate o-ring with a lubricant that is compatible with the system.
2. Screw fitting into the straight thread port until the metal back-up washer contacts the face of the port.
3. Position the fitting by backing it out no more than one turn.
4. Hold the fitting in position and tighten the locknut until the washer contacts the face of the port.
(See torque chart.)

Note: WLN Lock Nuts are ordered separately by size and part number.

Size	Straight port		Adjustable port	
	Torque (in-lbs)	(F.F.F.T)	Torque (in-lbs)	(F.F.F.T)
4	245 ± 10	1.0 ± .25	200 ± 10	1.5 ± 25
6	630 ± 25	1.5 ± .25	400 ± 10	1.5 ± 25
8	1150 ± 50	1.5 ± .25	640 ± 10	1.5 ± 25
10	1550 ± 50	1.5 ± .25	1125 ± 50	1.5 ± 25
12	2050 ± 50	1.5 ± .25	1450 ± 50	1.5 ± 25
16	3000 ± 50	1.5 ± .25	2150 ± 50	1.5 ± 25
20	3400 ± 100	1.5 ± .25	2800 ± 100	2.0 ± 25
24	4500 ± 100	1.5 ± .25	3450 ± 100	2.0 ± 25

- Restrain fitting body on adjustables if necessary in installation
- Valves in charts are for assemblies with o-ring lubricated
- Use upper limits of torque ranges for stainless steel fittings



Face seal o-ring fittings installation procedure

The o-ring requires a smooth, flat seating surface. This surface must be perpendicular to the axis of the threads.

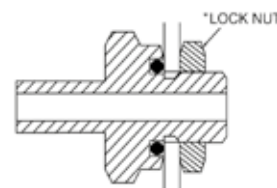
1. Turn the o-ring seal fitting in the port until finger tight.
2. The "squeezing" effect on the o-ring can be felt during the last 1/4 turn. 3. Snug lightly with a wrench.

*Typical application

The fitting can be adapted as a bulkhead fitting on thin wall tanks or vessels, eliminating welding, brazing or threading. Simply order the L5N locknut to take advantage of this option.

Standard o-rings are nitrile material. For other o-rings, state material after the part number. L5N locknuts are ordered separately by size and part number.

O-rings used with SAE/MS straight threads are nitrile. Other o-ring materials are available on request. Lubricate o-ring with a lubricant compatible with the system fluid, environment and o-ring material.

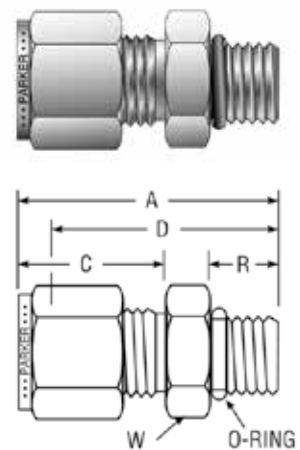


Please Note: Dimensions for reference only, subject to change.

Port size	Straight thread size	Straight thread machine length	L5N Locknut Thick.	Max. Tank wall Thick.
2	5/16 - 24	.297	.219	.078 = 5/64
3	3/8 - 24	.297	.219	.078 = 5/64
4	7/16 - 20	.360	.250	.109 = 7/64
5	1/2 - 20	.360	.250	.109 = 7/64
6	9/16 - 18	.391	.265	.125 = 1/8
8	3/4 - 16	.438	.312	.125 = 1/8
10	7/8 - 14	.500	.360	.140 = 9/64
12	1 - 1/16 - 12	.594	.406	.188 = 3/16
14	1 - 13/16 - 12	.594	.406	.188 = 3/16
16	1 - 5/16 - 12	.594	.406	.188 - 3/16

Male connector to SAE straight thread for fractional tube

#	#	Inter changes with			A	C	D	R	W	O-ring APR Uniform Dash No.
CPI™	A-LOK®		inch		inch	inch	inch	inch	inch	
1-2 ZHBA	1M1SC2	100-1-2 ST	1/16	5/16-24	0.92	0.43	0.77	.30	7/16	3-902
2-2 ZHBA	2M1SC2	200-1-2 ST	1/8	5/16-24	1.18	0.60	0.92	.30	7/16	3-902
2-6 ZHBA	2M1SC6	200-1-6 ST	1/8	9/16-18	1.35	0.60	1.06	.39	11/16	3-906
3-3 ZHBA	3M1SC3	300-1-6 ST	3/16	3/8-24	1.20	0.64	0.94	.30	1/2	3-903
4-4 ZHBA	4M1SC4	400-1-4 ST	1/4	7/16-20	1.34	0.70	1.05	.36	9/16	3-904
4-6 ZHBA	4M1SC6	400-1-6 ST	1/4	9/16-18	1.40	0.70	1.11	.39	11/16	3-906
4-8 ZHBA	4M1SC8	400-1-8 ST	1/4	3/4-16	1.48	0.70	1.19	.44	7/8	3-908
4-10 ZHBA	4M1SC10	400-1-10 ST	1/4	7/8-14	1.60	0.70	1.31	.50	1	3-910
5-5 ZHBA	5M1SC5	500-1-5 ST	5/16	1/2-20	1.37	0.73	1.08	.36	5/8	3-905
6-4 ZHBA	6M1SC4	600-1-4 ST	3/8	7/16-20	1.40	0.76	1.11	.36	5/8	3-904
6-6 ZHBA	6M1SC6	600-1-6 ST	3/8	9/16-18	1.46	0.76	1.17	.39	11/16	3-906
6-8 ZHBA	6M1SC8	600-1-8 ST	3/8	3/4-16	1.54	0.76	1.25	.44	7/8	3-908
6-10 ZHBA	6M1SC10	600-1-10 ST	3/8	7/8-14	1.67	0.76	1.38	.50	1.00	3-910
8-6 ZHBA	8M1SC6	810-1-6 ST	1/2	9/16-18	1.54	0.87	1.14	.39	7/8	3-906
8-8 ZHBA	8M1SC8	810-1-8 ST	1/2	3/4-16	1.65	0.87	1.25	.44	7/8	3-908
8-12 ZHBA	8M1SC12	810-1-12 ST	1/2	1-1/16-12	1.93	0.87	1.53	.59	1-1/4	3-912
10-10 ZHBA	10M1SC10	1010-1-10 ST	5/8	7/8-14	1.78	0.87	1.38	.50	1	3-910
12-10 ZHBA	12M1SC10	1210-1-10 ST	3/4	7/8-14	1.68	0.87	1.28	.50	1-1/8	3-910
12-12 ZHBA	12M1SC12	1210-1-12 ST	3/4	1-1/16-12	1.93	0.87	1.53	.59	1-1/4	3-912
12-14 ZHBA	14M1SC14	1410-1-14 ST	7/8	1-3/16-12	1.93	0.87	1.53	.59	1-3/8	3-914
16-12 ZHBA	16M1SC12	1610-1-12 ST	1	1-1/16-12	2.12	1.05	1.63	.59	1-3/8	3-912
16-16 ZHBA	16M1SC16	1610-1-16 ST	1	1-5/16-12	2.15	1.04	1.66	.59	1-1/2	3-916
20-20 ZHBA	20M1SC20	2010-1-20 ST	1-1/4	1-5/8-12	2.59	1.52	1.82	.59	1-7/8	3-920
24-24 ZHBA	24M1SC24	2410-1-24 ST	1-1/2	1-7/8-12	3.05	1.77	1.99	.59	2-1/8	3-924
32-32 ZHBA	32M1SC32	3210-1-32 ST	2	2-1/2-12	4.00	2.47	2.53	.59	2-3/4	3-932



Note: A and C dimensions are typical finger-tight.

For use with SAE J. 1926/1 port can also be used with MS-16142 port.

Sizes 20, 24, 32 require additional lubrication prior to assembly.

Parts are supplied with nitrile o-rings as standard. For Fluorocarbon o-rings, add the suffix "-VO".

Other o-rings available upon request.



Please Note: Dimensions for reference only, subject to change.

CPI™ / A-LOK®

TUBE TO O-RING SEAL

Male SAE straight thread elbow for fractional tube

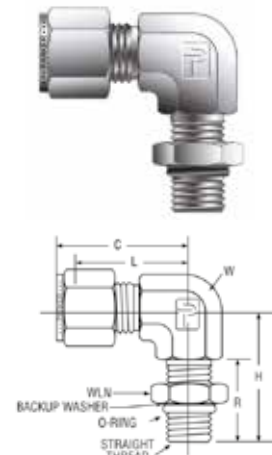
#	#	Inter changes with			C	H	L	R	W	O-ring APR Uniform Dash No.
CPI™	A-LOK®		inch		inch	inch	inch	inch	inch	
4-4 C5BZ	4M5SEL4	400-2-4ST	1/4	7/16-20	1.12	1.18	0.83	0.83	9/16	3-904
6-6 C5BZ	6M5SEL6	600-2-6ST	3/8	9/16-18	1.26	1.27	0.97	0.84	9/16	3-906
8-8 C5BZ	8M5SEL8	810-2-8ST	1/2	3/4-16	1.48	1.48	1.08	0.97	3/4	3-908
12-12 C5BZ	12M5SEL12	1210-2-12ST	3/4	1-1/16-12	1.63	1.92	1.23	1.28	1-1/16	3-912
16-16 C5BZ	16M5SEL16	1610-2-16ST	1	5/16-12	1.91	2.11	1.42	1.28	1-5/16	3-916
24-24 C5BZ	24M5SEL24	2410-2-24ST	1-1/2	1-7/8-12	3.47	2.33	2.00	1.16	1-7/8	3-924

Note: C dimension is typical finger-tight.

Size 24 requires additional lubrication prior to assembly.

Parts are supplied with nitrile o-rings as standard. For Fluorocarbon o-rings, add the suffix "-VO".

Other o-rings available upon request.



BSPP Male elbow (Positionable) for fractional tube

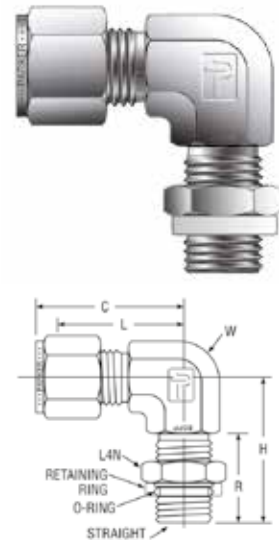
#	#	Inter changes with			C	H	L	R	W
CPI™	A-LOK®		inch		inch	inch	inch	inch	inch
4-2R CBZ	4MSEL2R	400-2-2PR	1/4	1/8-28	1.06	1.04	0.77	0.81	9/16
4-4R CBZ	4MSEL4R	400-2-4PR	1/4	1/4-19	1.14	1.27	0.85	0.83	9/16
6-4R CBZ	6MSEL4R	600-2-4PR	3/8	1/4-19	1.20	1.27	0.85	0.83	9/16
6-6R CBZ	6MSEL6R	600-2-6PR	3/8	3/8-19	1.31	1.46	1.02	0.83	3/4
8-4R CBZ	8MSEL4R	810-2-4PR	1/2	1/4-19	1.50	1.38	1.10	0.83	7/8
8-6R CBZ	8MSEL6R	810-2-6PR	1/2	3/8-19	1.50	1.46	1.10	0.85	7/8
8-8R CBZ	8MSEL8R	810-2-8PR	1/2	1/2-14	1.50	1.71	1.10	1.09	7/8
10-8R CBZ	10MSEL8R	1010-2-8PR	5/8	1/2-14	1.50	1.81	1.10	1.09	1-1/16
12-8R CBZ	12MSEL8R	1210-2-8PR	3/4	1/2-14	1.57	1.81	1.17	1.09	1-1/16
12-12R CBZ	12MSEL12R	1210-2-12PR	3/4	3/4-14	1.57	1.92	1.17	1.20	1-1/16
16-12R CBZ	16MSEL12R	1610-2-12PR	1	3/4-14	1.93	2.11	1.45	1.20	1-5/16
16-16R CBZ	16MSEL16R	1610-2-16PR	1	1-11	1.93	2.11	1.45	1.20	1-5/16

Note: C dimension is typical finger-tight.

Connects fractional tube to female ISO parallel thread.

Parts are supplied with nitrile o-rings as standard. For Fluorocarbon o-rings, add the suffix "-VO".

Other o-rings available upon request.



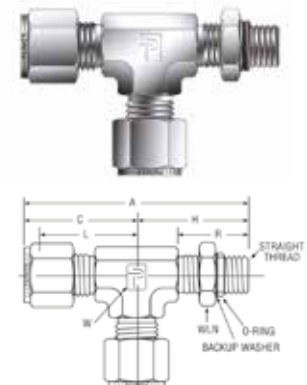
Male run tee SAE straight thread for fractional tube

#	#	Inter changes with			A	C	H	L	R	W	O-ring APR Uniform Dash No.
CPI™	A-LOK®		inch		inch	inch	inch	inch	inch	inch	
4-4-4 R5BZ	4M5RT4	400-3TST	1/4	1/16-20	2.24	1.12	1.18	0.83	0.83	7/16	3-904
6-6-6 R5BZ	6M5RT6	600-3TST	3/8	9/16-18	2.53	1.26	1.27	0.97	0.84	9/16	3-906
8-8-8 R5BZ	8M5RT8	800-3TST	1/2	3/4-16	3.97	1.48	1.48	1.08	0.97	3/4	3-908
12-12-12 R5BZ	12M5RT12	1210-3TST	3/4	1-1/16-12	3.55	1.63	1.92	1.23	1.28	1-1/16	3-912
16-16-16 R5BZ	16M5RT12	1610-3TST	1	1-5/16-12	3.74	1.87	2.11	1.38	1.28	1-5/16	3-916

Note: A and C dimension is typical finger-tight.

Parts are supplied with nitrile o-rings as standard. For Fluorocarbon o-rings, add the suffix "-VO".

Other o-rings available upon request.



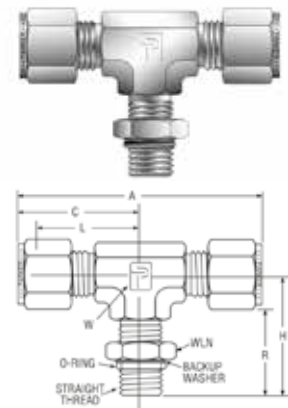
Please Note: Dimensions for reference only, subject to change.

Male branch tee SAE straight thread for fractional tube

# CPI™	# A-LOK®	Inter changes with			A	C	H	L	R	W	O-ring APR Uniform Dash No.
inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	
4-4-4 S5BZ	4M5BT4	400-3TTS	1/4	7/16-20	2.24	1.19	1.19	0.81	0.81	7/16	3-904
6-6-6 S5BZ	6M5BT6	600-3TTS	3/8	9/16-18	2.52	1.26	1.27	0.97	0.84	9/16	3-906
8-8-8 S5BZ	8M5BT8	810-3TTS	1/2	3/4-16	2.96	1.48	1.48	1.08	0.97	3/4	3-908
12-12-12 S5BZ	12M5BT12	1210-3TTS	3/4	1-1/16-12	3.26	1.63	1.92	1.23	1.28	1-1/16	3-912
16-16-16 S5BZ	16M5BT16	1610-3TTS	1	1-5/16-12	3.75	1.87	2.11	1.38	1.28	1-5/8	3-916

Note: A and C dimension is typical finger-tight.

Parts are supplied with nitrile o-rings as standard. For Fluorocarbon o-rings, add the suffix "-VO".
Other o-rings available upon request.

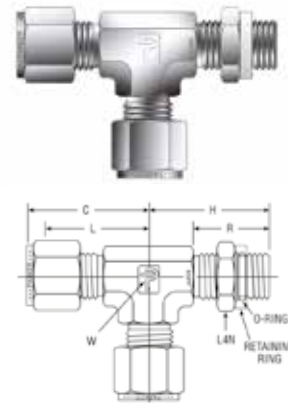


BSPP Male run tee (Positionable) for fractional tube

# CPI™	# A-LOK®	Inter changes with			C	H	L	R	W
inch	inch	inch	inch	inch	inch	inch	inch	inch	inch
4-2R-4 RBZ	4MRT2R	400-3TRT	1/4	1/8-28	1.06	1.04	0.77	0.81	9/16
4-4R-4 RBZ	4MRT4R	400-3-4TRT	1/4	1/4-19	1.14	1.27	0.85	0.83	9/16
6-6R-6 RBZ	6MRT6R	600-3TRT	3/8	3/8-19	1.20	1.27	0.91	0.83	9/16
8-6R-8 RBZ	8MRT8R	810-3TRT	1/2	3/8-19	1.50	1.46	1.10	0.85	7/8
8-8R-8 RBZ	8MRT8R	810-3-8TRT	1/2	1/2-14	1.50	1.71	1.10	1.09	7/8
10-8R-10 RBZ	10MRT8R	1010-3TRT	5/8	1/2-14	1.50	1.81	1.10	1.09	1-1/16
12-8R-12 RBZ	12MRT8R	1210-3-8TRT	3/4	1/2-14	1.57	1.81	1.17	1.09	1-1/16
12-12R-12 RBZ	12MRT12R	1210-3TRT	3/4	3/4-14	1.57	1.92	1.17	1.20	1-1/16
16-16R-16 RBZ	12MRT12R	1610-3TRT	1	1-11	1.93	2.11	1.45	1.20	1-5/16

Note: C dimension is typical finger-tight.

Parts are supplied with nitrile o-rings as standard. For Fluorocarbon o-rings, add the suffix "-VO".
Other o-rings available upon request.



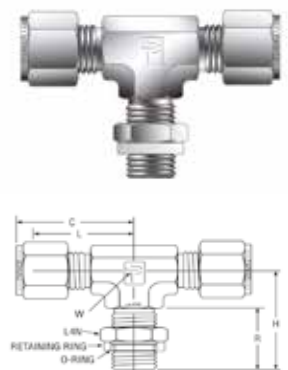
BSPP Male branch tee (Positionable) for fractional tube

# CPI™	# A-LOK®	Inter changes with			C	H	L	R	W
inch	inch	inch	inch	inch	inch	inch	inch	inch	inch
4-4-2R SBZ	4MBT2R	400-3TTR	1/4	1/8-28	1.06	1.25	0.77	0.81	9/16
4-4-4R SBZ	4MBT4R	400-3-4TTR	1/4	1/4-19	1.14	1.27	0.85	0.83	9/16
6-6-4R SBZ	6MBT4R	600-3TTR	3/8	1/4-19	1.20	1.27	0.91	0.83	9/16
8-8-6R SBZ	8MBT6R	810-3TTR	1/2	3/8-19	1.50	1.36	1.10	0.85	7/8
8-8-8R SBZ	8MBT8R	810-3-8TTR	1/2	1/2-14	1.50	1.71	1.10	1.09	7/8
10-10-8R SBZ	10MBT8R	1010-3TTR	5/8	1/2-14	1.50	1.81	1.10	1.09	1-1/16
12-12-8R SBZ	12MBT8R	1210-3-8TTR	3/4	1/2-14	1.57	1.81	1.17	1.09	1-1/16
12-12-12R SBZ	12MBT12R	1210-3TTR	3/4	3/4-14	1.57	1.92	1.17	1.20	1-1/16
16-16-16R SBZ	16MBT16R	1610-3TTR	1	1-11	1.94	2.11	1.45	1.20	1-5/16

Note: C dimension is typical finger-tight.

Connects fractional tube to female ISO parallel thread.

Parts are supplied with nitrile o-rings as standard. For Fluorocarbon o-rings, add the suffix "-VO".
Other o-rings available upon request.



Please Note: Dimensions for reference only, subject to change.

CPI™ / A-LOK®

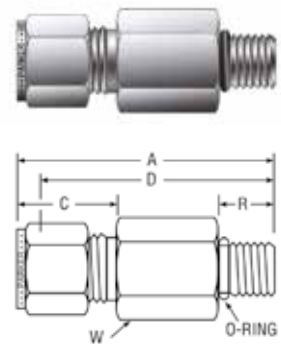
TUBE TO O-RING SEAL

Long male connector SAE/MS straight thread for fractional tube

#	#	Inter changes with			A	R	C	D	E	W	ST O-ring Uniform Size No.
CPI™	A-LOK®		inch	SAE	inch	inch	inch	inch	inch	inch	
4-4 ZH3BA	4-4 ZH3LA	400-1L-4ST	1/4	7/16-20	2.26	.36	0.70	1.97	.19	9/16	-904
6-6 ZH3BA	6-6 ZH3LA	600-1L-6ST	3/8	9/16-18	2.48	.39	0.76	2.19	.28	11/16	-906
8-8 ZH3BA	8-8 ZH3LA	810-1L-8ST	1/2	3/4-16	3.01	.44	0.86	2.58	.41	7/8	-908
12-12 ZH3BA	12-12 ZH3LA	1210-1L-12ST	3/4	1-1/16-12	3.88	.59	0.86	3.48	.62	1-1/4	-912
16-16 ZH3BA	16-16 ZH3LA	1610-1L-16ST	1	1-5/16-12	4.34	.59	1.04	3.86	.88	1-1/2	-916

Note: A and C dimensions are typical finger-tight.

Parts are supplied with nitrile o-rings as standard. For Fluorocarbon o-rings, add the suffix "-VO".
Other o-rings available upon request.



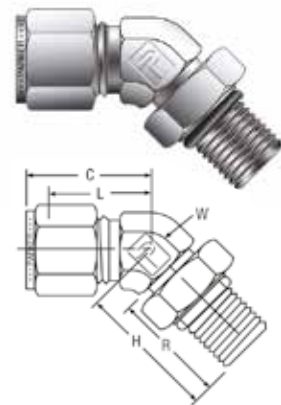
45° Positionable male elbow SAE/MS straight thread for fractional tube

#	#	Inter changes with			C	H	L	R	W	O-ring Uniform Dash No.
CPI™	A-LOK®		inch	SAE	inch	inch	inch	inch	inch	
4-4V5BZ	4M5VEL4	400-5-4ST	1/4	7/16-20	0.93	1.02	0.65	0.75	7/16	3-904
6-6V5BZ	6M5VEL6	600-5-6ST	3/8	9/16-18	1.01	1.27	0.72	0.77	9/16	3-906
8-8V5BZ	8M5VEL8	810-5-8ST	1/2	3/4-16	1.15	1.48	0.75	0.88	3/4	3-908
12-12V5BZ	12M5VEL12	1210-5-12ST	3/4	1-1/16-12	1.63	1.92	1.23	1.16	1-1/16	3-912
16-16V5BZ	16M5VEL16	1610-5-16ST	1	1-5/16-12	1.87	2.11	1.39	1.16	1-5/16	3-916

Note: A and C dimensions are typical finger-tight.

Adapts to SAE J1926 straight thread boss and MS16142 boss.

Parts are supplied with nitrile o-rings as standard. For Fluorocarbon o-rings, add the suffix "-VO".
Other o-rings available upon request.

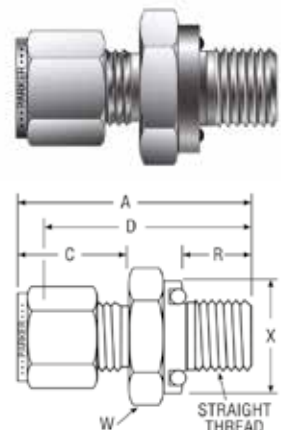


Male connector to o-ring straight thread for fractional tube

#	#	Inter changes with			A	C	D	R	X	W	O-ring APR Uniform Dash No.
CPI™	A-LOK®		inch	SAE	inch	inch	inch	inch	inch	inch	
1-2 ZHBA5	1M2SC2	100-1-OR	1/16	5/16-24	1.06	0.43	0.91	.34	.55	9/16	2-011
2-2 ZHBA5	2M2SC2	200-1-OR	1/8	5/16-24	1.29	0.60	1.03	.34	.55	9/16	2-011
3-3 ZHBA5	3M2SC3	300-1-OR	3/16	3/8-24	1.35	0.64	1.09	.38	.62	5/8	2-012
4-4 ZHBA5	4M2SC4	400-1-OR	1/4	7/16-20	1.51	0.70	1.22	.41	.74	3/4	2-111
5-5 ZHBA5	5M2SC5	500-1-OR	5/16	1/2-20	1.61	0.73	1.31	.44	.86	7/8	2-112
6-6 ZHBA5	6M2SC6	600-1-OR	3/8	9/16-18	1.67	0.76	1.38	.44	.93	15/16	2-113
8-8 ZHBA5	8M2SC8	810-1-OR	1/2	3/4-16	1.81	0.87	1.41	.47	1.12	1-1/8	2-116
10-10 ZHBA5	10M2SC10	1010-1-OR	5/8	7/8-14	1.90	0.87	1.50	.47	1.30	1-3/8	2-212
12-12 ZHBA5	12M2SC12	1210-1-OR	3/4	1-1/16-12	2.06	0.87	1.66	.56	1.49	1-1/2	2-215
14-12 ZHBA5	14M2SC12	1410-1-OR	7/8	1-1/16-12	2.06	0.87	1.66	.56	1.49	1-1/2	2-215
16-16 ZHBA5	16M2SC16	1610-1-OR	1	1-5/16-12	2.30	1.05	1.81	.56	1.74	1-3/4	2-219

Note: A and C dimensions are typical finger-tight.

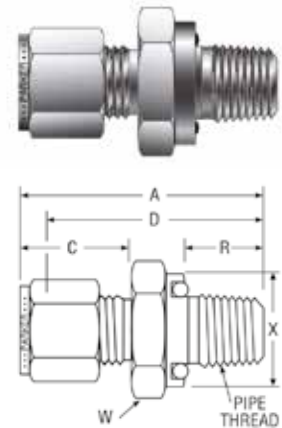
Parts are supplied with nitrile o-rings as standard. For Fluorocarbon o-rings, add the suffix "-VO".
Other o-rings available upon request.



Please Note: Dimensions for reference only, subject to change.

Male connector to o-ring pipe thread for fractional tube

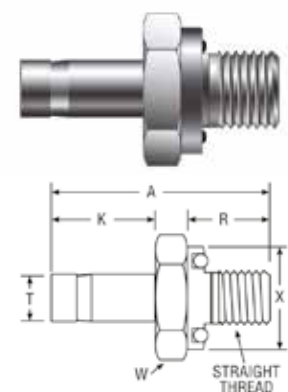
#	#	Inter changes with		Pipe Size	A	C	D	R	X	W	O-ring APR Uniform Dash No.
CPI™	A-LOK®		inch	NPT	inch	inch	inch	inch	inch	inch	
1-2 ZHBF5	1M3SC2	100-1-2-OR	1/16	1/8	1.12	0.43	0.97	.28	.74	3/4	2-111
2-2 ZHBF5	2M3SC2	200-1-2-OR	1/8	1/8	1.29	0.60	1.03	.28	.74	3/4	2-111
2-4 ZHBF5	2M3SC4	200-1-4-OR	1/8	1/4	1.43	0.60	1.17	.38	.93	15/16	2-113
3-2 ZHBF5	3M3SC2	300-1-2-OR	3/16	1/8	1.32	0.64	1.06	.28	.74	3/4	2-111
3-4 ZHBF5	3M3SC4	300-1-4-OR	3/16	1/4	1.46	0.64	1.20	.38	.93	15/16	2-113
4-2 ZHBF5	4M3SC2	400-1-2-OR	1/4	1/8	1.38	0.70	1.09	.28	.74	3/4	2-111
4-4 ZHBF5	4M3SC4	400-1-4-OR	1/4	1/4	1.51	0.70	1.22	.38	.93	15/16	2-113
4-6 ZHBF5	4M3SC6	400-1-6-OR	1/4	3/8	1.57	0.70	1.28	.41	1.12	1-1/8	2-116
5-2 ZHBF5	5M3SC2	500-1-2-OR	5/16	1/8	1.43	0.73	1.13	.28	.74	3/4	2-111
5-4 ZHBF5	5M3SC4	500-1-4-OR	5/16	1/4	1.46	0.73	1.25	.38	.93	15/16	2-113
6-2 ZHBF5	6M3SC2	600-1-2-OR	3/8	1/8	1.45	0.76	1.16	.28	.74	3/4	2-111
6-4 ZHBF5	6M3SC4	600-1-4-OR	3/8	1/4	1.57	0.76	1.28	.38	.93	15/16	2-113
6-6 ZHBF5	6M3SC6	600-1-6-OR	3/8	3/8	1.63	0.76	1.34	.41	1.12	1-1/8	2-116
6-8 ZHBF5	6M3SC8	600-1-8-OR	3/8	1/2	1.85	0.76	1.56	.53	1.30	1-3/8	2-212
8-4 ZHBF5	8M3SC4	810-1-4-OR	1/2	1/4	1.68	0.87	1.28	.38	.93	15/16	2-113
8-6 ZHBF5	8M3SC6	810-1-6-OR	1/2	3/8	1.76	0.87	1.36	.41	1.12	1-1/8	2-116
8-8 ZHBF5	8M3SC8	810-1-8-OR	1/2	1/2	1.98	0.87	1.58	.53	1.30	1-3/8	2-212
10-8 ZHBF5	10M3SC8	1010-1-8-OR	5/8	1/2	1.96	0.87	1.56	.53	1.30	1-3/8	2-212
10-12 ZHBF5	10M3SC12	1010-1-8-OR	5/8	3/4	2.06	0.87	1.66	.56	1.49	1-1/2	2-215
12-8 ZHBF5	12M3SC8	1210-1-8-OR	3/4	1/2	1.98	0.87	1.58	.53	1.30	1-3/8	2-212
12-12 ZHBF5	12M3SC12	1210-1-12-OR	3/4	3/4	2.06	0.87	1.66	.56	1.49	1-1/2	2-215
16-12 ZHBF5	16M3SC12	1610-1-12-OR	1	3/4	2.24	1.05	1.75	.56	1.49	1-1/2	2-215
16-16 ZHBF5	16M3SC16	1610-1-16-OR	1	1	2.40	1.05	1.91	.66	1.74	1-3/4	2-219



Note: A and C dimensions are typical finger-tight.
Parts are supplied with nitrile o-rings as standard. For Fluorocarbon o-rings, add the suffix "-VO".
Other o-rings available upon request.

Tube end to o-ring straight thread for fractional tube

#	#	Inter changes with			A	K	R	X	W	O-ring APR Uniform Dash No.
CPI™	A-LOK®		inch	NPT	inch	inch	inch	inch	inch	
2-2 T2HOA5	2M2TU2	2-TA-OR-ST	1/8	5/16-24	1.22	0.53	.34	0.55	9/16	2-011
3-3 T2HOA5	3M2TU3	3-TA-OR-ST	3/16	3/8-24	1.38	0.56	.38	0.62	5/8	2-012
4-4 T2HOA5	4M2TU4	4-TA-OR-ST	1/4	7/16-20	1.55	0.63	.41	0.74	3/4	2-111
5-5 T2HOA5	5M2TU5	5-TA-OR-ST	5/16	1/2-20	1.64	0.66	.44	0.86	7/8	2-112
6-6 T2HOA5	6M2TU6	6-TA-OR-ST	3/8	9/16-18	1.70	0.69	.47	0.93	15/16	2-113
8-8 T2HOA5	8M2TU8	8-TA-OR-ST	1/2	3/4-16	1.95	0.91	.47	1.12	1-1/8	2-116
10-10 T2HOA5	10M2TU10	10-TA-OR-ST	5/8	7/8-14	2.12	0.97	.47	1.30	1-3/8	2-212
12-12 T2HOA5	12M2TU12	12-TA-OR-ST	3/4	1-1/16-12	2.16	0.97	.56	1.49	1-1/2	2-215
16-16 T2HOA5	16M2TU16	16-TA-OR-ST	1	1-5/16-12	2.47	1.22	.56	1.74	1-3/4	2-219



Note: A and C dimensions are typical finger-tight.
Parts are supplied with nitrile o-rings as standard. For Fluorocarbon o-rings, add the suffix "-VO".
Other o-rings available upon request.



Please Note: Dimensions for reference only, subject to change.

CPI™ / A-LOK®

TUBE TO O-RING SEAL

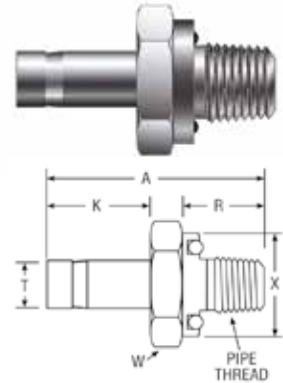
Tube end to o-ring pipe thread for fractional tube

#	#	Inter changes with			A	K	R	X	W	O-ring APR Uniform
CPI™	A-LOK®		inch	NPT	inch	inch	inch	inch	inch	Dash No.
1-2 T2HOF5	1M3TU2	1-TA-1-20R	1/16	1/8	1.03	0.34	.28	0.74	3/4	2-111
4-2 T2HOF5	4M3TU2	4-TA-1-20R	1/4	1/8	1.31	0.63	.28	0.74	3/4	2-111
4-4 T2HOF5	4M3TU4	4-TA-1-40R	1/4	1/4	1.44	0.63	.38	0.93	15/16	2-113
4-6 T2HOF5	4M3TU6	4-TA-1-60R	1/4	3/8	1.50	0.63	.41	1.12	1-1/8	2-116
5-2 T2HOF5	5M3TU2	5-TA-1-20R	5/16	1/8	2.34	0.66	.28	0.74	3/4	2-111
5-4 T2HOF5	5M3TU4	5-TA-1-40R	5/16	1/4	1.47	0.66	.38	0.93	15/16	2-113
6-2 T2HOF5	6M3TU2	6-TA-1-20R	3/8	1/8	1.38	0.69	.28	0.74	3/4	2-111
6-4 T2HOF5	6M3TU4	6-TA-1-40R	3/8	1/4	1.50	0.69	.38	0.93	15/16	2-113
6-6 T2HOF5	6M3TU6	6-TA-1-60R	3/8	3/8	1.59	0.69	.41	1.12	1-1/8	2-116
8-6 T2HOF5	8M3TU6	8-TA-1-60R	1/2	3/8	1.78	0.91	.41	1.12	1-1/8	2-116
10-8 T2HOF5	10M3TU8	10-TA-1-80R	5/8	1/2	2.14	0.97	.53	1.30	1-1/8	2-212
12-12 T2HOF5	12M3TU12	12-TA-1-120R	3/4	3/4	2.16	0.97	.56	1.49	1-1/2	2-215
16-16 T2HOF5	16M3TU16	16-TA-1-160R	1	1	2.56	1.22	.66	1.65	1-3/4	2-219

Note: Add -Z6 for assembly of nuts and ferrules on the tube stub end.

Parts are supplied with nitrile o-rings as standard. For Fluorocarbon o-rings, add the suffix "-VO".

Other o-rings available upon request.



NPT Thread to SAE straight thread adaptor for fractional tube

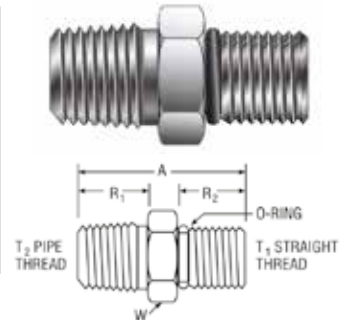
#	#	Inter changes with			A	R ₁	R ₂	W	O-ring APR Uniform
CPI™	A-LOK®		NPT	SAE	inch	inch	inch	inch	Dash No.
4-4 FHOA	4-4 FHOA	4-SAE-1-4	1/4-18	7/16-20	1.20	.56	.36	9/16	3-904
6-6 FHOA	6-6 FHOA	6-SAE-1-6	3/8-18	9/16-18	1.26	.56	.36	9/16	3-906
8-8 FHOA	8-8 FHOA	8-SAE-1-8	1/2-14	3/4-16	1.53	.75	.44	7/8	3-908
12-12 FHOA	12-12 FHOA	12-SAE-1-12	3/4-14	1-1/16-12	1.75	.75	.59	1-1/4	3-912
16-16 FHOA	16-16 FHOA	16-SAE-1-16	1-11-1/2	1-5/16-12	2.00	.94	.59	1-1/2	3-916

Note: A and C dimensions are typical finger-tight.

For use with SAE J.1926/1 port can also be used with MS-16142 port.

Parts are supplied with nitrile o-rings as standard. For Fluorocarbon o-rings, add the suffix "-VO".

Other o-rings available upon request.



Bulkhead to conversion adaptor for fractional tube

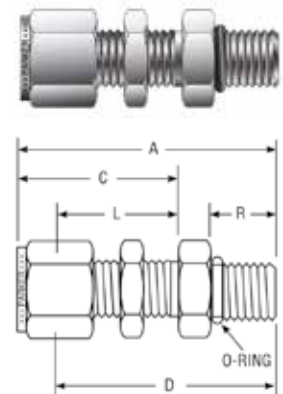
#	#	Inter changes with			A	C	D	R	L	W	Bulkhead hole	Max Bulkhead
CPI™	A-LOK®		Tube OD inch	SAE	inch	inch	inch	inch	inch	inch	Drill size	Thick.
4-6 AH2BZ	4-6 AH2LZ	400-11-6ST	1/4	9/16-18	1.74	1.17	1.45	.39	.88	3/4	37/64	9/16
6-6 AH2BZ	6-6 AH2LZ	600-11-6ST	3/8	9/16-18	1.81	1.24	1.52	.39	.94	3/4	37/64	9/16

Note: A and C dimensions are typical finger-tight.

For use with SAE J.1926/1 port can also be used with MS-16142 port.

Parts are supplied with nitrile o-rings as standard. For Fluorocarbon o-rings, add the suffix "-VO".

Other o-rings available upon request.



Please Note: Dimensions for reference only, subject to change.

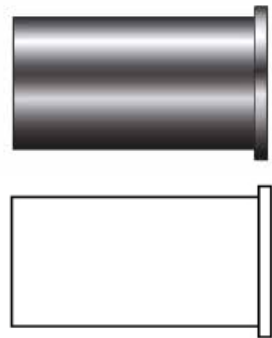
Insert for fractional tube

#	Inter changes with			Tube wall
Parker		inch	inch	inch
3 TIZ .125	305-2	3/16	.125	.031
4 TIZ .125	405-2	1/4	.125	.062
4 TIZ .170	405-170	1/4	.170	.040
4 TIZ .188	405-3	1/4	.188	.081
5 TIZ .125	505-2	5/16	.125	.094
5 TIZ .188	505-3	5/16	.188	.062
5 TIZ .250	505-4	5/16	.250	.031
6 TIZ .188	605-3	3/8	.188	.094
6 TIZ .250	605-4	3/8	.250	.062
8 TIZ .250	815-4	1/2	.250	.125
8 TIZ .375	815-6	1/2	.375	.062
10 TIZ .375	1015-6	5/8	.375	.125
10 TIZ .500	1015-8	5/8	.500	.062
12 TIZ .500	1215-8	3/4	.500	.125
12 TIZ .625	1215-10	3/4	.625	.062
16 TIZ .750	1615-12	1	.750	.125
16 TIZ .875	1615-14	1	.875	.062

Note: Tubing wall thickness and corresponding minimum I.D. flow paths are listed so the system designer can properly match the insert to the tubing.

Example: 4 TIZ .125 is used with tubing having a wall thickness of .062 and I.D. of .125.

TIZ inserts allow CPI™ / A-LOK® fittings to be used with soft plastic tubing.

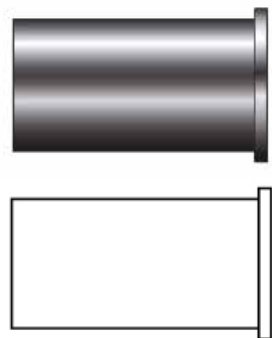


Insert for metric tube

#	Inter changes with			Tube wall
Parker		mm	mm	mm
TIZ 6 (4)	6M5-4M	6.0	4	1.0
TIZ 8 (6)	8M5-6M	8.0	6	1.0
TIZ 10 (6)	10M5-6M	10.0	6	2.0
TIZ 10 (8)	10M5-8M	10.0	8	1.0
TIZ 12 (8)	12M5-8M	12.0	8	2.0
TIZ 12 (10)	12M5-10M	12.0	10	1.0
TIZ 15 (10)	15M5-10M	15.0	10	2.5

Note: Tubing wall thickness and corresponding minimum I.D. flow paths are listed so the system designer can properly match the insert to the tubing.

Example: TIZ 6 (4) is used with tubing having a wall thickness of 1mm and I.D. of 4mm. TIZ inserts allow CPI™ / A-LOK® fittings to be used with soft plastic tubing.



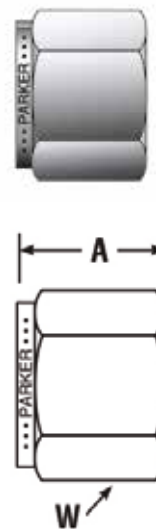
Please Note: Dimensions for reference only, subject to change.

A-LOK® / CPI™ COMPONENTS

Tube nut for fractional tube

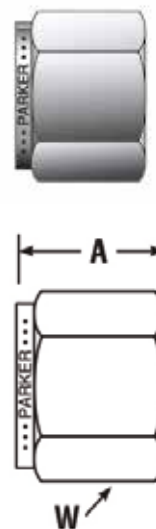
#	#	Inter changes with		A	W
CPI™	A-LOK®	inch	Tube O.D. inch	inch	inch
1BZ	1NU1	102-1	1/16	0.31	5/16
2BZ	2NU2	202-1	1/8	0.47	7/16
3BZ	3NU3	302-1	3/16	0.47	1/2
4BZ	4NU4	402-1	1/4	0.50	9/16
5BZ	5NU5	502-1	5/16	0.53	5/8
6BZ	6NU6	602-1	3/8	0.56	11/16
8BZ	8NU8	812-1	1/2	0.69	7/8
10BZ	10NU10	1012-1	5/8	0.69	1
12BZ	12NU12	1212-1	3/4	0.69	1-1/8
14BZ	14NU14	1412-1	7/8	0.69	1-1/4
16BZ	16NU16	1612-1	1	0.81	1-1/2
20BZ	20NU20	2012-1	1-1/4	1.25	1-7/8
24BZ	24NU24	2412-1	1-1/2	1.50	2-1/4
32BZ	32NU32	3212-1	2	2.06	3

Note: All size 20, 24 and 32 silver plated nuts should have a system compatible lube (Permatex Anti-seize - Parker Catalogue 4290-INST) or equivalent applied to the fitting body threads and the inside back of nuts. This will minimize the effort required to assemble the fitting properly.



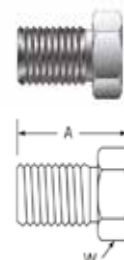
Tube nut for metric tube

#	#	Inter changes with			A	W
CPI™	A-LOK®		UN	Tube O.D. mm	mm	mm
BZ 2	NUM2	2M2-1	5/16-20	2.0	11.9	12.0
BZ 3	NUM3	3M2-1	5/16-20	3.0	11.9	12.0
BZ 4	NUM4	4M2-1	3/8-20	4.0	11.9	12.0
BZ 6	NUM6	6M2-1	7/16-20	6.0	12.7	14.0
BZ 8	NUM8	8M2-1	1/2-20	8.0	13.5	16.0
BZ 10	NUM10	10M2-1	5/8-20	10.0	15.1	19.0
BZ 12	NUM12	12M2-1	3/4-20	12.0	17.5	22.0
BZ 14	NUM14	14M2-1	7/8-20	14.0	17.5	25.0
BZ 15	NUM15	15M2-1	7/8-20	15.0	17.5	25.0
BZ 16	NUM16	16M2-1	7/8-20	16.0	17.5	25.0
BZ 18	NUM18	18M2-1	1-20	18.0	17.5	30.0
BZ 20	NUM20	20M2-1	1.1/8-20	20.0	17.5	32.0
BZ 22	NUM22	22M2-1	1.1/8-20	22.0	17.5	32.0
BZ 25	NUM25	25M2-1	1.5/16-20	25.0	20.6	38.0



Inverted tube nut for fractional tube

#	Inter changes with		A	W
Parker		Tube O.D. inch	inch	inch
1 BZI	1F2-1GC	1/16	.39	1/4
2 BZI	2F2-1GC	1/8	.44	7/16



Please Note: Dimensions for reference only, subject to change.

Knurled nut for fractional tube

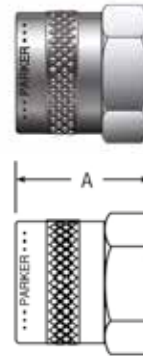
How to assemble BZP

1. Replaces BZ/NU nuts on Parker CPI™ / A-LOK® fitting bodies.
2. Insert plastic tubing until it bottoms in fitting body.
3. Tighten finger tight.

The knurled nut is designed for use with soft plastic tubing on low pressure applications where a finger tight assembly procedure is satisfactory.

Example: Laboratory test hook-ups. Nylon or PTFE ferrules are frequently used instead of metal ferrules in this type of application.

#	Inter changes with		A
Parker		Tube O.D. inch	inch
1 BZP	102-1K	1/16	.32
2 BZP	202-1K	1/8	.47
3 BZP	302-1K	3/16	.47
4 BZP	402-1K	1/4	.51
5 BZP	502-1K	5/16	.54
6 BZP	812-1K	3/8	.57
8 BZP	602-1K	1/2	.69
10 BZP	1012-1K	5/8	.69



CPI - Ferrules for fractional tube

#	
Parker	inch
1 TZ	1/16
2 TZ	1/8
3 TZ	3/16
4 TZ	1/4
5 TZ	5/16
6 TZ	3/8
8 TZ	1/2
10 TZ	5/8
12 TZ	3/4
14 TZ	7/8
16 TZ	1
20 TZ	1-1/4
24 TZ	1-1/2
32 TZ	2



Note: Ferrules are available in standard metal materials as well as standard plastics like PTFE and nylon.



Please Note: Dimensions for reference only, subject to change.

A-LOK® / CPI™ COMPONENTS

CPI - Ferrules for metric tube

# Parker	 mm
TZ 3	3.0
TZ 6	6.0
TZ 8	8.0
TZ 10	10.0
TZ 12	12.0
TZ 16	16.0
TZ 20	20.0
TZ 25	25.0



Note: Ferrules are available in standard metal materials as well as standard plastics like PTFE and nylon.

A-LOK - Inch front ferrule for fractional tube

# Parker	Inter changes with	 inch
1FF1	103-1	1/16
2FF2	203-1	1/8
3FF3	303-1	3/16
4FF4	403-1	1/4
5FF5	503-1	5/16
6FF6	603-1	3/8
8FF8	813-1	1/2
10FF10	1013-1	5/8
12FF12	1213-1	3/4
14FF14	1413-1	7/8
16FF16	1613-1	1
20FF20	2013-1	1-1/4
24FF24	2413-1	1-1/2
32FF32	3213-1	2



Note: Ferrules are available in standard metal materials as well as standard plastics like PTFE and nylon.



Please Note: Dimensions for reference only, subject to change.

A-LOK - Metric front ferrule for metric tube

# Parker	Inter changes with	 mm
FFM2	2M3-1	2.0
FFM3	3M3-1	3.0
FFM4	4M3-1	4.0
FFM6	6M3-1	6.0
FFM8	8M3-1	8.0
FFM10	10M3-1	10.0
FFM12	12M3-1	12.0
FFM14	14M3-1	14.0
FFM15	15M3-1	15.0
FFM16	16M3-1	16.0
FFM18	18M3-1	18.0
FFM20	20M3-1	20.0
FFM22	22M3-1	22.0
FFM25	25M3-1	25.0



Note: Ferrules are available in standard metal materials as well as standard plastics like PTFE and nylon.

A-LOK - Inch back ferrule for fractional tube

# Parker	Inter changes with	 inch
1BF1	104-1	1/16
2BF2	204-1	1/8
3BF3	304-1	3/16
4BF4	404-1	1/4
5BF5	504-1	5/16
6BF6	604-1	3/8
8BF8	814-1	1/2
10BF10	1014-1	5/8
12BF12	1214-1	3/4
14BF14	1414-1	7/8
16BF16	1614-1	1
20BF20	2014-1	1-1/4
24BF24	2414-1	1-1/2
32BF32	3214-1	2



Note: For stainless steel, sizes 4-32 are Supercase ferrules. Ferrules are available in standard metal materials as well as standard plastics like PTFE and nylon.



Please Note: Dimensions for reference only, subject to change.

A-LOK® / CPI™ COMPONENTS

A-LOK - Metric back ferrule for metric tube

# Parker	Inter changes with	 mm
BFM2	2M4-1	2.0
BFM3	3M4-1	3.0
BFM4	4M4-1	4.0
BFM6	6M4-1	6.0
BFM8	8M4-1	8.0
BFM10	10M4-1	10.0
BFM12	12M4-1	12.0
BFM14	14M4-1	14.0
BFM15	15M4-1	15.0
BFM16	16M4-1	16.0
BFM18	18M4-1	18.0
BFM20	20M4-1	20.0
BFM22	22M4-1	22.0
BFM25	25M4-1	25.0



Note: For stainless steel, sizes 6mm-25mm are Supercase ferrules. Ferrules are available in standard metal materials as well as standard plastics like PTFE and nylon.

Ferrule holder

Package simplifies ordering, stocking, and assembling.

# CPI™	# A-LOK®	 inch
2 CPI-SET	2 ALOK-SET	1/8
4 CPI-SET	4 ALOK-SET	1/4
6 CPI-SET	6 ALOK-SET	3/8
8 CPI-SET	8 ALOK-SET	1/2
12 CPI-SET	12 ALOK-SET	3/4
16 CPI-SET	16 ALOK-SET	1

# CPI™	# A-LOK®	 mm
6M CPI-SET	6M ALOK-SET	6
8M CPI-SET	8M ALOK-SET	8
10M CPI-SET	10M ALOK-SET	10
12M CPI-SET	12M ALOK-SET	12



* Material designator - 316-SS, B-Brass, S-Steel.

Note: The Parker ferrule holder offers a new convenience. The holder contains individual ferrule sets. Ferrule sets may be dispensed one at a time.



Please Note: Dimensions for reference only, subject to change.

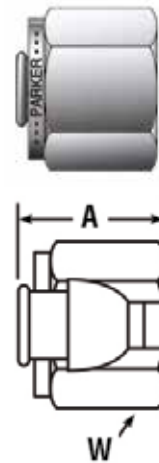
Plug for fractional tube

For plugging open ended CPI™ / A-LOK® fitting ends.

How to assemble

Wrench tighten only 1/4 turn from finger tight position. Assembly includes machined ferrule with lock ring.

# CPI™	# A-LOK®	Inter changes with	 inch	 UN	A inch	W inch
1 FNZ	1BLP1	100-P	1/16	10-32	0.31	5/16
2 FNZ	2BLP2	200-P	1/8	5/16-20	0.47	7/16
3 FNZ	3BLP3	300-P	3/16	3/8-20	0.47	1/2
4 FNZ	4BLP4	400-P	1/4	7/16-20	0.50	9/16
5 FNZ	5BLP5	500-P	5/16	1/2-20	0.53	5/8
6 FNZ	6BLP6	600-P	3/8	9/16-20	0.56	11/16
8 FNZ	8BLP8	810-P	1/2	3/4-20	0.69	7/8
10 FNZ	10BLP10	1010-P	5/8	7/8-20	0.69	1
12 FNZ	12BLP12	1210-P	3/4	1-20	0.69	1-1/8
14 FNZ	14BLP14	1410-P	7/8	1-1/8-20	0.69	1-1/4
16 FNZ	16BLP16	1610-P	1	1-5/16-20	0.81	1-1/2
20 FNZ	20BLP20	2010-P	1-1/4	1-5/8-20	1.35	1-7/8
24 FNZ	24BLP24	2410-P	1-1/2	1-5/16-20	1.72	2-1/4
32 FNZ	32BLP32	3210-P	2	2-5/8-20	2.27	3



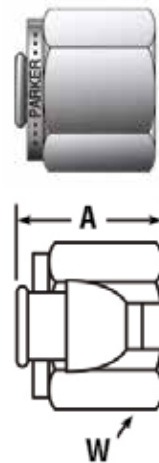
Plug for metric tube

For plugging open ended CPI™ / A-LOK® fitting ends.

How to assemble

Wrench tighten only 1/4 turn from finger tight position. Assembly includes machined ferrule with lock ring.

# CPI™	# A-LOK®	Inter changes with	 mm	 UN	A mm	W mm
FNZ 2	BLPM2	2MO-P	2.0	5/16-20	11.9	12.0
FNZ 3	BLPM3	3MO-P	3.0	5/16-20	11.9	12.0
FNZ 4	BLPM4	4MO-P	4.0	3/8-20	11.9	12.0
FNZ 6	BLPM6	6MO-P	6.0	7/16-20	12.7	14.0
FNZ 8	BLPM8	8MO-P	8.0	1/2-20	13.5	16.0
FNZ 10	BLPM10	10MO-P	10.0	5/8-20	15.1	19.0
FNZ 12	BLPM12	12MO-P	12.0	3/4-20	17.5	22.0
FNZ 14	BLPM14	14MO-P	14.0	7/8-20	17.5	25.0
FNZ 15	BLPM15	15MO-P	15.0	7/8-20	17.5	25.0
FNZ 16	BLPM16	16MO-P	16.0	7/8-20	17.5	25.0
FNZ 18	BLPM18	18MO-P	18.0	1-20	17.5	30.0
FNZ 20	BLPM20	20MO-P	20.0	1-1/8-20	17.5	32.0
FNZ 22	BLPM22	22MO-P	22.0	1-1/8-20	17.5	32.0
FNZ 25	BLPM25	25MO-P	25.0	1-5/16-20	20.6	38.0



Please Note: Dimensions for reference only, subject to change.

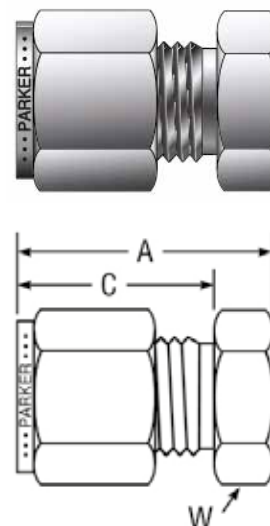
A-LOK® / CPI™ COMPONENTS

Cap for fractional tube

For capping open ended tubing.

#	#	Inter changes with		A	C	W
CPI™	A-LOK®		Tube O.D. inch	inch	inch	inch
1 PNBZ	1BLEN1	100-C	1/16	0.56	0.43	5/16
2 PNBZ	2BLEN2	200-C	1/8	0.79	0.60	7/16
3 PNBZ	3BLEN3	300-C	3/16	0.84	0.64	7/16
4 PNBZ	4BLEN4	400-C	1/4	0.92	0.70	1/2
5 PNBZ	5BLEN5	500-C	5/16	0.96	0.73	9/16
6 PNBZ	6BLEN6	600-C	3/8	1.01	0.76	5/8
8 PNBZ	8BLEN8	810-C	1/2	1.15	0.87	13/16
10 PNBZ	10BLEN10	1010-C	5/8	1.18	0.87	15/16
12 PNBZ	12BLEN12	1210-C	3/4	1.25	0.87	1-1/16
14 PNBZ	14BLEN14	1410-C	7/8	1.31	0.87	1-3/16
16 PNBZ	16BLEN16	1610-C	1	1.52	1.05	1-3/8
20 PNBZ	20BLEN20	2010-C	1-1/4	2.09	1.52	1-3/4
24 PNBZ	24BLEN24	2410-C	1-1/2	2.53	1.77	2-1/8
32 PNBZ	32BLEN32	3210-C	2	3.41	2.47	2-3/4

Note: A and C dimensions are typical finger-tight.
For body only specify PNZ.

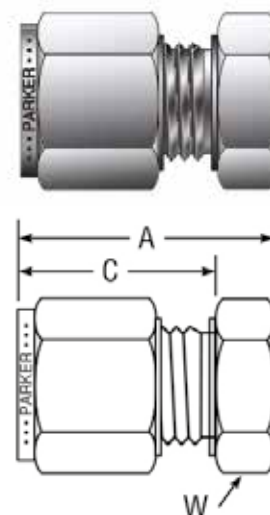


Cap for metric tube

For capping open ended tubing.

#	#	Inter changes with		A	C	W
CPI™	A-LOK®		Tube O.D. mm	mm	mm	mm
PNBZ 2	BLENM2	2MO-C	2.0	13.5	15.3	12.0
PNBZ 3	BLENM3	3MO-C	3.0	13.5	15.3	12.0
PNBZ 4	BLENM4	4MO-C	4.0	14.3	16.1	12.0
PNBZ 6	BLENM6	6MO-C	6.0	15.9	17.7	14.0
PNBZ 8	BLENM8	8MO-C	8.0	17.1	18.6	15.0
PNBZ 10	BLENM10	10MO-C	10.0	19.1	19.5	18.0
PNBZ 12	BLENM12	12MO-C	12.0	19.1	22.0	22.0
PNBZ 14	BLENM14	14MO-C	14.0	19.8	22.0	24.0
PNBZ 15	BLENM15	15MO-C	15.0	19.8	22.0	24.0
PNBZ 16	BLENM16	16MO-C	16.0	19.8	22.0	24.0
PNBZ 18	BLENM18	18MO-C	18.0	21.3	22.0	27.0
PNBZ 20	BLENM20	20MO-C	20.0	23.9	22.0	30.0
PNBZ 22	BLENM22	22MO-C	22.0	23.9	22.0	30.0
PNBZ 25	BLENM25	25MO-C	25.0	26.2	26.5	35.0

Note: A and C dimensions are typical finger-tight.
For body only specify PNZ.



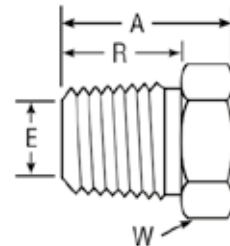
Please Note: Dimensions for reference only, subject to change.

Vent protector NPT male pipe thread for fractional tube

#	Inter changes with		A	R	E	W
CPI™		NPT	inch	inch	inch	inch
2 MDF	MS-MD-2M	1/8-27	0.63	.38	.19	9/16
4 MDF	MS-MD-4M	1/4-18	0.81	.56	.28	9/16
6 MDF	MS-MD-6M	3/8-18	0.81	.56	.41	11/16
8 MDF	MS-MD-8M	1/2-14	1.06	.75	.50	7/8
12 MDF	MS-MD-12M	3/4-14	1.13	.75	.63	1-1/16
16 MDF	MS-MD-16M	1-11-1/2	1.3	.95	.94	1-3/8

Note: Parker Instrumentation vent protectors (mud dauber fittings) protect open ends of instruments, tubing, outlet vents, etc.
The mesh wire screen prevents foreign bodies such as insects or debris from entering and clogging various systems and causing damage.

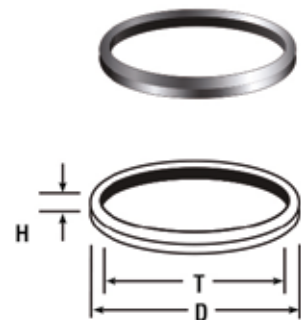
- Pipe plug, bored-thru design
- 40 x 40 mesh, .010 diameter wire screen
- Designed to vent female pipe, straights, elbows and tees



Bonded Seals

Consists of an outer stainless steel ring with a fluorocarbon inner ring used to seal a male ISO parallel thread.

#		D	H
Parker	BSPP (T)		
M30201-SS	1/8	0.63	.08
M30202-SS	1/4	0.81	.08
M30203-SS	3/8	0.94	.08
M30204-SS	1/2	1.12	.10
M30206-SS	3/4	1.38	.10
M30208-SS	1	1.69	.10



Pressure ratings for sealing washer		
Thread size	PSI	Bar
1/8	5300	370
1/4	5500	380
3/8	4400	300
1/2	4000	280
3/4	3700	260
1	2800	190

Note: These seals are also available in steel with a nitrile inner ring. Simply replace Suffix SS with S.



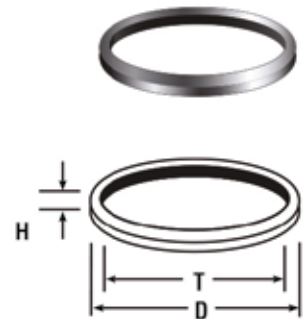
Please Note: Dimensions for reference only, subject to change.

A-LOK® / CPI™ COMPONENTS

Copper Washers

Used to provide a seal with male or female parallel ISO threads.
For BSPP male thread sealing

#		D	D	H
Parker	BSPP			
M28329-CU	1/8	0.71	0.39	.09
M28330-CU	1/4	0.87	0.55	.09
M28331-CU	3/8	0.94	0.67	.09
M28332-CU	1/2	1.18	0.87	.10
M28334-CU	3/4	1.38	1.06	.09
M28336-CU	1	1.65	1.34	.09



For BSPP female thread sealing

#		D	D	H
Parker	BSPP			
M25179-CU	1/8	0.322	.188	.062
M25180-CU	1/4	0.436	.250	.062
M25181-CU	3/8	0.574	.375	.062
M25182-CU	1/2	0.719	.500	.062
M25184-CU	3/4	0.935	.719	.062
M25186-CU	1	1.178	.969	.093

Note: Please note the pressure ratings are based on taper threaded ends. The pressure rating for the BSPP ends are dependent on the type of sealing washer used.

Bulkhead locknut for fractional tube

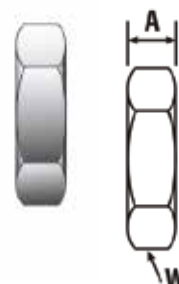
#	Inter changes with			A	W
Parker	A-LOK®	UN	inch	inch	inch
1 WLZ	102-61	10-32	1/16	.13	5/16
2 WLZ	202-61	5/16-20	1/8	.19	1/2
3 WLZ	302-61	3/8-20	3/16	.22	9/16
4 WLZ	402-61	7/16-20	1/4	.22	5/8
5 WLZ	502-61	1/2-20	5/16	.23	11/16
6 WLZ	602-61	9/16-20	3/8	.25	3/4
8 WLZ	812-61	3/4-20	1/2	.28	15/16
10 WLZ	1012-61	7/8-20	5/8	.31	1-1/16
12 WLZ	1212-61	1-20	3/4	.34	1-3/16
14 WLZ	1412-61	1-1/8-20	7/8	.38	1-3/8
16 WLZ	1612-61	1-5/16-20	1	.38	1-5/8



Please Note: Dimensions for reference only, subject to change.

Bulkhead locknut for fractional tube

#			A	W
Parker	UNF	inch	inch	inch
4 WLN	7/16-20	1/4	.28	11/16
6 WLN	9/16-18	3/8	.27	13/16
8 WLN	3/4-16	1/2	.31	1
12 WLN	1-1/16-12	3/4	.41	1-3/8
16 WLN	1-5/16-12	1	.41	1-5/8



Bulkhead locknut for metric tube

#			A	W
Parker	UN	mm	mm	mm
2BN2	5/16-20	2 and 3	4.8	13.0
3BN3	3/8-20	4	5.6	14.0
4BN4	7/16-20	6	5.6	16.0
5BN5	1/2-20	8	5.6	17.0
BN10	5/8-10	10	6.4	21.0
8BN8	3/4-20	12	7.1	24.0
10BN10	7/8-20	14, 15 and 16	7.9	27.0
12BN12	1-20	18	8.6	30.0
14BN14	1-1/8-20	20 and 22	9.7	33.0
16BN16	1-5/16	25	9.7	41.0



Accessory locknut

#		A	W
Parker	UNF	inch	inch
2 L5NR	5/16-24	.22	7/16
3 L5NR	3/8-24	.22	1/2
4 L5NR	7/16-20	.28	9/16
5 L5NR	1/2-20	.28	5/8
6 L5NR	9/16-18	.28	11/16
8 L5NR	3/4-16	.31	7/8
10 L5NR	7/8-14	.36	1
12 L5NR	1-1/16-12	.41	1-1/4
14 L5NR	1-3/16-12	.41	1-3/8
16 L5NR	1-5/16-12	.41	1-1/2



Please Note: Dimensions for reference only, subject to change.

CPI™ / A-LOK®

ASSEMBLY & REMAKE INSTRUCTIONS

1. Parker instrument tube fittings are sold completely assembled and ready for immediate use. Simply insert the tube as illustrated until it bottoms in the fitting body. (If the fitting is disassembled, note that the small tapered end of the ferrule(s) go into the fitting body.)
2. Tighten nut finger tight. Then tighten nut with wrench an additional 3/4 or 1-1/4 turns indicated at left. Hold fitting body with a second wrench to prevent body from turning. It is helpful to mark the nut to facilitate counting the number of turns.

For maximum number of remakes, mark the fitting and nut before disassembly. Before retightening, make sure the assembly has been inserted into the fitting until the ferrule seats in the fitting. Retighten the nut by hand. Rotate the nut with a wrench to the original position as indicated by the previous marks lining up. (A noticeable increase in mechanical resistance will be felt indicating the ferrule is being re-sprung into sealing position.) Only after several remakes will it become necessary to advance the nut slightly past the original position. This advance (indicated by B) need only be 10°-20° (less than 1/3 of a hex flat). For Sizes above 16 (1"), the Parker IPD Hydraulic Presetting Tool or Rotary Wrench Tool should be used.

Parker CPI™ / A-LOK® Tube Fitting part numbers use symbols to identify the size, style, and material. Tube and pipe thread sizes begin with a number indicating their size in sixteenths of an inch.

For example, 4=4/16" or 1/4"; 16=16/16" or 1".

Note: Lubrication of the nut is required for proper assembly on all larger size fittings in both inch and metric sizes. This requirement applies to:

- Inch sizes of 20 and higher
- Metric sizes of 25 and higher

INCH SIZE 1 thru 3
(1/16" - 3/16")
METRIC SIZE 2 thru 4
(2-4mm)



Only 3/4 turn from finger tight is necessary to seal and will result in additional remakes of the fitting

INCH SIZE 4 thru 16
(1/4" - 1")
METRIC SIZE 6 thru 25
(6-25mm)



1-1/4 Turns from Finger Tight



Gaugeability instructions

1. From "finger tight" position, wrench 1-1/4 turns for 1/4" to 1" size fittings (6mm to 25mm) (1/16", 1/8", 3/16", 2mm 3mm and 4mm size tube fittings only wrench 3/4 turn from finger tight position). Hold fitting body hex with second wrench to prevent body from turning as you tighten. It is a good idea to mark the nut (scribe or ink) to help you count the turns.
2. Now select the proper size inspection gauge and try to place it, as shown, between the nut and the body hex. If gauge does not fit at any point between them, you have correctly tightened the nut. If you can slip the gauge into the space, the fitting is not properly made up, and you must repeat the assembly procedure.

*For initial make up only.



Please Note: Dimensions for reference only, subject to change.

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INSTRUMENT TUBING SELECTION GUIDE

Instrument tubing selection guide

Parker's instrument tube fittings have been designed to work in a wide variety of applications that demand the utmost in product performance.

Although Parker's Instrument tube fittings have been engineered and manufactured to consistently provide this level of reliability, no systems integrity is complete without considering the critical link, tubing.

This booklet is intended to assist the designer to properly select and order quality tubing.

Proper tube selection and installation, we believe, are key ingredients in building leak-free reliable tubing systems.

General selection criteria

The most important consideration in the selection of suitable tubing for any application is the compatibility of the tubing material with the media to be contained. Table 1 lists common materials and their associated general application. Table 1 also lists the maximum and minimum operating temperature for the various tubing materials.

In addition, Parker instrument fittings are designed to work on like materials. Stainless steel fittings should be used only with stainless steel tubing, aluminium fittings with aluminium tubing, etc. The practice of mixing materials is strongly discouraged. The only exception is brass fittings with copper tubing.

Dissimilar materials in contact may be susceptible to galvanic corrosion. Further, different materials have different levels of hardness, and can adversely affect the fittings ability to seal on the tubing.

Table 1

Tubing material	General application	Recommended temperature range
Stainless Steel (Type 316)	High Pressure, High Temperature, Generally Corrosive Media	-425°F to 1,200°F1 (-255°C to 605°C)
Carbon Steel	High Pressure, High Temperature Oil, Air, Some Specialty Chemicals	-20°F to 800°F2 (-29°C to 425°C)
Copper	Low Temperature, Low Pressure Water, Oil, Air	-40°F to 400°F (-40°C to 205°C)
Aluminum	Low Temperature, Low Pressure Water, Oil, Air, Some Specialty Chemicals	-40°F to 400°F (-40°C to 205°C)
Monel® 400	Recommended for Sour Gas Applications Well Suited for Marine and General Chemical Processing Applications	-325°F to 800°F (-198°C to 425°C)
Hastelloy® C-276	Excellent Corrosion Resistance to Both Oxidizing and Reducing Media and Excellent Resistance to Localized Corrosion Attack	-325°F to 1000°F (-198°C to 535°C)
Carpenter® 20	Applications Requiring Resistance to Stress Corrosion Cracking in Extreme Conditions	-325°F to 800°F (-198°C to 425°C)
Inconel® Alloy 600	Recommended for High Temperature Applications with Generally Corrosive Media	-205°F to 1200°F (-130°C to 650°C)
Titanium	Resistant to Many Natural Environments such as Sea Water, Body Fluids and Salt Solutions	-75°F to 600°F (-59°C to 315°C)

1. For operating temperatures above 800°F (425°C), consideration should be given to media. 300 Series Stainless Steels are susceptible to carbide precipitation which may lead to intergranular corrosion at elevated temperatures.

2. Consideration should be given to maximum temperature ratings if fittings and / or tubing are coated or plated. All temperature ratings based on temperatures per ASME B31.3 Chemical Plant and Petroleum Refinery Piping Code, 1999 Edition.

Note: Hastelloy® is a registered trademark of Haynes International. Inconel®, and Monel® are registered trademarks of Special Metals Corporation. Carpenter® is a registered trademark of CRS Holdings Inc.



Please Note: Dimensions for reference only, subject to change.

INSTRUMENT TUBING SELECTION GUIDE

Gas service

Special care must be taken when selecting tubing for gas service. In order to achieve a gas-tight seal, ferrules in instrument fittings must seal any surface imperfections. This is accomplished by the ferrules penetrating the surface of the tubing. Penetration can only be achieved if the tubing provides radial resistance and if the tubing material is softer than the ferrules.

Thick walled tubing helps to provide resistance. Tables 2-7 indicate the minimum acceptable wall thickness for various materials in gas service. The ratings in white indicate combination of diameter and wall thickness which are suitable for gas service.

Acceptable tubing hardness for general application is listed in Table 9. These values are the maximum allowed by ASTM. For gas service, better results can be obtained by using tubing well below this maximum hardness.

For example, a desirable hardness of 80 Rb is suitable for stainless steel. The maximum allowed by ASTM is 90 Rb.

System pressure

The system operating pressure is another important factor in determining the type, and more importantly, the size of tubing to be used. In general, high pressure installations require strong materials such as steel or stainless steel. Heavy walled softer tubing such as copper may be used if chemical compatibility exists with the media. However, the higher strength of steel or stainless steel permits the use of thinner tubes without reducing the ultimate rating of the system. In any event, tube fitting assemblies should never be pressurized beyond the recommended working pressure.

The following tables (2-7) list by material the maximum suggested working pressure of various tubing sizes.

Acceptable tubing diameters and wall thickness's are those for which a rating is listed. Combinations, which do not have a pressure rating, are not recommended for use with instrument fittings.

MAXIMUM ALLOWABLE WORKING PRESSURE TABLES**Table 2 - 316 or 304 Stainless steel (seamless)**

Tube O.D. Size	Wall Thickness															
	0.010	0.012	0.014	0.016	0.020	0.028	0.035	0.049	0.065	0.083	0.095	0.109	0.120	0.134	0.156	0.188
1/16	5600	6900	8200	9500	12100	16800										
1/8						8600	10900									
3/16						5500	7000	10300								
1/4						4000	5100	7500	10300							
5/16							4100	5900	8100							
3/8							3300	4800	6600							
1/2							2600	3700	5100	6700						
5/8								3000	4000	5200	6100					
3/4								2400	3300	4300	5000	5800				
7/8								2100	2800	3600	4200	4900				
1									2400	3200	3700	4200	4700			
1-1/4										2500	2900	3300	3700	4100	4900	
1-1/2											2400	2700	3000	3400	4000	4500
2												2000	2200	2500	2900	3200



Please Note: Dimensions for reference only, subject to change.

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INSTRUMENT TUBING SELECTION GUIDE

Table 3 - 316 or 304 Stainless steel (welded)

Tube O.D. Size	Wall Thickness															
	0.010	0.012	0.014	0.016	0.020	0.028	0.035	0.049	0.065	0.083	0.095	0.109	0.120	0.134	0.156	0.188
1/16	4800	5900	7000	8100	10300	14300										
1/8						7300	9300									
3/16						4700	6000	8700								
1/4						3400	4400	6400	8700							
5/16							3400	5000	6900							
3/8							2800	4100	5600							
1/2							2200	3200	4300	5700						
5/8								2500	3400	4500	5200					
3/4								2100	2800	3700	4200	4900				
7/8								1800	2400	3100	3600	4200				
1									2100	2700	3100	3600	4000			
1-1/4										2100	2400	2800	3100	3500	4200	
1-1/2											2000	2300	2600	2900	3400	4200
2												1700	1900	2100	2500	3000

Table 4 - Carbon steel (seamless)

Tube O.D. Size	Wall Thickness											
	0.028	0.035	0.049	0.065	0.083	0.095	0.109	0.120	0.134	0.184	0.165	0.180
1/8	8100	10300										
3/16	5200	6700	9700									
1/4	3800	4900	7100	9700								
5/16		3800	5500	7700								
3/8		3100	4500	6200								
1/2		2300	3300	4500	6000							
5/8		1800	2600	3500	4600	5400						
3/4			2200	2900	3800	4400	5100					
7/8			1800	2500	3200	3700	4300					
1			1600	2100	2800	3200	3700	4100				
1-1/4				1700	2200	2500	2900	3200	3700	3800		
1-1/2					1800	2100	2400	2700	3000	3400	3800	4000
2						1600	1800	2000	2200	2500	2800	3000



Please Note: Dimensions for reference only, subject to change.

INSTRUMENT TUBING SELECTION GUIDE

Table 5 - Copper (seamless)

Tube O.D. Size	Wall Thickness									
	0.010	0.020	0.028	0.035	0.049	0.065	0.083	0.095	0.109	0.120
1/16	1700	3800	5400							
1/8			2800	3600						
3/16			1800	2300	3500					
1/4			1300	1700	2600	3500				
5/16				1300	2000	2800				
3/8				1100	1600	2300				
1/2				800	1200	1600	2200			
5/8					900	1300	1700	2000		
3/4					800	1000	1400	1600	1900	
7/8					600	900	1100	1300	1600	
1					600	800	1000	1200	1400	1500
1-1/8					500	700	900	1000	1200	1300
1-1/4							800	900	1100	1200
1-1/2							650	750	850	950

Table 6 - Aluminum

Tube O.D. Size	Wall Thickness				
	0.035	0.049	0.065	0.083	0.095
1/8	8700				
3/16	5600	8100			
1/4	4100	5900			
5/16	3200	4600			
3/8	2600	3800			
1/2	1900	2800	3800		
5/8	1500	2200	2900		
3/4		1800	2400	3200	
7/8		1500	2100	2700	
1		1300	1800	2300	2700

Table 7 - Monel 400 (seamless)

Tube O.D. Size	Wall Thickness									
	0.010	0.020	0.028	0.035	0.049	0.065	0.083	0.095	0.109	0.120
1/16	5500	11800	13600							
1/8			8100	10400						
3/16			5100	6600	9600					
1/4			3800	4800	7000	9600				
5/16				3800	5500	7500				
3/8				3100	4500	6100				
1/2				2300	3300	4500	5900			
5/8					2700	3700	4900	5600		
3/4					2300	3100	4000	4600	5400	
1						2300	2900	3400	3900	4400

Note: All working pressures have been calculated using the maximum allowable stress levels in accordance with ASME B31.3, Chemical Plant and Petroleum Refinery Piping Code, 1999 Edition. All calculations are based on maximum outside diameter and minimum wall thickness. All working pressures are ambient (72°F or 22°C) temperature.



Please Note: Dimensions for reference only, subject to change.

System temperature

Operating temperature is another factor in determining the proper tubing material. Copper and aluminium tubing are suitable for low temperature media. Stainless steel and carbon steel tubing are suitable for higher temperature media. Special alloys such as Alloy 600 are recommended for extremely high temperatures (see Table 1). Table 8 lists derating factors which should be applied to the working pressures listed in Tables 2-7 for elevated temperature conditions. Simply locate the correct factor in Table 8 and multiply this by the appropriate value in Tables 2-7 for elevated temperature working pressure.

Table 9

Temperature		Copper	Aluminum	316 SS	304 SS	Steel	Monel 400
°F	°C						
100	38	1.00	1.00	1.00	1.00	1.00	1.00
200	93	.80	1.00	1.00	1.00	.96	.88
300	149	.78	.81	1.00	1.00	.90	.82
400	204	.50	.40	.97	.94	.86	.79
500	260	-	-	.90	.88	.82	.79
600	316	-	-	.85	.82	.77	.79
700	371	-	-	.82	.80	.73	.79
800	427	-	-	.80	.76	.59	.76
900	486	-	-	.78	.73	-	.43
1000	538	-	-	.77	.69	-	-
1100	593	-	-	.62	.49	-	-
1200	649	-	-	.37	.30	-	-

EXAMPLE: 1/2 inch x .49 wall seamless 316 stainless steel tubing has a working pressure of 3700 psi at room temperature. If the system were to operate at 800°F (425°C), a factor of 80% or (.80) would apply (see Table 8) and the "at temperature" system pressure would be 3700 PSI x .80 = 2960 PSI.

Tubing ordering suggestions

Tubing for use with Parker instrument fittings must be carefully ordered to ensure adequate quality for good performance. Each purchase order must specify the material nominal outside diameter, and wall thickness. Ordering to ASTM specifications ensures that the tubing will be dimensionally, physically, and chemically within strict limits. Also, more stringent requirements may be added by the user. All tubing should be ordered free of scratches and suitable for bending.

A purchase order meeting the above criteria would read as follows:

"1/2 x .049 316 stainless steel, seamless, or welded and redrawn per ASTM A-249. Fully annealed, 80 Rb or less. Must be suitable for bending; surface scratches, and imperfections (incomplete weld seams) are not permissible."

Table 9 lists specific ordering information for each material.



Please Note: Dimensions for reference only, subject to change.

Table 9

Material	Type	ASTM Tubing Spec.	Condition	Max. Recommended Hardness
Stainless Steel	304, 316, 316L	ASTM-A-269, A-249, A-213, A632	Fully Annealed	90 Rb
Copper	K or L	ASTM-B75 B68, B88 (K or L)	Soft Annealed Temper 0	60 Max. Rockwell 15T
Carbon Steel	1010	SAE-J524b, J525b ASTM-A-179	Fully Annealed	72 Rb
Aluminum	Alloy 6061	ASTM B-210	T6 Temper	56 Rb
Monel® 400	400	ASTM B-165	Fully Annealed	75 Rb
Hastelloy® C-276	C-276	ASTM-B-622, B-626	Fully Annealed	90 Rb
Inconel® Alloy 600	600	ASTM B-167	Fully Annealed	90 Rb
Carpenter® 20	20CB-3	ASTM B-468	Fully Annealed	90 Rb
Titanium	Commercially Pure Grade 2	ASTM B-338	Fully Annealed	90 Rb 200 Brinell Typical

B88 Copper Tube to be ordered non-engraved.

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Pipe pressure ratings

NPT / BSPT Pipe Size	Brass			
	Male		Female	
	Straight ^a	Shape ^b	Straight ^a	Shape ^b
1/16	6000	5500	4500	3800
1/8	5600	5000	4000	2900
1/4	4100	4100	4300	3000
3/8	4000	4000	3500	2700
1/2	3900	3100	3600	2500
3/4	3800	3400	3000	2000
1	2700	2700	3100	2300
1-1/4	2000	2000	2300	1900
1-1/2	1800	1800	2100	1700
2	1600	1600	2000	1500

NPT / BSPT Pipe Size	Stainless Steel			
	Male		Female	
	Straight ^a	Shape ^b	Straight ^a	Shape ^b
1/16	10000	9500	7500	7000
1/8	9100	9100	6400	5500
1/4	7500	7500	6600	5600
3/8	7200	7200	5300	5000
1/2	6600	5800	5200	4500
3/4	6400	6400	4300	3500
1	4600	4600	4500	3900
1-1/4	3500	3500	3500	3100
1-1/2	2900	2900	3200	2500
2	2600	2600	2700	2300



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INSTRUMENT TUBING SELECTION GUIDE

NPT / BSPT Pipe Size	Carbon Steel			
	Male		Female	
	Straight ^a	Shape ^b	Straight ^a	Shape ^b
1/16	10500	10100	8000	7500
1/8	9700	9700	6800	5900
1/4	8000	8000	7000	6000
3/8	7600	7600	5600	5300
1/2	7000	6200	5500	4800
3/4	6800	6800	4600	3700
1	4900	4900	4800	4200
1-1/4	3700	3700	3700	3300
1-1/2	3100	3100	3400	2600
2	2800	2800	2800	2400

Note:

- ^a Fittings manufactured from bar stock.
- ^b Fittings manufactured from forgings.
- ^c Material of construction.
- ^d Pressure ratings for fittings with both tube and pipe ends are rated to the lower pressure.



Please Note: Dimensions for reference only, subject to change.



INSTRUMENTATION VALVES

BALL & PLUG VALVES

MB SERIES

- One piece compact barstock design
- Centre off position for 3-way
- 2-way, inline, angle; 3-way, 4-way and 5-way
- Standard drop-in replacement



B SERIES

- 2-way, 3-way diverting or spring loaded 3-way selector designs
- Wide temperature application range -65°F (18°C) to +450°F (232°C)
- Rated for up to 6,000 psi (413.7 bar)
- Widest variety of seats, seals and port connections
- Connections include CPI™, A-LOK®, male and female NPT, UltraSeal™ and VacuSeal™



SWB SERIES

- Zero clearance body allows repairs in field
- Spring loaded seats and stem seals
- Fully enclosed body bolts
- ISO-type actuator mounting design
- Available up to 1" full flow design



HB SERIES

- Compact FNPT version for tight work areas
- Full operating pressure in any port
- PEEK™ trunnion bearings provide high cycle life
- 10,000 psi (689 bar) rating with PEEK™ seats
- Excellent for CNG



MPB SERIES

- 2-way and 3-way ball valve for severe service applications
- Designed for 1/4 and 1/2 turn media shut-off or switching applications



PR SERIES

- Low operating torque
- Optional locking device, downstream vent and metal tee handles
- Typically used in laboratories
- Most compact 90° actuated valve



PNEUMATIC / ELECTRIC ACTUATORS

- 60 Series pneumatic actuators provide 90° and 180° rotation in both double acting and spring return models
- 70 and 80 Series electric actuators provide 90° and 180° actuation for our B, MB, HB, SWB series ball valves



Please Note: Dimensions for reference only, subject to change.

INSTRUMENTATION VALVES

BALL & PLUG VALVES

HBV SERIES

- Suitable for the most demanding applications in the oil, gas and process control industries
- Integral compression ends available, eliminating taper threads and thread sealants
- Two piece barstock design reduces body leakage paths
- Complies with ANSI / ASME B16.34 requirements where applicable
- NACE MR-01-75 / ISO 15156 compliant materials available
- Fire safe option



20K HI-PRO BALL VALVE

- Designed for cold working pressure applications of up to 20,000 psi (1,379 bar)
- Two piece body design
- Bi-directional
- Low torque operation
- Tru-Loc® anti-vibration locking system on gland adjuster for 100% security



Valve groups		Ball / Plug valves							
Model series		MB	B	SWB	HB	MPB	PR	HBV	20K HPBV
Product description		Mini barstock ball valve	Ball valve	Swing out ball valve	Ball valve	Med pressure ball valve	Plug valve	Ball valve	Hi-Pro ball valve
Maximum operating pressure		3,000 psi 207 psi	6,000 psi 414 bar	2,500 psi 172 bar	10,000 psi 689 bar	20,000 psi 1379 bar	3,000 psi 207 bar	10,000 psi 689 bar	20,000 psi 1379 bar
Temperature	Min	-65 F -54 C	-65 F -54 C	-65 F -54 C	-65 F -54 C	-10 F -23 C	-10 F -23 C	-65 F -54 C	-4 F -20 C
	Max	300 F 149 C	400 F 204 C	600 F 316 C	400 F 204 C	400 F 204 C	400 F 204 C	450 F 232 C	392 F 200 C
CV	Max	11.00	6.40	35.00	1.00	8.80	3.20		1.56
Body material	Brass	X	X				X		
	Stainless steel	X	X	X	X	X	X	X	X
	Alloy		X					X	
Actuation	Manual	X	X	X	X	X		X	
	Pneumatic	X	X	X	X	X		X	
	Electric	X	X	X	X	X			
Seat / Seal material	PCTFE		X		X				
	Buna-N rubber		X	X	X	X	X		
	Ethylene Propylene rubber		X	X	X	X	X		
	Highly Fluorinated Fluorocarbon		X			X	X		
	Fluorocarbon rubber		X	X	X	X	X		
	PFA	X							
	GRAFOIL®			X				X	
	PEEK		X	X	X	X		X	X
	PTFE		X	X				X	
End connection size range	Min	1/16 in 3 mm	1/16 in 3 mm	1/4 in n/a mm	1/4 in 6 mm	1/8 in n/a mm	1/8 in 3 mm	1/8 in 6 mm	1/4 in 6 mm
	Max	3/4 in 12 mm	3/4 in 12 mm	1 in n/a mm	1/2 in 12 mm	1 in n/a mm	1/2 in 12mm	1 in 25 mm	9/16 in 14 mm



Please Note: Dimensions for reference only, subject to change.

INSTRUMENTATION VALVES

CHECK VALVES

C SERIES

- Resilient, custom molded, seat design
- Back stopped poppet to minimize spring stress
- Cracking pressures: 1/3, 1, 5, 10, 25, 50, 75 and 100 psi (.023, .069, .345, .69, 1.72, 3.45, 5.17, 6.9 bar)
- Port connections include male and female NPT, CPI™, A-LOK®, UltraSeal™, VacuSeal™, BSP, SAE and Seal-Lok®



CO SERIES

- Suitable for applications requiring high integrity leak rates and re-sealing capabilities.
- Seal integrity to 4 x 10⁻⁹ std. atm-cc / sec
- Back stopped poppet to minimize spring stress
- Cracking pressures: 1/3, 1, 5, 10, 25, 50, 75 and 100 psi (.023, .069, .345, .69, 1.72, 3.45, 5.17, 6.9 bar)
- Available with highly fluorinated Fluorocarbon rubber
- Only check valve with published helium leak rate



CB SERIES

- Reduces maintenance while improving performance requirements on dual fuel turbines
- Cracking pressures: 1, 5, 10, 25, 50, 75, 100 and 120 psi (.023, .069, .345, .69, 1.72, 3.45, 5.17, 6.9, 8.27 bar)
- Rugged ball design for demanding applications
- For high temperatures with highly viscous medias



MPC SERIES

- Variety of elastomeric poppet seals
- 5 psi (.345 bar) cracking pressure
- MPI™, cone and thread and female NPT connections available
- For pressures up to 20,000 psi (1,379 bar)



MPCB SERIES

- Metal to metal seat for use in applications that cannot accept Fluorocarbon rubber
- 5 psi (.345 bar) cracking pressure
- MPI™, cone and thread and female NPT connections available
- For pressures up to 20,000 psi (1379 bar)



LC SERIES

- For extreme temperature applications
- The gravity assisted poppet uses reverse flow to achieve a seal to within 99.9% of forward flow



Please Note: Dimensions for reference only, subject to change.

INSTRUMENTATION VALVES

CHECK VALVES

Valve groups		Check valves					
Model series		C	CO	CB	MPC	MPCB	LC
Maximum operating pressure		6,000 psi 414 psi	6,000 psi 414 bar	3,000 psi 207 bar	20,000 psi 1379 bar	20,000 psi 1379 bar	6,000 psi 414 bar
Temperature	Min	-65 F -54 C	-15 F -26 C	-65 F -54 C	-10 F -23 C	-100 F -73 C	-100 F -73 C
	Max	400 F 204 C	400 F 204 C	450 F 232 C	400 F 204 C	600 F 316 C	900 F 482 C
CV	Max	6.70	2.70	6.00			2.30
Cracking pressure	Max	100 psi 6.9 bar	100 psi 6.9 bar	120 psi 8.27 bar	5 psi .345 bar	5 psi .345 bar	
Body material	Brass	X					
	Stainless steel	X	X	X	X	X	X
Seat / Seal material	Parkfill / Parker carbon			X			
	Buna-N rubber	X	X		X		
	Ethylene Propylene rubber	X	X		X		
	Highly Fluorinated Fluorocarbon	X	X		X		
	Fluorocarbon rubber	X	X		X		
	Neoprene rubber	X					
	Metal					X	X
End connection size range	PTFE	X					
	Min	1/8 in 3 mm	1/4 in 6 mm	3/8 in	1/4 in	1/4 in	1/8 in
	Max	1 in 25 mm	1/2 in 12 mm	3/4 in	1 in	1 in	1/2 in



Please Note: Dimensions for reference only, subject to change.

INSTRUMENTATION VALVES FILTERS

F SERIES

- Replaceable sintered 316 Stainless steel filter element
- Optional 250 and 450 micron wire cloth filter elements



FT SERIES

- Filter elements are easily replaced without disconnecting the tube lines
- Fast loop bypass option enables a continuous self cleaning flow
- Replaceable sintered 316 Stainless steel filter element
- Optional 250 and 450 micron wire cloth filter elements



MPF SERIES

- High pressure applications up to 20,000 psi (1,379 bar)
- Sintered 316 Stainless steel filter disc
- Inline filters help protect valuable equipment in the process system
- MPI™, cone, thread and female NPT connections available



Valve groups		Filters		
Model series		F	FT	MPF
Product Description		Inline Filter	Tee Filter	Medium Pressure Filter
Maximum operating pressure		6,000 psi 414 psi	6,000 psi 414 bar	20,000 psi 1379 bar
Temperature	Min	-65 F -54 C	-100 F -73 C	-10 F -23 C
	Max	400 F 204 C	900 F 482 C	400 F 204 C
CV	Max	3.40	2.50	0.59
Micron range		.5 to 500	.5 to 500	.5 to 100
Body material	Brass	X	X	
	Stainless steel	X	X	X
Seat / Seal material	Fluorocarbon rubber	X	X	
	Buna-N rubber	X	X	
	Ethylene Propylene rubber	X	X	
	Highly Fluorinated Fluorocarbon		X	
	Neoprene rubber	X	X	
	PTFE	X	X	X
	Silver plated nickel alloy		X	
End connection size range	Min	1/8 in 3 mm	1/8 in 6 mm	1/4 in
	Max	1 in 25 mm	1/2 in 12 mm	9/16 in



Please Note: Dimensions for reference only, subject to change.

INSTRUMENTATION VALVES

RELIEF VALVES

RL4 SERIES

- Handle for field maintenance
- Externally adjustable pressure settings while valve is in operation
- Seven different springs
- Manual override option with positive stem retraction is available for the full working pressure range
- Colour coded springs and labels indicate spring cracking range



RH4 SERIES

- Eight springs
- Manual override option with positive stem retraction is available for pressures up to 1,500 psi (103 bar)
- Preset from factory and comes with standard springs



HPRV – PED HIGH PRESSURE PROPORTIONAL RELIEF VALVE

- Captured moulded seat design is blow-out and chip resistant
- Colour coded springs and labels indicate spring cracking range
- Unique Tru-Loc facility prevents accidental adjustment
- Low friction stem seal design prevents friction which increases accuracy of cracking pressure and reseal pressure
- Balanced poppet design ensures consistent cracking pressure regardless of system back pressure
- Multiple end connections available



HPRV – PED LOW PRESSURE PROPORTIONAL RELIEF VALVE

- Pressure settings are externally adjustable. Six different spring ranges provide greater system sensitivity and enhanced performance
- Back pressure has minimum effect on cracking pressure
- Colour coded springs and labels indicate spring cracking range
- Orifice sizes: 5.2mm (0.203")
- Lock wire feature secures a given pressure setting
- Multiple end connections available



Valve groups		Relief valves			
Model series		RL	RH	HPRV High pressure	HPRV Low pressure
Maximum operating pressure		400 psi 27.6 bar	6,000 psi 414 bar	6,000 psi 414 bar	400 psi 27.6 bar
Temperature	Min	-70 F -57 C	-70 F -57 C	-45 F -43 C	-45 F -43 C
	Max	400 F 204 C	400 F 204 C	250 F 121 C	250 F 121 C
CV	Max	0.8	0.4	.41	.41
Body material	Stainless steel	X	X	X	X
Seat / Seal material	Buna-N rubber	X	X		
	Ethylene Propylene rubber	X	X	X	X
	Highly Fluorinated Fluorocarbon	X	X	X	X
	Fluorocarbon rubber	X	X	X	X
	Neoprene rubber	X	X	X	X
End connection size range	Min	1/4 in 6 mm	1/4 in 6 mm	1/4 in 6 mm	1/4 in 6 mm
	Max	1/4 in 8 mm	1/4 in 8 mm	1/4 in 6 mm	1/4 in 6 mm



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INSTRUMENTATION VALVES

BLEED & PURGE VALVES

BV SERIES

- Recommended for use in bleeding hydraulic systems
- Valve vents line pressure to atmosphere or to containment
- Multi-valve manifolds or gauge / root valves



PG SERIES

- Vent hole in the cap bleeds, drains or purges system pressure
- Optional PTFE ball requires only finger-tight torque to achieve a leak-tight seal
- Crimped cap ensures safe relief of system pressures



Valve groups		Bleed and Purge valves		
Model series		BV	PG	MPBV
Maximum operating pressure		10,000 psi 690 bar	4,000 psi 276 bar	30,000 psi 2068 bar
Temperature	Min	-65 F -54 C	-65 F -54 C	-10 F -23 C
	Max	850 F 454 C	400 F 204 C	400 F 204 C
CV	0.1	x		
Body material	Brass		X	
	Stainless steel	X	X	X
	Alloy	X	X	
End connection size range	Min	1/4 in	1/8 in	9/16 in
	Max	1/2 in	1/2 in	9/16 in



Please Note: Dimensions for reference only, subject to change.

INSTRUMENTATION VALVES

METERING VALVES

N SERIES

- Panel or in-line mounting
- Angle or in-line patterns
- Valve stem threads not in contact with process fluid



HR SERIES

- Bubble tight shut-off capability
- High resolution metering valve with limited hysteresis
- Seven optional valve stem tapers



CARTRIDGE VALVE

- Valve pin o-ring guarantees positive shut off without stem damage
- Self-lubricating orifice liner
- Seven available needle tapers



Valve groups		Metering valves				
Model series		NS	NM	NL	HR	CARTRIDGE VALVE
Maximum operating pressure		2,000 psi 138 bar	1,000 psi 69 bar	1,000 psi 69 bar	250 psi 17 bar	250 psi 17 bar
Temperature	Min	-50 F -46 C	-50 F -46 C	-50 F -46 C	-50 F -46 C	
	Max	400 F 204 C	400 F 204 C	400 F 204 C	400 F 204 C	
CV	Max	0.040	0.100	0.200	0.100	
Body material	Brass	X	X	X	X	
	Stainless steel	X	X	X	X	
Seat material	Buna-N rubber	X	X	X	X	
	Ethylene Propylene rubber	X	X	X	X	
	Highly Fluorinated Fluorocarbon	X	X	X	X	
	Fluorocarbon rubber	X	X	X	X	
	Neoprene rubber	X	X	X	X	
End connection size range	Min	1/16 in 3 mm	1/8 in 3 mm	1/16 in 3 mm	1/16 in 3 mm	
	Max	1/4 in 6 mm	1/4 in 6 mm	3/8 in	1/4 in 6 mm	



Please Note: Dimensions for reference only, subject to change.

INSTRUMENTATION VALVES

NEEDLE VALVES

V SERIES

- For positive leak tight shut-off and regulation of fluids
- Choice of three stem types
- Wide variety of size and end connections



SN6 SERIES

- Provides shut-off and coarse regulation of liquids and gases
- Choice of two stem types
- In-line and angle patterns
- Ideal cylinder valve



VQ SERIES

- In-line and angle patterns
- Panel mountable
- Colour-coded handles
- Quick actuation for low pressure applications



NP6 SERIES

- Choice of two non-rotating stem types
- Packing below power threads
- Panel mountable
- Fracture resistant nylon handle



PV SERIES

- Roddable, straight through flow path
- Gauge port option
- Bonnet lock plate resists accidental bonnet disengagement
- PEEK™, Acetal, PFA seat materials available



U SERIES

- Stem packing below the threads isolates the thread lubricant from the flow
- Severe service applications
- Panel mountable
- Ideal for steam blowdown



HNV SERIES

- Compact needle valves
- For applications up to 10,000 psi (690 bar)
- Available with integral A-LOK® or CPI™ connections, reducing leak paths and reducing installation costs
- Soft tipped optional seating available for gaseous applications



RPV SERIES

- For fluids containing high levels of contamination frequently found in oil and gas processing facilities
- Straight through flow pattern, roddable design
- 100% repeatable bubble tight shut off



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INSTRUMENTATION VALVES

NEEDLE VALVES

HGV SERIES

- Up to 10,000 psi (690 bar)
- Compact single and multi port gauge valves
- Soft tipped optional seating available for gaseous applications



20K H-SERIES

- Designed for cold working pressure applications of up to 20,000 psi (1,379 bar)
- Non-rotating spindle for bubble tight shut off
- Externally adjustable gland
- Fine threaded stem raiser gives increased stem sensitivity and accuracy
- Tru-Loc® anti-vibration locking system on gland adjuster for 100% security



Valve groups		Needle valves													
Model series		V	SN6	VQ	NP6	PV	U	MPN	MPGV	HNV	HRPV	HGV	HVG	HYNV	20K HNV
Maximum operating pressure		6,000 psi 414 bar	6,000 psi 414 bar	300 psi 21 bar	6,000 psi 414 bar	6,000 psi 414 bar	6,000 psi 414 bar	20,000 psi 1379 bar	30,000 psi 2068 bar	10,000 psi 690 bar	10,000 psi 690 bar	10,000 psi 690 bar	6,000 psi 414 bar	10,000 psi 690 bar	20,000 psi 1379 bar
Temp	Min	-65 F -54 C	-65 F -54 C	-20 F -29 C	-70 F -57 C	-20 F -29 C	-65 F -54 C	-65 F -54 C	-10 F -23 C	-65 F -54 C	-65 F -54 C	-65 F -54 C	-65 F -54 C	-65 F -54 C	-63 F -54 C
	Max	450 F 232 C	450 F 232 C	200 F 93 C	700 F 371 C	400 F 204 C	1200 F 649 C	800 F 427 C	400 F 204 C	1000 F 538 C	1000 F 538 C	1000 F 538 C	1000 F 538 C	1000 F 538 C	392 F 200 C
CV	Max	1.30	0.30	0.80	0.60	2.00	2.70			0.35	1.80	0.35	0.35	0.35	0.66
Body material	Stainless steel	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Alloy	X								X	X	X	X		
Actuation	Manual	X	X	X	X	X	X	X	X	X	X	X	X		
	Pneumatic			X				X							
Seat / Seal material	PTFE	X	X	X	X		X	X		X	X	X	X	X	X
	Buna-N rubber	X		X	X	X			X						
	Ethylene Propylene Rubber	X		X	X	X			X						
	Highly Fluorinated Fluorocarbon			X	X	X			X						
	Fluorocarbon Rubber	X		X	X	X			X						
	Silicon Rubber					X	X	X							
	GRAFOIL®		X		X					X	X	X	X	X	
End connection size range	Min	1/8 in 3 mm	1/4 in	1/8 in 3 mm	1/4 in 6 mm	1/4 in	1/8 in 6 mm	1/4 in	9/16 in	1/4 in 6 mm	1/4 in 6 mm	1/4 in 6 mm	1/4 in 6 mm	1/4 in 6 mm	1/4 in 6 mm
	Max	3/4 in 12 mm	1/4 in	1/2 in 10 mm	3/8 in 8 mm	3/4 in	1 in 25 mm	1 in	9/16 in	1/2 in 12 mm	1/2 in 12 mm	1/2 in 12 mm	1/2 in 12 mm	1/2 in 12 mm	9/16 in 14 mm



Please Note: Dimensions for reference only, subject to change.

INSTRUMENTATION VALVES

MANIFOLD VALVES

CCIMS®

- Close coupled solution for flow measurement applications
- Reductions in installation time of up to 75%
- Reductions in connections and leak paths of up to 85%
- Features phastfit® for rapid transmitter removal and connection



MONOFLANGE

- Compact double block and bleed valves, featuring needle valves
- Reducing installations cost while improving safety through a reduction in leak paths
- Configurable options include single block, double block and double block and bleed
- Available in a range of materials including carbon steel, Stainless steel, duplex, alloy 625



PRO-BLOC®

- Compact double block and bleed valves, featuring needle or ball valve options
- Reducing installations cost while improving safety through a reduction in leak paths
- Configurable options include single block, double block and double block and bleed
- Available in a range of materials including carbon steel, Stainless steel, duplex, alloy 625



MONOFLANGE (FE) & PRO-BLOC® (FE)

- ISO 15848 approved
- All ball valves are bi-directional
- Highest possible 'A' class leakage
- Firesafe design available rates achieved
- All threads sealed from the media



H-SERIES

- A comprehensive range of 2, 3 and 5 valve manifolds for pressure and flow measurement applications
- Available with integral PTFree® connections, reducing leakpaths and installation cost
- Available in Stainless steel and many exotic alloys, including Hastelloy®, 6Mo, Monel®, and Alloy 625
- Direct or remote mounting options



HBM SERIES

- A complete range of ball valves 10mm ball and needle valve manifolds
- Including block and bleed, and double block and bleed manifold options
- Working pressures up to 10,000 psi (690 bar)
- Available with integral A-LOK® or CPITM connections, reducing leak paths and installation costs



Please Note: Dimensions for reference only, subject to change.

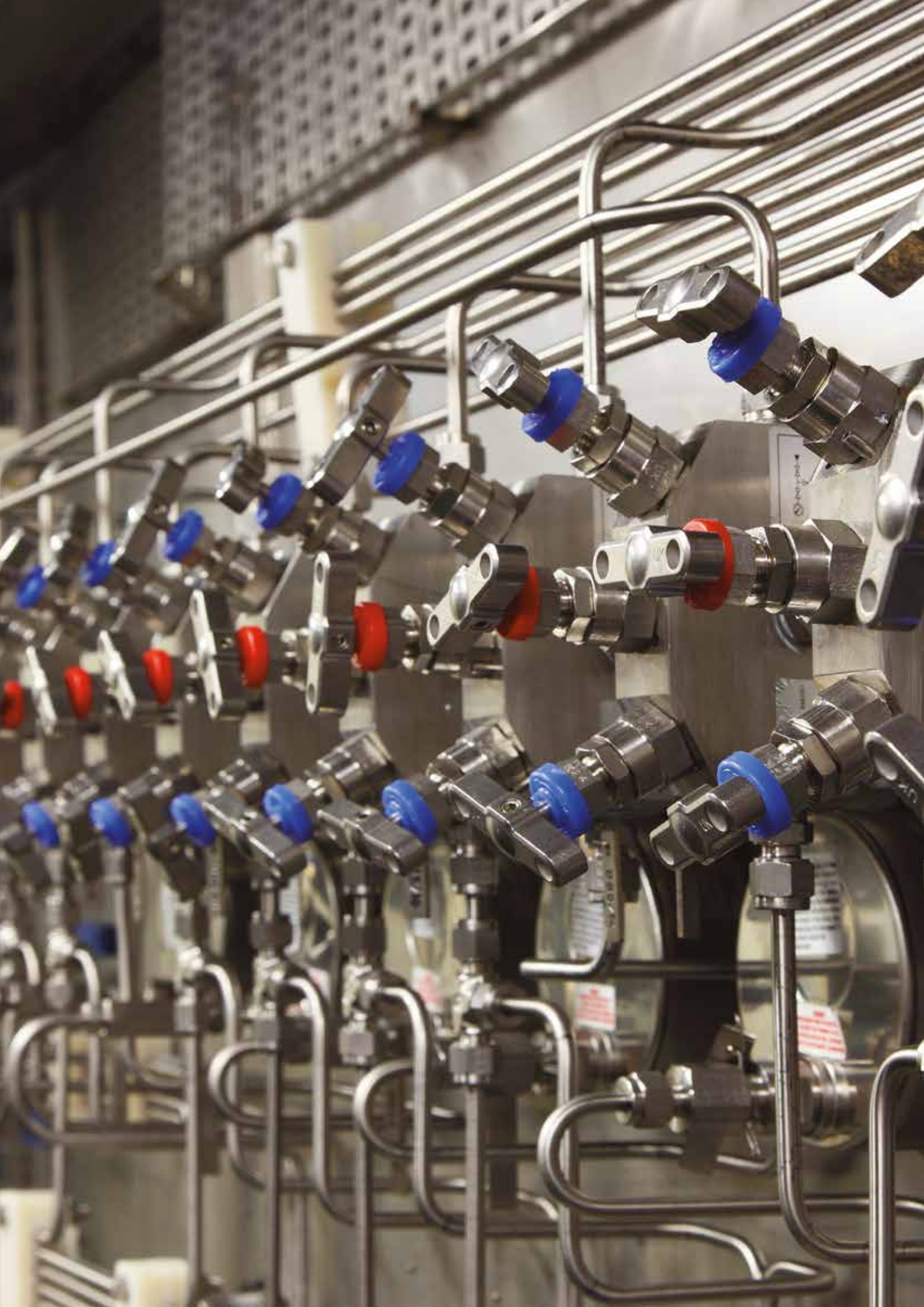
INSTRUMENTATION VALVES

MANIFOLD VALVES

Valve groups		Manifolds					
Model series		MF	PB	H2	H3	H5	HBM
Product Description		Double block and bleed	Double block and bleed	2 Valve manifolds - needle style	3 Valve manifolds - needle style	5 Valve manifolds - needle style	2 and 3 Valve manifolds - ball style
Maximum operating pressure		ANSI 2,500 psi API 10,000 psi	ANSI 2,500 psi API 10,000 psi	10,000 psi 689 bar	10,000 psi 689 bar	10,000 psi 689 bar	10,000 psi 689 bar
Temp	Min	-65 F -54 C	-65 F -54 C	-65 F -54 C	-65 F -54 C	-65 F -54 C	-65 F -54 C
	Max	1000 F 538 C	450 F 232 C	1000 F 538 C	1000 F 538 C	1000 F 538 C	450 F 232 C
Body material	Carbon Steel	X	X				
	Stainless steel	X	X	X	X	X	X
	Alloy	X	X	X	X	X	X
Packing	GRAFOIL®	X	X	X	X	X	X
	PTFE	X	X	X	X	X	X
Seat / Tip	316 SS	X		X	X	X	
	PEEK™	X	X	X	X	X	X
	PCTFE	X		X	X	X	
	PTFE		X				X
End connection size range	Min	1/4 in 6 mm	1/4 in 6 mm	1/4 in 6 mm	1/4 in 6 mm	1/4 in 6 mm	1/4 in 6 mm
	Max	1/2 in 12 mm	1 in 25mm	1/2 in 12 mm	1/2 in 12 mm	1/2 in 12 mm	1/2 in 12 mm



Please Note: Dimensions for reference only, subject to change.



INSTRUMENTATION VALVES

DIAPHRAGM VALVES

NV17

- General purpose, high cycle, compact valve
- Air operated (NC and NO), spin handwheel, lever, indicating handwheel and mini lever options
- For regulator outlet valve, gas control panels and analyser sampling system applications



NV55

- General purpose, high flow compact valve
- For flowing large volumes of corrosive and non-corrosive fluids



FS190

- Excess flow shut-off valve
- Manual or pneumatic actuation
- Non-attitude sensitive
- Six pressure / flow limit settings
- Available with welded fittings as well as 1/4" NPT female fittings
- Clear indication of operating position – either "Open (Reset)" or "Auto (Shut Off)"

Note: Please ask our Sales Team for technical information.



16 SERIES

- High pressure valve for gas manifold / box systems
- 316L SST machined body design
- Metal-to-metal diaphragm seal
- Packless valve design



Valve groups		Diaphragm valves		
Model series		NV17	NV55	16 SERIES
Product description		Diaphragm Springless	Diaphragm Springless	Diaphragm Spring
Maximum operating pressure		250 psi 17 bar	250 psi 17 bar	3,000 psi 207 bar
Temperature	Min	-15 F -26 C	-15 F -26 C	-65 F -54 C
	Max	150 F 66 C	150 F 66 C	150 F 66 C
CV	Min	0.15	0.48	0.3
	Max	0.17	0.55	0.3
Body material	Brass	X		
	Stainless steel	X	X	X
	Alloy	X		
Actuation	Manual	X	X	X
	Pneumatic	X	X	X



Please Note: Dimensions for reference only, subject to change.

INSTRUMENTATION REGULATORS

PRESSURE REGULATORS

IR4000 SERIES

- Internally threadless design
- Convoluted Hastelloy C-22® diaphragm
- Available in 316L SST, Brass, Hastelloy C-22®, Monel®, and 316L SST Welded body
- Seals available for nitrous oxide and hydrocarbon applications
- Low dead volume
- General purpose for instrument/analyser and semiconductor applications



IR6000 SERIES

- Dual stage regulator
- Internally threadless design
- Convoluted Hastelloy C-22® diaphragm
- Available in 316L SST, Brass, Hastelloy C-22®, Monel®, and 316L SST Welded body
- Virtually eliminates supply pressure effect
- Provides cylinder gas pressure reduction in refineries, process analytical systems and specialty gases



IR5000 SERIES

- Internally threadless design
- Large convoluted Hastelloy C-22® diaphragm
- Available in 316L SST, 316L SST Welded body
- Greater sensitivity for precise pressure control
- For analyser system gas management and instrument calibration



HFR900

- High flow regulator
- Self-contained replaceable valve seat
- For corrosive and non-corrosive fluid applications
- Available in 316L SST and Brass



HF1200

- High flow regulator
- Inlet pressure up to 1,250 psig (86 barg)
- Available welded and threaded
- 1.2 Cv
- Large convoluted diaphragm provides stable pressure control



APR66

- High pressure piston sensing regulator
- Low actuating torque
- Pressures up to 6,000 psig (413.7 barg)
- Available in 316L SST and brass



Please Note: Dimensions for reference only, subject to change.

INSTRUMENTATION REGULATORS

PRESSURE REGULATORS

HPR 800

- High pressure diaphragm regulator
- For corrosive and non-corrosive applications
- Inlet pressure up to 5,000 psig (345 barg)
- Low actuating torque
- Available in 316L stainless steel and brass
- Outlet pressures up to 2,500 psig (172 barg)



MIR700

- Compact single stage regulator
- For low to medium pressure applications that require pressure control in a compact space
- Available in 316L stainless steel and brass
- Precise flexing Hastelloy C-22 diaphragm



NPR4100

- Negative pressure regulation
- Internally threadless design
- Convuluted Hastelloy C-22® diaphragm
- For delivery of low pressure gases from liquid sources
- White knob indicates negative pressure



INSTRUMENT PRESSURE REGULATORS

- All models are direct acting, non-relieving and cleaned for analytical instrument service
- Designed specifically to provide high resolution control at the low flow rates typical in instrumentation applications
- Available with special port locations, manifold mount configurations or with the regulator integrated into a larger, multi-functional package



Valve groups		Single stage								Dual stage
Model series		IR4000	IR500	HFR900	APR66	HPR800	MIR700	NPR4100	HF1200	IR6000
Type		General purpose	Sensitive	High flow	High pressure	High pressure	Low pressure	Absolute pressure	High flow	High pressure
Pressure	Min inlet pressure	4,000 psig 276 barg	3,500 psig 241 barg	500 psig 35 barg	6,000 psig 414 barg	5,000 psig 345 barg	3,000 psig 207 barg	250 psig 17 barg	1,250 psig 86 barg	4,000 psig 276 barg
	Max outlet pressure	500 psig 35 barg	250 psig 17 barg	150 psig 10 barg	6000 psig 414 barg	2500 psig 172 barg	200 psig 14 barg	-26 in Hg to 10 psig -1.8 in Hg to .7 barg	200 psig 14 barg	250 psig 17 barg
CV	Min	0.02	0.02	0.85	0.05	0.02	0.02	0.02	1.2	0.02
	Max	0.15	0.15					0.15		
Body material	316L SS	X	X	X	X	X	X	X	X	X
	Brass	X		X	X	X	X	X		X
	Hastelloy C-22®	X	X					X		x
	Monel®	X	X					X		x
Connection	Min FNPT	1/8 in	1/8 in	1/4 in	1/8 in	1/4 in	1/8 in	1/8 in	1/2 in	1/8 in
	Max FNPT	1/2 in	1/2 in	1/2 in	1/4 in	1/4 in	1/4 in	3/8 in	3/4 in	1/2 in
	Compression	X	X	X				X	X	X
	Face Seal / Tube						X		X	



Please Note: Dimensions for reference only, subject to change.

INSTRUMENTATION REGULATORS

BACK PRESSURE REGULATORS

ABP1

- Reduce contamination and accurately control back pressure
- Internally threadless design
- Convuluted Hastelloy C-22® diaphragm
- Integral diaphragm stop
- Available in 316L SST, Hastelloy C-22®, Monel®



ABP3

- Internally threadless design
- Provides sensitive pressure adjustments
- Large convoluted Hastelloy C-22® diaphragm
- Integral diaphragm stop
- Available in 316L SST, Hastelloy C-22®



BPR50

- For use with corrosive and non-corrosive fluids
- Adjustable from 100 psi (7 bar) to 2,000 psi (138 bar)
- Piston sensed high pressure back pressure regulator
- Available in 316L SST



Valve groups		Back pressure		
Model series		ABP1	ABP3	BPR50
Pressure	Max inlet pressure	Up to 500 psig 35 barg	Up to 60 psig 4 barg	Up to 2,500 psig 172 barg
CV	Min	0.06	0.06	0.45
	Max	0.30	0.30	
Body material	316L SS	X	X	X
	Hastelloy C-22®	X	X	
	Monel®	X		
Connection	Min FNPT	1/8 in	1/8 in	1/4 in
	Max FNPT	1/4 in	1/4 in	1/4 in



Please Note: Dimensions for reference only, subject to change.

INSTRUMENTATION REGULATORS

VAPORIZING REGULATORS

AVR3

- Steam heat design
- Internally threadless design
- Available in 316L SST, Monel®, Hastelloy C-22®
- Internal liquid volume only .5cc
- Convoluted Hastelloy C-22® diaphragm



AVR4

- Electrical heat design
- Field serviceable heat transfer element
- CSA, Cenelec, and ATEX certified
- Internally threadless design
- 120v or 240v, 50 / 60 Hz
- Convoluted Hastelloy C-22® diaphragm
- Available in 316L SST, Monel®, Hastelloy C-22®



Regular groups		Vaporizing regulators	
Model series		AVR3	AVR4
Type		Steam heated	Electrically heated
Pressure	Max inlet pressure	4,000 psig 276 barg	4,000 psig 276 barg
	Max outlet pressure	500 psig 34 barg	500 psig 34 barg
CV	Min	0.06	0.06
	Max		
Body material	316L SS	X	X
	Hastelloy C-22®	X	X
	Monel®	X	X
Connection	Min FNPT	1/8 in	1/8 in
	Max FNPT	1/8 in	1/8 in



Please Note: Dimensions for reference only, subject to change.

INSTRUMENTATION REGULATORS

TIED DIAPHRAGM REGULATORS

735 SERIES

- Dual stage tied diaphragm regulator
- Greater consistency in outlet pressure regardless of inlet pressure fluctuations
- Provides shut off of corrosive or hazardous gases for added safety
- Available in 316L SST or Hastelloy C-22®



959 SERIES

- Tied diaphragm design to minimize regulator creep
- Internally threadless design
- Metal to metal diaphragm seal
- Available in 316L SST and Hastelloy C-22®



Regular groups		Tied Diaphragm regulators	
Model series		735	959
Type		Two stage	Single stage
Pressure	Max inlet pressure	3,500 psig 240 barg	3,500 psig 240 barg
	Max outlet pressure	100 psig 7 barg	150 psig 10 barg
CV	Min	0.04	0.04
	Max		0.20
Body material	316L SS	X	X
	Hastelloy C-22®	X	X
Connection	Min FNPT	1/4 in	1/4 in
	Max FNPT	1/4 in	1/4 in



Please Note: Dimensions for reference only, subject to change.

FLUOROPOLYMER COMPONENTS

PFA / PTFE

FLUOROPOLYMER COMPONENTS

Durable, leak free fluoropolymer products are used in a variety of industries, including semiconductor manufacturing, chemical / food / pharmaceutical / biomedical processing, as well as analytical instrumentation.

Partek fluoropolymer products are recommended for applications that encounter pressures below 120 psig (8.27 barg), and corrosive media at temperatures up to 400°F (204°C). Fluoropolymer valves and fittings offer corrosion protection and are used to ensure media / system purity. The wetted surfaces of all products are of chemically inert corrosion resistant PFA or PTFE. Partek products are available from 1/8" up to 1" in size.

- Parflare PFA tube fittings:**
 Parflare fittings provide low dead volume, which decreases the possibility of particle entrapment and bacterial growth.
- Pargrip PFA tube fittings:**
 Perfect for applications where ease of assembly is a requirement. Grooved tubing is not required.
- Parbond PFA fusible pipe fittings:**
 Parbond fittings welded design eliminates threaded connections and entrapment areas and creates a leak free connection.
- PFA Pipe fittings:**
 Available in a variety of configurations, all with standard NPT threads.
- PFA Valves, Gauge protectors, Thermocouple fittings and spray guns:**
 High cycle life, all fluoropolymer construction, with application tested and proven designs.
- PTFE Valves, Regulators and Flowmeters:**
 Wetted areas are manufactured from fluoropolymer material which offers unmatched corrosion protection and high cycle life.



Please Note: Dimensions for reference only, subject to change.

INSTRUMENTATION VALVES

ANALYTICAL SYSTEMS

VENT MASTER™

- Pre-engineered compact instrument panel that includes regulators, gauges, rotometer, an eductor and a separate pressure controller
- Creates a stable pressure within the analyser shelter vent header system
- Provide analysis accuracy with .06% over a vent header flow of 0-18SLPM



INTRAFLOW™

- ISA / ANSI SP 76.00.02-2002 compliant
- Modular process analytic sample system and lab fluid delivery system platform
- Factory system design support
- Wide selection of top work components including valves, regulators, filters, stream switching and more
- Pressure rating from vacuum to 3,600 psi (248 bar)



R-MAX II

- Surface mount technology for stream switching valves
- Low internal volume to reduce system purge time
- Low pressure actuation of valves-40 psig (-2.76)
- Rated from vacuum to 500 psig (34 barg)



CHANGEOVER SYSTEM

- Compact turnkey module designed for continuous gas management
- Optional outlet regulator to control application specific outlet pressure
- Audio/visual alarm annunciator available
- Available in 316L Stainless steel and brass
- Suitable for oxygen service



COSM

- Compact turnkey module designed for continuous gas management
- Outlet regulator to control application specific outlet pressure
- Maximum inlet pressure of 3,000 psig (207 barg) with 4 delivery options
- Available in 316L Stainless steel and brass



PILOT PRO

- Communication interface for process sample conditioning systems
- Applications include: Logic Control, I/O Module Application, Non-Hazardous PLC and I/O Interface, Solenoid Valve control
- I/O capability up to 24
- Accommodates multiple PLC types
- Allows use of basic analyser systems



Please Note: Dimensions for reference only, subject to change.



EITOK

60SS-FH9-1

60000psig@40~100°F

4137bar@4.4~38°C

LDH150712789



EITOK316
LEM
150724

ABOUT FITOK

Abdex provides a complete range of Instrumentation fittings, valves and tubing for high and ultra high applications, using quality engineered components from Fitok.

Fitok is an industry-leading developer and manufacturer of superior quality instrumentation valves and fittings. The company has R&D centres, manufacturing facilities, warehousing and service locations in Europe, the USA, the Middle East and China.

Abdex is Fitok's exclusive distributor for high pressure fittings, and carries extensive stock for local support and service across a range of industry segments, including products for lower pressure, up to 400 bar (5,800 psi) applications and ultra-high pressure applications to 4,000 bar (up to 58,000 psi).

HIGHEST QUALITY

FITOK applies the highest accredited quality control standards in everything it does. It's an ISO 9001:2008 certified company and its products have been certified by numerous different industry authorities and third-party inspection institutions, including TA-Luft, ABS, ASTM F1387, TPED, RTN, E-Mark and CRN.

The Fitok mission is to continuously explore ways to improve process of designing, manufacturing, testing and to exceed industry standards.

OUTSTANDING SERVICE

With global facilities, Fitok combine the most cost-effective resources with flexible manufacturing systems, delivering a wide range of highest-quality products quickly, supported with world-class service and support.

Abdex carry extensive warehouse stock and offer prompt delivery schedules on a wide range of industry standard product lines, backed by unrivalled technical expertise.

FITOK SERIES & PRESSURE RATINGS

6 Series = 6,000 psi range
10 Series = 10,000 psi range
15 Series = 15,000 psi range
20 Series = 20,000 psi range
60 Series = 60,000 psi range

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INSTRUMENTATION BALL VALVES

1,000 PSI TO 10,000 PSI RATED

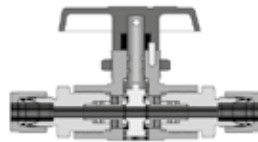
BALL VALVES

- High flow capability and low operating torque
- 2-way ball valves available for flow in both directions
- Low operating torque and easy to use
- Pneumatic or electric actuator available
- Options for handle colour
- Every valve is factory tested with nitrogen at rated pressure; If rated pressure is greater than 6000 psig, tested at 6000 psig accordingly

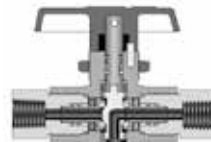


BF & BFH SERIES

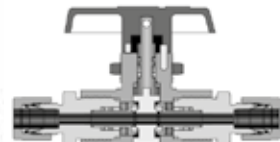
- Forged body with end connectors
- Body materials: 316 SS, 316L SS, 904L SS and alloy 400
- Seat materials: PTFE, PCTFE and PEEK
- Packing materials: fluorocarbon FKM and PTFE
- End connections:
 - 1/8" to 1/2" female NPT
 - 1/4" to 1/2" and 6mm to 12mm tube fitting
- Orifice size: 0.19" (4.8mm)
- Working pressure up to:
 - BF Series 6000 psig (414 bar)
 - BFH Series 10,000 psig (690 bar)
- Working temperature: 0°F to 450°F (-17°C to 232°C)



BF Series



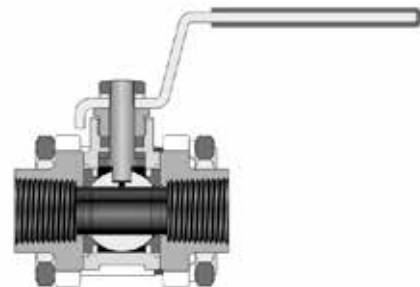
BF Series



BFH Series

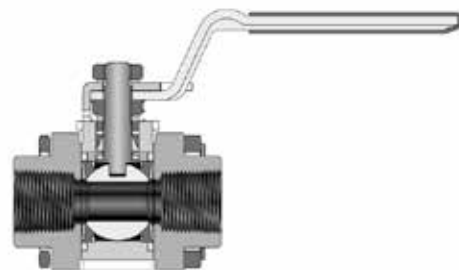
BG SERIES

- 3-piece precision cast body construction
- Body materials: CF8M (316), CF3M (316L), CF8 (304), CF3 (304L) and 904L SS
- Seat materials: PTFE
- Packing materials: PTFE
- End connections:
 - 1/8" to 3" thread
 - 1/8" to 3" pipe butt or socket weld
 - 1/4" to 2" and 6mm to 50mm tube butt or socket weld
 - 1/4" to 2" and 6mm to 50mm tube fitting
- Orifice size: 0.19" (4.8mm) to 3" (76mm)
- Working pressure up to: 1000 psig (69.0 bar)
- Working temperature: -20° to 450°F (-28°C to 232°C)



BH SERIES

- 3-piece precision cast body construction
- Body materials: CF8M (316), CF3M (316L), CF8 (304), CF3 (304L) and 904L SS
- Seat materials: PTFE, RPTFE and PEEK
- Packing materials: PTFE, RPTFE, Graphite and O-ring
- End connections:
 - 1/8" to 2" thread
 - 1/8" to 2" pipe butt or socket weld
 - 1/2" to 2" and 12mm to 50mm tube butt or socket weld
 - 1/2" to 2" and 12mm to 38mm tube fitting
- Orifice size: 0.19" (4.8mm) to 1.5" (38.1mm)
- Working pressure up to: 3000 psig (207 bar)
- Working temperature: -20°F to 450°F (-28°C to 232°C)



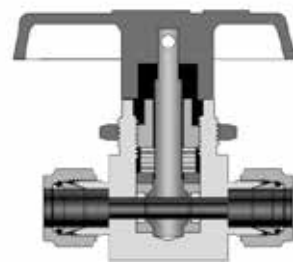
FITOK
Valves and Fittings

INSTRUMENTATION BALL VALVES

1,000 PSI TO 10,000 PSI RATED

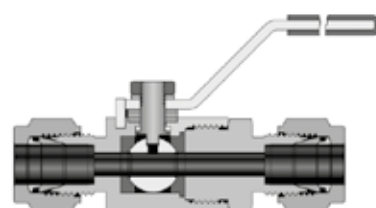
BO SERIES

- 1-piece forged body, top entry
- Body materials: 316 SS, 316L SS, 304 SS, 321 SS, 304L SS, 904L SS, alloy 400 and brass
- Seat materials: PTFE and UHMWPE
- Flow patterns: 2-way, 3-way, 4-way, 5-way, 6-way and 7-way
- End connections:
 - 1/8" to 1/2" thread
 - 1/16" to 3/4" and 3mm to 18mm tube fitting
- Orifice size: 0.05" (1.3mm) to 0.41" (10.3mm)
- Working pressure up to: 3000 psig (207 bar)
- Working temperature: -65°F to 300°F (-54°C to 148°C)



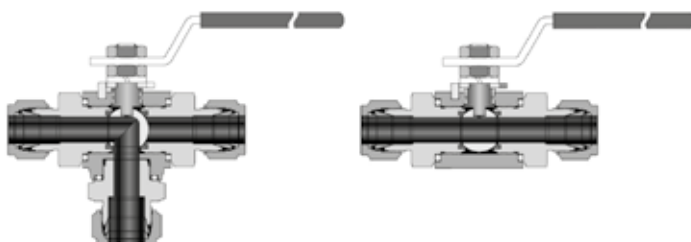
BR SERIES

- Cold drawn hex bar and cast body with single connector
- Body materials: 316 SS, 304 SS, 316L SS, 904L SS and brass
- Seat materials: PTFE
- Packing materials: PTFE
- End connections:
 - 1/8" to 1" thread
 - 1/4" to 1" and 6mm to 25mm tube fitting
- Orifice size: 0.19" (4.8mm) to 0.63" (16mm)
- Working pressure up to: 1000 psig (69.0 bar)
- Working temperature: -20°F to 450°F (-28°C to 232°C)



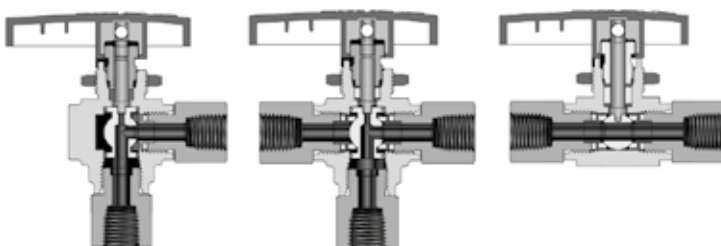
BP SERIES

- Cold drawn bar or forged body with end connectors
- Body materials: 316 SS, 304 SS, 321 SS and 904L SS
- Seat materials: PVDF, PCTFE and PEEK
- Packing materials: PTFE
- Flow patterns: 2-way and 3-way
- End connections:
 - 1/4" to 1" thread
 - 1/4" to 1" and 6mm to 25mm tube fitting
- Orifice size: 0.39" (10mm), 0.5" (12.7mm) and 0.71" (18mm)
- Working pressure up to: 10,000 psig (690 bar)
- Working temperature: -40°F to 450°F (-40°C to 232°C)



BV SERIES

- Precision cast body with end connectors
- Body materials: CF8M (316), CF3M (316L), CF8 (304), 904L SS, CF3 (304L) and brass
- Seat materials: PVDF, PCTFE and PEEK
- Packing materials: PTFE
- Flow patterns: 2-way straight, 2-way angle and 3-way
- End connections:
 - 1/8" to 3/4" thread
 - 1/8" to 3/4" and 3mm to 22mm tube fitting
- Orifice size: 0.09" (2.4mm), 0.41" (10.3mm)
- Working pressure up to: 6000 psig (414 bar)
- Working temperature: -65°F to 450°F (-54°C to 232°C)



BALL VALVES

PART NUMBER DESCRIPTION

BV SS - FL 8 - FNS 8 - P 10 - R - RX HQ 3 - S F2

SERIES	BODY MATERIAL	PORT 1 TYPE	PORT 1 SIZE	PORT 2/3 TYPE	PORT 2/3 SIZE	SEAT MATERIAL	ORIFICE SIZE	PACKING MATERIAL	HANDLE / ACTUATOR	FOR ACTUATOR	FLOW PATTERN	SPECIAL APPLICATION
BF	CF8M / 316 SS	FNS	2 1/8"	Same as Port 1		PTFE	02 0.09" (2.4mm)	Fluorocarbon FKM (BF, BFH)	Black, Nylon (BF, BFH, BO, BV)	NO	Straight	NO
BFH	CF3M / 316L SS	NS	3 3mm	Specify every Port designator if any of its Ports is different from the others		H UHMWPE	03 0.13" (3.2mm)	PTFE (BG, BH, BO, BP, BR, BV)	Stainless steel with yellow vinyl covered (BG, BH, BP, BR)	H Mechanical Limit Switch	A Angel (Bottom Port Inlet)	S NACE MR0175
BG		FRT	4 1/4"			K PCTFE	04 0.17" (4.2mm)			N Inductive Limit Switch	3 3-way	
BH	CF8 / 304 SS	RT	5 5/16"			P PEEK	05 0.19" (4.7mm)	B Buna N		Q Electromagnetic Valve	4 4-way	CLEANING & PACKAGING
BO	CF3 / 304L SS	FMS	6 3/8" or 6mm or M6 x 1			R Reinforced RPTFE	07 0.28" (7.1mm)	E Ethylene propylene	Red Handle or Vinyl Covered		5 5-way	FC-01
BP		MS	8 1/2" or 8mm					G Graphite	Green Handle or Vinyl Covered		6 6-way	FC-02
BR	321 SS	FRP	10 10mm or M10 x 1					H UHMWPE		HQ Mechanical Limit Switch and Electromagnetic Valve	7 7-way	
BV	Brass	BP	12 3/4" or 12mm					K Fluorocarbon FKM	Blue Handle or Vinyl Covered	NQ Inductive Limit Switch and Electromagnetic Valve		
	Alloy 400	FL	14 14 mm or M14 x 1/5					N Neoprene				
	F22	ML	16 1" or 16mm					P Peek	Yellow Nylon			
	F91	MTS	18 18mm					R RPTFE	Black Aluminium			
	Duplex 2205	TS	20 20mm or M20 x 1.5					T PTFE	90° Normally Closed Spring Return Pneumatic Actuator			
	Duplex 2507	MTB	22 22mm or M22 x 1.5						90° Normally open spring return pneumatic actuator			
INC	Inconel 600	TB	24 1 1/2" or M24 x 1.5						90° Double acting pneumatic actuator			
CS	Carbon Steel	PS	25 25mm						180° Left end normally open spring return pneumatic actuator			
904L SS		PB	27 M27 x 2						180° Right end normally open spring return pneumatic actuator			
		UFB	28 28mm						180° Double acting pneumatic actuator			
		UMB	32 2" or 32mm						180° Double acting pneumatic actuator			
		UPB	36 2 1/4" or M40 x 2						180° Double acting pneumatic actuator			
			40 2 1/2" or M40 x 2						180° Double acting pneumatic actuator			
			48 3" or M48 x 2						180° Double acting pneumatic actuator			
			64 4"						180° Double acting pneumatic actuator			

NB: "Part Number Description" is used for composition rules of Abdex product model, not suitable for specific product part number selection, not random combinations. If in doubt, please contact Abdex.

INSTRUMENTATION NEEDLE VALVES

3,000 PSI TO 10,000 PSI RATED

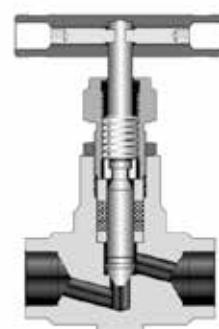
NEEDLE VALVES FEATURES

- The non-rotating stem eliminates galling between the seat and tip, and reducing the friction of sealed packing. Effectively improving the service life of the valve and valve packing.
- Intermittent packing system designed to effectively reduce the cold flow of valve packing and the valve operating torque. While using the system media for the use of valve packing.
- Packing mounted on the bottom of the stem transmission thread designed to achieve the isolation of transmission thread lubricating material and system medium to prevent transmission thread lubricating substance contamination of the media on the system.
- Threaded operating torque transmitted using online extrusion and roll forming process, effectively improves the strength and precision of the threads. To provide strong protection for operating torque for the screw to pass long-term, stable and reliable torque transmission.
- Different body materials and structure selection, a variety of colours and forms of the handle and optional panel mounting structure to achieve different requirements and different application occasions.



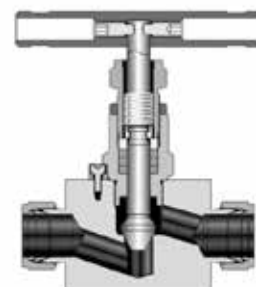
FORGED NEEDLE VALVES - NF & NFH SERIES

- One-piece forged body
- Body materials: Carbon steel / A105, 316 SS, 316L SS, 304 SS, 304L SS, 321 SS, Duplex 2205, Alloy 400, Alloy C-276 and brass
- Orifice (mm): 4, 6.4, 10, 15 and 18 (15 and 18 suitable for NF series only)
- Working pressure up to:
NF Series - 6000 psig (41.4 MPa)
NFH Series - 10000 psig (69.0 MPa)
- Working temperature: -65°F to 1200°F (-54°C to 649°C)
- Sealing face materials: Same as body material, optional stellite available
- Stem tips type: blunt, ball, regulating and soft tips (suitable for NF series only)
- End Connection type and size:
1/8" to 1" and M10 to M36 thread
1/4" to 1" and 6mm to 28mm tube fitting
3/8" to 1" and 12mm to 25mm weld



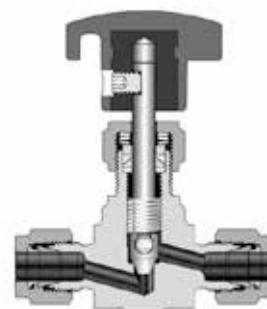
BAR STOCK NEEDLE VALVES - NB & NBH SERIES

- Cold drawn bar
- Body materials: 316 SS, 316L SS, 304 SS, 304L SS, Duplex 2205, Alloy C-276 and brass
- Orifice (mm): 4, 6, 10, 15 and 18 (15 and 18 suitable for NB series only)
- Working pressure up to:
NB Series - 6000 psig (41.4 MPa)
NBH Series - 10000 psig (69.0 MPa)
- Working temperature: -65°F to 1200°F (-54°C to 649°C)
- Sealing face materials: Same as body material, optional stellite available
- Stem tips type: blunt, ball, regulating and soft tips (suitable for NB series only)
- End Connection type and size:
1/8" to 1" and M14 to M27 thread
1/4" to 1" and 6mm to 25mm tube fitting
3/8" to 1" and 10mm to 28mm weld



GENERAL PURPOSE NEEDLE VALVE - NG & NGH SERIES

- One-piece forged body
- Body materials: Carbon steel / A105, 316 SS, 316L SS, 304 SS, 304L SS, Duplex 2205, Alloy 400, Alloy C-276 and brass
- Orifice (mm): 2, 4, 6.4, 10
- Working pressure up to:
NG Series - 3000 psig (20.7 MPa)
NGH Series - 5000 psig (34.5 MPa)
- Working temperature: -65°F to 600°F (-54°C to 315°C)
- Sealing face materials: Same as body material
- Stem tips type: blunt, ball, regulating and soft tips
- End Connection type and size:
1/8" to 3/4" and M14 to M27 thread
1/4" to 3/4" and 6mm to 25mm tube fitting

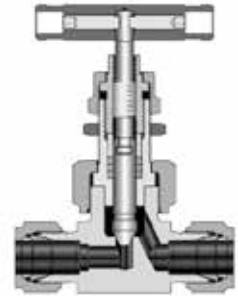


INSTRUMENTATION NEEDLE VALVES

3,000 PSI TO 10,000 PSI RATED

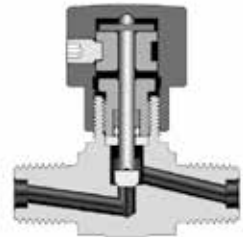
UNION BONNET NEEDLE VALVES - NU & NUH SERIES

- One-piece forged body
- Body materials: 316 SS, 316L SS, 304 SS, 304L SS, Duplex 2205, Alloy 400, Alloy C-276 and brass.
- Orifice (mm): 4, 6.4, 10
- Working pressure up to:
 - NU Series - 6000 psig (41.4 MPa)
 - NUH Series - 10000 psig (69.0 MPa)
- Working temperature: -65°F to 1200°F (-54°C to 649°C)
- Sealing face materials: Same as body material, optional stellite available
- Stem tips type: blunt, ball, regulating and soft tips (suitable for NU series only)
- End Connection type and size:
 - 1/8" to 1" and M14 to M27 thread
 - 1/4" to 1" and 6mm to 25mm tube fitting
 - 3/8" to 1" and 10mm to 28mm weld



NON-ROTATING STEM NEEDLE VALVES - ND SERIES

- One-piece forged body
- Body materials: 316 SS, 316L SS, 304 SS, 304L SS, Alloy 400 and brass
- Orifice (mm): 2, 4, 6.4
- Working pressure up to: 3000 psig (2.07 MPa)
- Working temperature: -20°F to 450°F (-28°C to 232°C)
- Sealing face materials: Same as body materials
- End Connection type and size:
 - 1/8" to 1/2" and M10 to M20 thread
 - 1/4" to 1/2" and 3mm to 12mm tube fitting



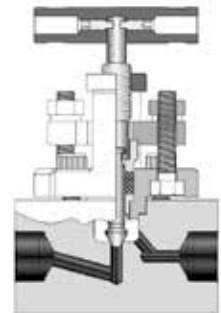
RISING PLUG VALVES - NR & NRG SERIES

- Cold drawn square bar
- Body materials: 316 SS, 316L SS, 304 SS, 304L SS, Duplex, Alloy 400, Alloy C-276 and brass
- Orifice (mm): 4, 6.4
- Working pressure up to: 6000 psig (41.4 MPa)
- Working temperature: -20°F to 400°F (-28°C to 204°C)
- Sealing face materials: Soft seat design
 - Seat materials: Acetal, PEEK, PFA
- End Connection type and size:
 - 1/8" to 1/2" and M14 to M20 thread
 - 1/4" to 1/2" and 6mm to 12mm tube fitting



OUTSIDE SCREW & YOKE (OS & Y) NEEDLE VALVES - NY & NYH SERIES

- Cold drawn bar
- Body materials: Carbon steel / A105, 316 SS, 316L SS, 304 SS, 304L SS, Duplex, Alloy 400, Alloy C-276 and brass
- Orifice (mm): 4
- Working pressure up to:
 - NY Series - 6000 psig (41.4 MPa)
 - NYH Series - 10000 psig (69.0 MPa)
- Working temperature: -65°F to 1200°F (-54°C to 649°C)
- Sealing face materials: Same as body material, optional stellite available
- Externally adjustable gland independent of spindle thread
- End Connection type and size:
 - 1/4" to 1/2" and M10 to M20 thread
 - 1/4" to 1/2" and 6mm to 12mm tube fitting
 - 3/8" to 1/2" and 10mm to 20mm weld



TOGGLE VALVES - NT SERIES

- One-piece forged body
- Body materials: 316 SS, 316L SS, 304 SS, 304L SS and brass
- Orifice (mm): 2, 4, 6.4
- Working pressure up to: 300 psig (2.07 MPa)
- Working temperature: -20°F to 250°F (-28°C to 121°C)
- Sealing face materials: Same as body material
- End Connection type and size:
 - 1/8" to 1/2" and M10 to M20 thread
 - 1/4" to 1/2" and 3mm to 12mm tube fitting



FITOK
Valves and Fittings

NEEDLE VALVES

PART NUMBER DESCRIPTION

NB SS - PB 8 - ML 12 - 18 WR - GYM - A - SF2									
SERIES	BODY MATERIAL	INLET TYPE	INLET SIZE	OUTLET TYPE	OUTLET SIZE	ORIFICE SIZE	TIP TYPE	PACKING MATERIAL	PANEL MOUNTING
NF/NFH	SS	FMS	2 1/8"	Same as Inlet		5 0.08"	Blunt	PTFE	No
NB/NBH	6L 316L SS	NS	4 1/4"	If different specify in the same way as Inlet type and Inlet size		7 0.16"	R Regulating		NF/NFH NB/NBH NG/NGH NV/NVH Series
NG/NGH	S4 304 SS	FRT	6 3/8" or 6mm			8 0.25"	B Ball	P PEEK	Y Yes
NU/NUH	4L 304L SS	RT	8 1/2" or 8mm			9 0.39"	T Soft Tip PTFE	G Graphite	
ND	S1 321 SS	FMS	10 10mm			12 0.59"	K Soft Tip PCTFE	ND NB/NRG NT Series	
NR/NG	91 F91	MS	14 14mm			6 0.71"	P Soft Tip PCTFE	B Buna N	
NV/NVH	92 F92	MS	14 1/4 x 1.5			0 0.71"	P Soft Tip PEEK	E Ethylene Propylene	
BV	D5 Duplex 2205	FRP	16 1" or 16mm						
	TI Titanium	BP	18 18mm						
	C20 Alloy 20	BP	18 18mm						
	M Alloy 400	TS	20 1 1/4" or 20mm or M20 x 1.5						
	INC Alloy 600	MTS	22 22mm or M22 x 1.5						
HC Alloy C-276	TS	TB	24 M24 x 1.5						
B Brass	TS	TS	25 25mm						
CS Carbon Steel	MTB	MTB	27 M27 x 2						
	PS	PS	28 28mm						
	PB	PB							
FL	FL	FL							
ML	ML	ML							
UMB	UMB	UMB							

SEAT MATERIAL	TIP MATERIAL	PANEL MOUNTING	FLOW PATTERN	SPECIAL APPLICATION	CLEANING & PACKAGING
Same as body	Same as body	No	Straight	NO	FC-01
NF/NFH NB/NBH NU/NUH NV/NVH Series	NF/NFH NB/NBH NU/NUH NV/NVH Series	Y Yes	A Angle	S MACE MR0175 Classification for Nuclear Facility Application	F2 FC-02
				N2 Class 2	
				N3 Class 3	

PACKING MATERIAL	PANEL MOUNTING	HANDLE
PTFE	No	Black Aluminium Bar
NF/NFH NB/NBH NU/NUH NV/NVH Series	Y Yes	Green Aluminium Bar
		Blue Aluminium Bar
		Aluminium Series
		321 Stainless Steel Bar
		Black Knob
		Black Knob
		Stainless Steel Handle
		NT Series

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HIGH PRESSURE BALL VALVES

10,000 PSI TO 20,000 PSI RATED

HIGH PRESSURE BALL VALVES

- One piece, trunion mounted style, ideal for heavy duty applications
- Two-way and three-way valve configurations
- PEEK seats offer excellent resistance to chemicals, heat and wear / abrasion
- Full-port flow path minimizes pressure drop
- Optional o-rings available for high-temperature applications
- Pneumatic actuator options



10B SERIES BALL VALVES

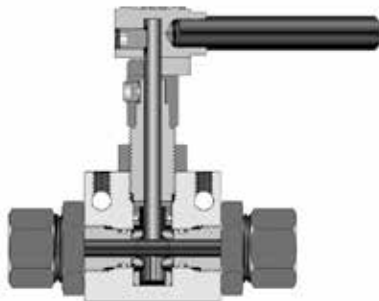
- End connections: 3/4" and 1" tube fittings, 3/4" and 1" NPT threads
- Body materials: 316 SS
- Orifice (mm): 2-way: 0.5", 3-way: 0.5"
- Working pressure up to: 10000 psig (690 bar)
- Fluorocarbon FKM O-ring working temperature: 0°F to 400°F (-17.8°C to 204°C)

15B SERIES BALL VALVES

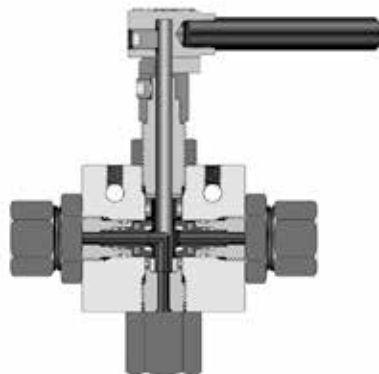
- End connections: 1/8", 1/4", 3/8", 1/2", 9/16", and 3/4" tube fittings, 1/8", 1/4", 3/8" and 1/2" NPT threads
- Body materials: 316 SS
- Orifice (mm): 2-way: 0.094" to 0.375", 3-way: 0.094" to 0.328"
- Working pressure up to: 15000 psig (1034 bar)
- Fluorocarbon FKM O-ring working temperature: 0°F to 400°F (-17.8°C to 204°C)

20B SERIES BALL VALVES

- End connections: 1/4", 3/8", 9/16", and 3/4" tube fittings
- Body materials: 316 SS
- Orifice (mm): 2-way: 0.094" to 0.375", 3-way: 0.094" to 0.328"
- Working pressure up to: 20000 psig (1379 bar)
- Fluorocarbon FKM O-ring working temperature: 0°F to 400°F (-17.8°C to 204°C)



Shut-Off



Switching
180° Turn



Diverting
90° Turn

FITOK
Valves and Fittings

HIGH PRESSURE BALL VALVES

PART NUMBER DESCRIPTION

15B SS - 2FH 6 - 6 - 2

SERIES	BODY MATERIAL	CONNECTION	SIZE	ORIFICE NO.	BODY STYLE
10B	SS	316 SS	For 10B Series	2 1/8"	For 2-way
15B		FH 15 Series	4 1/4"	1/4"	1 2-way straight valves
20B		2FH 20 Series	6 3/8"	6 3/8"	2 3-way valves, 180° turn
		FNS NPT (Female)	8 1/2"	8 1/2"	2D 3-way valves, 90° turn
		For 15B Series	9 9/16"	For 3-way	
		FH 15 Series	12 3/4"	3/16"	
		2FH 20 Series	16 1"	6 3/8"	
		FNS NPT Series (Female)		8 1/2"	
		For 20B Series			
		FH 20 Series			
		6FH 60 Series			

NB: "Part Number Description" is used for composition rules of Abdex product model, not suitable for specific product part number selection, not random combinations. If in doubt, please contact Abdex.

Code	O-ring Material	Temperature Range
	Fluorocarbon FKM	0 to 400°F (-17.8 to 204°C)
N	NBR	-40 to 250°F (-40 to 121°C)
F	FFKM	-20 to 500°F (29 to 260°C)
E	EPDM	-50 to 300°F (-45 to 148°C)
K	Kalrez	-40 to 500°F (-40 to 250°C)

Options: O-ring
Fluorocarbon FKM is standard. For other materials, add a material code to the valve Ordering number.
Example: 15BSS-2FH6-6-2-K

HIGH PRESSURE NEEDLE VALVES

10,000 PSI TO 60,000 PSI RATED

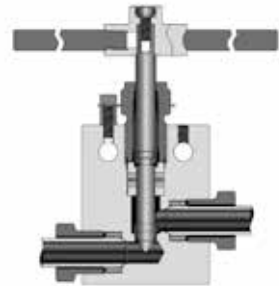
NEEDLE VALVES

- Non-rotating stem and bar stock body design
- Easy to assemble and replace packing
- Metal-to-metal seating achieves ideal shut-off, longer stem / seat service lifetime for abrasive flow, excellent corrosion resistance and greater durability for repeated on / off cycles
- The standard packing material for 60N Series is Nylon, and other series is PTFE. RPTFE glass, extended stuffing box with graphite are also available
- Extended stuffing box with graphite can be operated to 1200°F (649°C)
- The location of packing is under the thread of valve stem
- The material of packing gland and lower stem have been selected to achieve reduced handle torque and extended thread cycle life
- Options for Vee or Regulating stem tips
- Five flow patterns are available
- Available to NACE MR-01-75



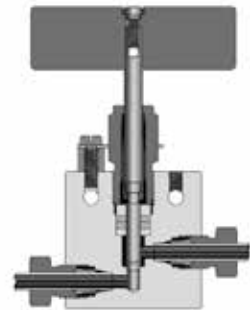
10N SERIES NEEDLE VALVES

- End connections: 9/16", 3/4", 1" tube fittings and 3/4" NPT, 3/4" BSPT, 1" NPT, 1" BSPT
- Body materials: 316 SS
- Orifice sizes: 0.359", 0.516", 0.688", 0.438" and 0.562"
- Working pressure up to: 10000 psig (690 bar)
- Working temperature: -100°F to 1200°F (-73°C to 649°C)



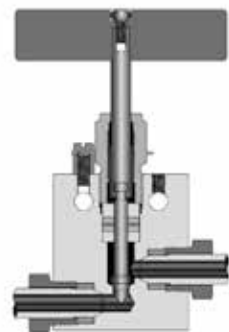
15N SERIES NEEDLE VALVES

- End connections: 1/8", 1/4", 3/8", 1/2" tube fittings and 1/8" NPT, 1/8" BSPT, 1/4" NPT, 1/4" BSPT, 3/8" NPT, 3/8" BSPT, 1/2" NPT, 1/2" BSPT
- Body materials: 316 SS
- Orifice sizes: 0.094", 0.188", 0.250", 0.375", 0.078", 0.203", 0.219" and 0.312"
- Working pressure up to: 15000 psig (1034 bar)
- Working temperature: -100°F to 800°F (-78°C to 427°C)



20N SERIES NEEDLE VALVES

- End connections: 1/4", 3/8", 9/16", 3/4" and 1" tube fittings
- Body materials: 316 SS
- Orifice (mm): 0.125", 0.219", 0.312", 0.438", 0.562"
- Working pressure up to: 20000 psig (1379 bar)
- Working temperature: -100°F to 1200°F (-73°C to 649°C)

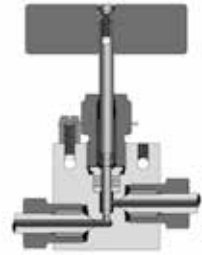


HIGH PRESSURE NEEDLE VALVES

10,000 PSI TO 60,000 PSI RATED

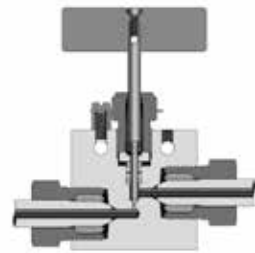
30N SERIES NEEDLE VALVES

- End connections: 1/4", 3/8", 9/16" tube fittings
- Body materials: 316 SS
- Orifice (mm): 0.094", 0.125"
- Working pressure up to: 30000 psig (2068 bar)
- Working temperature: -100°F to 1200°F (-73°C to 649°C)



60N SERIES NEEDLE VALVES

- End connections: 1/4", 3/8", 9/16" tube fittings
- Body materials: 316 SS
- Orifice (mm): 0.063", 0.078"
- Working pressure up to: 60000 psig (4137 bar)
- Working temperature: -100°F to 1200°F (-73°C to 649°C)



PART NUMBER DESCRIPTION

15N SS - FH4 - R G 2										
SERIES	BODY MATERIAL		CONNECTOR SIZES		STEM TIPS		PACKING		FLOW PATTERNS	
10N	SS	316 SS	FH2	1/8"		Vee		PTFE	1	Straight
15N			FH4	1/4"	R	Regulating		Nylon	2	Angle
20N			FH6	3/8"			TG	RPTFE Glass	3	Angle (replaceable seat)
30N			FH8	1/2"			G	Graphite	4	3-way / 2 on pressure
60N			FH9	9/16"			HT	Extend stuffing box valve with Graphite	5	3-way / 1 on pressure
			FH12	3/4"					6	3-way / 2 stem manifold
			FH16	1"						
			FNS2	1/8 NPT (Female)						
			FNS4	1/4 NPT (Female)						
			FNS6	3/8 NPT (Female)						
			FNS8	1/2 NPT (Female)						
			FNS12	3/4 NPT (Female)						
			FNS16	1 NPT (Female)						
			FRT2	1/8 BSPT (Female)						
			FRT4	1/4 BSPT (Female)						
			FRT6	3/8 BSPT (Female)						
			FRT8	1/2 BSPT (Female)						
			FRT12	3/4 BSPT (Female)						
			FRT16	1 BSPT (Female)						

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HIGH PRESSURE CHECK VALVES

10,000 PSI TO 60,000 PSI RATED

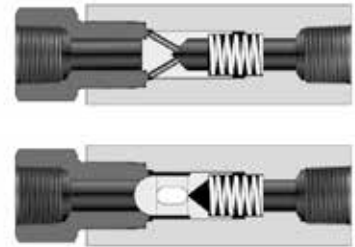
CHECK VALVES

- Provides unidirectional flow and tight shut-off for liquid and gas with high reliability. When differential drops below cracking pressure, valve shuts-off (not for use as relief valve)
- Body materials: 316 SS
- Resilient o-ring seat design for noise-free closing leakage-free
- Optional o-rings available for high-temperature applications
- Cracking pressure: 10C, 15C, 20C and 60C Series Check Valves:
14 psig - 26 psig (0.966 bar - 1.794 bar)



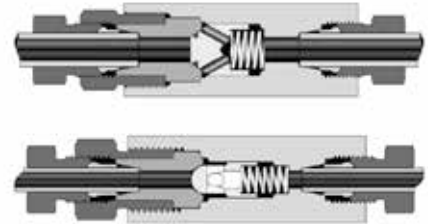
10C, 10CO SERIES CHECK VALVES

- End connections: 3/4" NPT and 1" NPT
- Orifice sizes: 0.52", 0.69"
- Working pressure up to: 10000 psig (690 bar)
- Working temperature:
10C Series (Pipe O-ring Check Valves): -50°F to 400°F (-45°C to 204°C)
10CO Series (Ball Check Valves): -110°F to 400°F (-79°C to 204°C)



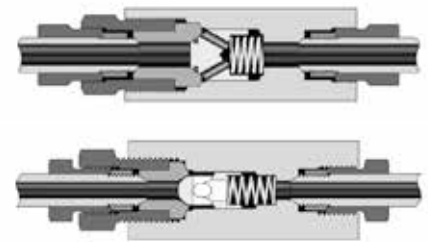
15C, 15CO SERIES CHECK VALVES

- End connections:
O-ring Check Valves and Ball Check Valves:
1/4", 3/8" and 1/2" tube fittings
Pipe O-ring Check Valves and Pipe Ball Check Valves:
1/4" NPT, 3/8" NPT and 1/2" NPT
- Orifice sizes:
0.188", 0.25" and 0.375"
Pipe o-ring Check Valves and Pipe Ball Check Valves:
0.12", 0.22" and 0.36"
- Working pressure up to: 15000 psig (1034 bar)
- Working temperature:
15C Series (O-ring Check Valves): -50°F to 550°F (-45°C to 288°C)
15C Series (Pipe Check Valves): -50°F to 400°F (-45°C to 204°C)
15CO Series (Ball Check Valves): -110°F to 800°F (-79°C to 427°C)
15CO Series (Pipe Ball Check Valves): -110°F to 400°F (-79°C to 204°C)



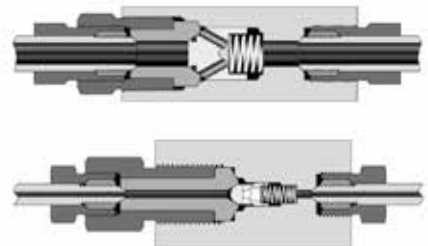
20C, 20CO SERIES CHECK VALVES

- End connections:
1/4", 3/8", 9/16", 3/4" tube fittings
- Orifice sizes:
0.125", 0.218", 0.359", 0.516" and 0.688"
- Working pressure up to: 20000 psig (1379 bar)
- Working temperature:
20C Series (O-ring check valves): -50°F to 550°F (-45°C to 288°C)
20C Series Check valves (Ball check valves): -110°F to 1200°F (-79°C to 649°C)



60C, 60CO SERIES CHECK VALVES

- End connections:
1/4", 3/8", 9/16" tube fittings
- Orifice sizes:
0.094", 0.125", 0.187"
- Working pressure up to: 60000 psig (4137 bar)
- Working temperature:
60C Series Check valves (O-ring check valves): -50°F to 550°F (-45°C to 288°C)
60C Series Check valves (Ball check valves): -110°F to 1200°F (-79°C to 649°C)



FITOK
Valves and Fittings

HIGH PRESSURE CHECK VALVES

PART NUMBER DESCRIPTION

15C SS - FH 4

SERIES	BODY MATERIAL	CONNECTOR SIZES	STEM TIPS
10C	SS	316 SS	For 10C/10CO Series
10CO		FNS NPT (Female)	4 1/4"
15C		For 15C/15CO Series	6 3/8"
15CO		FH 15 Series	8 1/2"
20C		FNS NPT (Female)	9 9/16"
20CO		For 20C/20CO Series	12 3/4"
60C		FH 20 Series	16 1"
60CO		For 60C/60CO Series	
		FH 60 Series	

Code	O-ring Material	Temperature Range
	Fluorocarbon FKM	0 to 400°F (-17.8 to 204°C)
N	NBR	-40 to 250°F (-40 to 121°C)
F	FFKM	-20 to 500°F (29 to 260°C)
E	EPDM	-50 to 300°F (-45 to 148°C)
K	Kalrez	-40 to 500°F (-40 to 250°C)

Options: O-ring
 Fluorocarbon FKM is standard. For other materials, add a material code to the valve Ordering number.
 Example: 20CSS-FH6-K

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HIGH PRESSURE METERING VALVES

10,000 PSI TO 60,000 PSI RATED

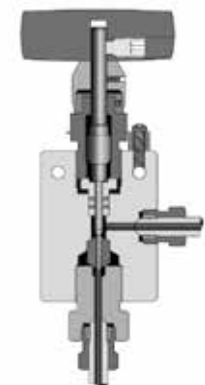
PRECISE METERING VALVES

- The design of Barrel and Thimble micrometer permits repeatable settings. Each division of barrel equal to 0.025"
- Thimble is divided into 25 divisions, each division of thimble equal is to 0.001" stem travel
- One revolution equal to valve stem 0.025" travel
- Precise Metering valves are not intended for use as shut-off valves
- The minimum flow rate is factory set at "0" position. The valve will be damaged when the valve is operated below "0" position. When shut-off is required, a correlated shut-off valve from 15B, 20B, 15N, 20N, 30N and 60N series valves should be installed in series with the Precise Metering valves
- Packing is located under the thread of valve stem
- Reliable locking device for packing gland
- Extended stuffing box valve with graphite can be operated to 1200°F (649°C)



PRECISE METERING VALVES

- End connections:
 - 15M series: 1/8" and 1/4" tube fittings
 - 30M series: 1/4" tube fittings
 - 60M series: 1/4" and 3/8" tube fittings
- Body materials: 316 SS
- Orifice sizes: 0.062"
- Flow coefficient (Cv): 0.04
- Working pressure up to:
 - 15M series: 15000 psig (1034 bar)
 - 30M series: 30000 psig (2068 bar)
 - 60M series: 60000 psig (4137 bar)
- Working temperature: -100°F to 1200°F (-73°C to 649°C)



PART NUMBER DESCRIPTION

30M SS - FH4 - G					
SERIES	BODY MATERIAL		CONNECTOR SIZES		PACKING MATERIAL
15M	SS	316 SS	FH2	1/8"	PTFE
30M			FH4	1/4"	Nylon (60M Only)
60M			FH6	3/8"	TG RPTFE Glass
				G Graphite	
				HT Extend stuffing box valve with Graphite	

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HIGH PRESSURE RELIEF VALVES

10,000 PSI TO 60,000 PSI RATED

HIGH PRESSURE RELIEF VALVES

- Maximum back pressure: 500 psig (34.5 bar)
- Liquid or gas service
- Pressure settings of HSR Series and HMR Series valves are made at the factory and valves are tagged accordingly. State the required set pressure with the order
- Lock wired secure cap to maintain set pressure
- Easily exchangeable replaceable seat
- Free assembly positions



HSR SERIES RELIEF VALVES

- Inlet connection:
9/16" of 20 series tube fittings
- Outlet connection: 3/4" NPT thread
- Body materials: 316 SS
- Orifice sizes: 0.156" to 0.312"
- Soft seat relief valves
- Set pressure: 1500 to 20000 psig (103.4 to 1378.9 bar)
- Working temperature: 32°F to 400°F (0°C to 204°C)



HMR SERIES RELIEF VALVES

- Inlet connection:
9/16" of 20 series tube fittings
3/8" of 60 series tube fittings
- Outlet connection: 3/4" NPT thread
- Body materials: 316 SS
- Orifice sizes: 0.078" to 0.312"
- Metal seat relief valves
- Set pressure: 3000 to 60000 psig (206.8 to 4136.8 bar)
- Working temperature: 110°F to 500°F (-79°C to 260°C)



HAR SERIES RELIEF VALVES

- Inlet connection:
9/16" of 20 series tube fittings
- Outlet connection: 3/4" NPT thread
- Body materials: 316 SS
- Orifice sizes: 0.093" to 0.197"
- Soft seat relief valves
- Set pressure: 3000 to 20000 psig (206.8 to 1378.9 bar)
- Working temperature: 32°F to 400°F (0°C to 204°C)



HIGH PRESSURE FILTERS

10,000 PSI TO 60,000 PSI RATED

DUAL-DISC LINE FILTERS

- Dual-disc line filters are utilized in chemical processing, aerospace, nuclear and other applications
- The large contamination particles are filtered by upstream element. The rest of the contamination particles are filtered by downstream element
- Easy to replace filter element
- Standard size of downstream/upstream nominal pore is 5/10, 10/35 and 35/65 μm
Other element combinations also available on special order
- Pressure differential not to exceed 1,000 psig (69 bar) in a flowing condition



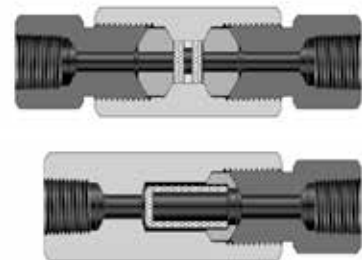
CUP-TYPE LINE FILTERS

- The filter elements can be quickly and easily replaced
- Cup-type Line Filters are recommended in high pressure systems requiring both maximum filter surface area and high flow rates. Cup-type Line Filters are widely used in chemical processing and industrial fields. The cup design of this filter offers about six times the effective filter area as compared to disc-type units
- Nominal pore sizes for filter element: 5, 35 and 65 μm
- Pressure differential not to exceed 1,000 psig (69 bar) in a flowing condition



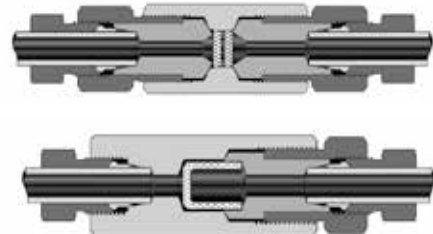
10FD 10FC SERIES LINE FILTERS

- Inlet connection:
3/4" NPT and 1" NPT
- Body materials: 316 SS
- Orifice sizes:
10FD Series: 0.359" and 0.563"
10FC Series: 0.516" and 0.688"
- Set pressure: 10000 psig (690 bar)
- Working temperature: -60°F to 400°F (-50°C to 204°C)



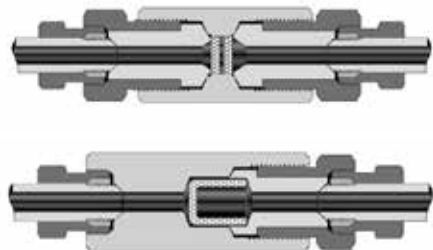
15FD 15FC SERIES LINE FILTERS

- End connections:
1/8", 1/4", 3/8", 1/2" tube fittings
1/8" NPT, 1/4" NPT, 3/8" NPT, 1/2" NPT
- Body materials: 316 SS
- Orifice sizes:
15FD Series: 0.094", 0.125", 0.188" and 0.312"
15FC Series: 0.125", 0.188", 0.132" and 0.438"
- Working pressure up to: 15000 psig (1034 bar)
- Working temperature:
Tube fittings: -60°F to 660°F (-50°C to 350°C)
NPT thread ends: -60°F to 400°F (-50°C to 204°C)



20FD 20FC SERIES LINE FILTERS

- End connections:
20FD Series: 9/16" tube fitting
20FC Series: 1/4", 3/8", 9/16", 3/4" and 1" tube fittings
- Body materials: 316 SS
- Orifice sizes:
20FD Series: 0.312"
20FC Series: 0.125", 0.218", 0.359", 0.516" and 0.688"
- Working pressure up to: 20000 psig (1379 bar)
- Working temperature: -60°F to 660°F (-50°C to 350°C)



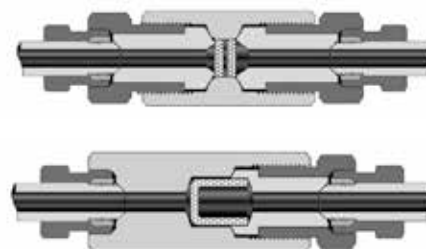
FITOK
Valves and Fittings

HIGH PRESSURE FILTERS

10,000 PSI TO 60,000 PSI RATED

60FD 60FC SERIES LINE FILTERS

- End connections: 1/4", 3/8" and 9/16" tube fittings
- Body materials: 316 SS
- Orifice sizes:
60FD Series: 0.094", 0.125" and 0.187"
60FC Series: 0.094", 0.125" and 0.187"
- Working pressure up to: 60000 psig (4137 bar)
- Working temperature: -60°F to 660°F (-50°C to 350°C)



PART NUMBER DESCRIPTION

15FD SS - FH 4 - 1035						
SERIES	BODY MATERIAL		CONNECTION		SIZE	NOMINAL PORE SIZE
10FD	SS	316 SS	For 10FD/10FC Series		2 1/8"	For 10FD/15FD/20FD/60FD Series
10FC			FNS	NPT (Female)	4 1/4"	0510 5/10 µm
15FD			For 15FD/15FC Series		6 3/8"	1035 10/35 µm
15FC			FH	15 Series	8 1/2"	3565 35/65 µm
20FD			FNS	NPT (Female)	9 9/16"	For 10FC/15FC/20FC/60FC Series
20FC			For 20FD/20FC Series		12 3/4"	5 5 µm
60FD			FH	20 Series	16 1"	35 35 µm
60FC			For 60FD/60FC Series			65 65 µm
			FH	60 Series		

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HIGH PRESSURE TUBING

15,000 PSI TO 60,000 PSI RATED

15 SERIES TUBING

- Working pressures up to: 15000 psig (1034 bar)
- 316 / 316L and 304 / 304L stainless steel are standard materials. Other materials available on request
- Example:
316 SS: SS-15T4-083-6M
304 SS: S4-15T8-156-5



20 SERIES TUBING

- Working pressures up to: 20000 psig (1379 bar)
- 316 / 316L and 304 / 304L stainless steel are standard materials. Other materials available on request
- Example:
316 SS: SS-MT-2FH6-10
304 SS: S4-MT-2FH9-3M



60 SERIES TUBING

- Working pressures up to: 60000 psig (4137 bar)
- 316 / 316L and 304 / 304L stainless steel are standard materials. Other materials available on request
- Example:
316 SS: SS-HT-6FH4-5
304 SS: S4-HT-6FH6-3M



TWIN FERRULE UP TO 10,000 PSI TUBE FITTINGS

FEATURES

- Sizes range from 1/16" to 2" and 2mm to 50mm
- Diverse materials and configurations are available
- Precision machined components ensure perfect deformation of the ferrules and tubing
- Hardened threads and smoothed surface finishes extend fitting life and prevent sticking of the matching threads
- Female nut threads are silver-plated to minimize the friction with body threads
- Radius junction design within elbows provides smooth flow path
- Every fitting is stamped with size, material and heat code
- Fittings are easy to disconnect and retighten



WORKING PRESSURES OF NPT THREAD ENDS

	316 Stainless Steel and Carbon Steel				Brass			
	psig	bar	psig	bar	psig	bar	psig	bar
1/16	11000	757	6700	460	5500	378	3300	227
1/8	10000	690	6500	447	5000	344	3200	220
1/4	8000	551	6600	454	4000	275	3300	227
3/8	7800	537	5300	365	3900	268	2600	179
1/2	7700	530	4900	337	3800	261	2400	165
3/4	7300	502	4600	316	3600	248	2300	158
1	5300	365	4400	303	2600	179	2200	151
1 1/4	6000	410	5000	344	3000	200	2500	172
1 1/2	5000	344	4600	317	2500	172	2300	158
2	3900	268	3900	268	1900	130	1900	130

Working pressure is based on ANSI / ASME B31.3 at ambient temperature.

WORKING PRESSURES OF ADJUSTABLE ISO PARALLEL THREAD ENDS (PP)

	316 Stainless Steel and Carbon Steel	
	psig	bar
1/8	4568	315
1/4		
3/8		
1/2	2320	160
3/4		
1		

TWIN FERRULE

UP TO 10,000 PSI TUBE FITTINGS

WORKING PRESSURES OF SAE / MS THREAD ENDS

	316 Stainless Steel and Carbon Steel			
	Non-adjustable		Adjustable	
	psig	bar	psig	bar
5/16-24	4568	315	4568	315
3/8-24				
7/16-20				
1/2-20			3626	250
9/16-18				
3/4-16	3626	250	2900	200
7/8-14				
1 1/16-12	2900	200	2320	160
1 3/16-12				
1 5/16-12				
1 5/8-12	2320	160	1813	125
1 7/8-12				
2 1/2-12	1813	125	1450	100

WORKING PRESSURES FOR MST STUD ENDS

	316 Stainless Steel and Carbon Steel			
	Non-adjustable		Adjustable	
	psig	bar	psig	bar
M8 x 1	5800	400	4568	315
M10 x 1				
M12 x 1.5				
M14 x 1.5				
M16 x 1.5	4568	315	3626	250
M18 x 1.5				
M20 x 1.5				
M22 x 1.5				
M27 x 2	2900	200	2320	160
M30 x 2				
M33 x 2				
M42 x 2				
M48 x 2	2320	160	1450	100
M60 x 2				

WORKING PRESSURES

- The maximum working pressures of the tube ends at ambient temperature are determined by the maximum working pressure of the FITOK Tubing that is used. Refer to FITOK Tube and Pipes.
- The maximum working pressure of the whole fitting is determined by the end connection with the lowest pressure rating.

TWIN FERRULE UP TO 10,000 PSI TUBE FITTINGS

CONFIGURATION	FITTING TYPE	EXAMPLE
	Male Connector	SS-CM-ML12-NS8
	Bulkhead Male Connector	S4-BCM-FL8-AN8
	Thermocouple Connector	S1-TCM-FL8-NS8
	Female Connector	B-CF-FL8-RG6
	Bulkhead Female Connector	CS-BCF-ML12-NS8
	Union	M-U-FL12
	Bulkhead Union	HC-BU-ML10
	Male Elbow	T-LM-FL8-NS8
	Positionable Male Elbow	TI-LP-ML14-ST14
	Female Elbow	PA-LF-FL8-NS8
	Union Elbow	INC-LU-FL8
	Male Run Tee	A20-TMT-FL8-NS8
	Male Branch Tee	D5-TTM-ML16-NS8
	Positionable Male Run Tee	AL-TPT-FL8-ST14
	Positionable Male Branch Tee	A65-TTP-FL8-PP8
	Female Run Tee	SS-TFT-FL8-NS8
	Female Branch Tee	SS-TTF-ML12-NS8

TWIN FERRULE

UP TO 10,000 PSI TUBE FITTINGS

CONFIGURATION	FITTING TYPE	EXAMPLE
	Union Tee	SS-TTT-FL6
	Union Cross	SS-C-FL8
	Cap	SS-TC-FL8
	Plug	SS-TP-ML12
	Nut and Ferrules	SS-NFR-FL8
	Reducer	SS-R-FL8-MT12
	Insert for Soft Plastic Tubing	SS-IN-8-6
 over 25mm	Port Connector	SS-P-FL4
 over 25mm	Male Adaptor	SS-AM-FT8-RT8
 over 25mm	Female Adaptor	SS-AF-MT12-NS8
	Flange Adaptor	SS-FA-FL6-F8-300
	Weld Connector	SS-CW-FL8-TS8
	Weld Elbow	SS-LW-FL8-PB8
	Lapped Flange Connector	SS-LFC-FL6A
	Calibrating Fitting	SS-FC-FL4-1428
	Dielectric Fitting	SS-DF-FL6
	Nut-Ferrule Set	SS-NFS-FL6

TWIN FERRULE UP TO 10,000 PSI TUBE FITTINGS

CONFIGURATION	FITTING TYPE	EXAMPLE
	Ferrule Set	SS-FRS-FL6
	45° Male Elbow	SS-VM-FL5-NS2
	45° Adjustable Male Elbow	SS-VP-FL16-ST21
	Vent Protector	SS-VPF-NS12
	Fusible Fittings	SS-GFTA4-160

TWIN FERRULE

PART NUMBER DESCRIPTION

SS - CM - ML 12 - NS 8 - [] - [] - []

MATERIAL	FITTING TYPE	P1 TYPE	P1 SIZE	P2 TYPE	P2 SIZE	P3 & P4	CLEANING & PACKAGING
SS 316 SS	CM Male Connector	ML Metric Ferrule	1 1/16"	Except the same as the P1, the other type follows: NS NPT Thread ONS O-ring with NPT Thread RT ISO Tapered thread RS ISO Parallel Thread RP ISO Parallel Thread RG ISO Parallel Thread (Gauge) RJ ISO Parallel Thread (Japanese Gauge) PP Positionable, ISO Parallel Thread ST SAE/MS Straight Thread AN 37" Flare MS Male Metric Thread TS Fractional Tube Socket Weld PB Pipe Butt Weld	Except the same as the P1, the other type follows: 5 M5 x 0.8 or 5/16-24 6 M6 x 1 or 3/8-24 7 7/16-20 8 M8 x 1 or 1/2-20 9 9/16-18 10 M10 x 1 12 M12 x 1.5 or 3/4-16 14 M14 x 1.5 or 7/8-14 16 M16 x 1.5 17 1 1/16-12 18 M18 x 1.5 19 1 3/16-12 20 M20 x 1.5 21 1 5/16-12 22 M22 x 1.5 24 M24 x 1.5 26 1 5/8-12 27 M27 x 2 30 1 7/8-12	Specify in the same way as P2	F2 FC-02
S4 304 SS	BCM Bulkhead Male Connector	FL Fractional Ferrule	2 1/8" or 2mm				
S1 321 SS	TCM Thermocouple Connector	MT Metric Tube	3 3/16" or 3mm				
904L 904L SS	CF Female Connector	FT Fractional Tube	4 1/4" or 4mm				
TI Titanium	BCF Bulkhead Female Connector		5 5/16"				
D5 Duplex 2205	U Union		6 3/8" or 6mm				
D7 Duplex 2507	BU Bulkhead Union		8 1/2" or 8mm				
A20 Alloy 20	LM Male Elbow		10 5/8" or 10mm				
M Alloy 400	VM 45 Male Elbow		12 3/4" or 12mm				
INC Alloy 600	VP 45 Adjustable Male Elbow		14 7/8" or 14mm				
A65 Alloy 625	LP Positionable Male Elbow		15 15mm				
HC Alloy C-276	LF Female Elbow		16 1" or 16mm				
CS Carbon Steel	LU Union Elbow		18 1 1/8" or 18mm				
AL Aluminium	TMT Male Run Tee		20 1 1/4" or 24mm				
B Brass	TTM Male Branch Tee		22 22mm				
PA Nylon	TPT Positionable Male Run Tee		24 1 1/2" or 24mm				
T PTFE	TTP Positionable Male Branch Tee		25 25mm				
	TFT Female Run Tee		28 28mm				
	TTF Female Branch Tee		30 30mm				
	TTT Union Tee		32 2" or 32mm				
	C Union Cross		38 38mm				
	TC Cap		50 50mm				
	TP Plug						
	R Reducer						
	P Port Connector						
	AM Male Adaptor						
	AF Female Adaptor						
	CW Weld Connector						
	LW Weld Elbow						
	DF Dielectric Fitting						

NB: "Part Number Description" is used for composition rules of Abdex product model, not suitable for specific product part number selection, not random combinations. If in doubt, please contact Abdex.

37° FLARED TUBE FITTINGS

TUBE FITTINGS

FEATURES

- Fittings are designed and manufactured in compliance with SAEJ514
- Sizes range from 1/8" to 2" and 3mm to 50mm
- 316 stainless steel, aluminium, brass and carbon steel materials are available
- Hardened threads and smoothed surface finishes extend fitting life and prevent sticking of the matching threads
- Radius junction design within elbows provides smooth flow path
- Every fitting is stamped with size, material and heat code.
- Female nut threads are silver-plated to minimize the friction with body threads
- Fittings are easy to disconnect and retighten



WORKING PRESSURES OF 37° FLARE TUBE FITTINGS

Nom. SAE dash size	Nom. Tube O.D size inch	37° Flare St. thread	Nom. Pipe size	SAE St. Thread Union and Bulkhead psig / bar	Fittings with pipe threads psig / bar
2	1/8	5/16-24	1/8	5000 (345)	5000 (345)
3	3/16	3/8-24	1/8	5000 (345)	5000 (345)
4	1/4	7/16-20	1/8	5000 (345)	5000 (345)
5	5/16	1/2-20	1/8	5000 (345)	5000 (345)
6	3/8	9/16-18	1/4	5000 (345)	4000 (276)
8	1/2	3/4-16	3/8	4500 (310)	3000 (207)
10	5/8	7/8-14	1/2	3500 (241)	3000 (207)
12	3/4	1 1/16-12	3/4	3500 (241)	2500 (172)
14	7/8	1 3/16-12	3/4	3000 (207)	2500 (172)
16	1	1 5/16-12	1	3000 (207)	2000 (138)
20	1 1/4	1 5/8-12	1 1/4	2500 (172)	1150 (79)
24	1 1/2	1 7/8-12	1 1/2	2000 (138)	1000 (69)
32	2	2 1/2-12	2	1500 (103)	1000 (69)

Working pressures given are for carbon steel only.
Four times safety factor applied for above working pressure.

CONFIGURATION	FITTING TYPE	EXAMPLE
	Sleeve	SS-SL-AN8
	Nut	AL-N-AN8
	Male Connector	B-CM-AN8-NS8
	Female Connector	CS-CF-AN8-RT6
	Union	SS-U-AN8

37° FLARED TUBE FITTINGS

TUBE FITTINGS

CONFIGURATION	FITTING TYPE	EXAMPLE
	Reducing Adaptor	SS-RA-AN8-AN4
	Bulkhead Union	SS-BU-AN6
	Tube Plug	SS-TP-AN6
	Tube Cap	SS-TC-AN6
	Male Elbow	SS-LM-AN8-NS4
	Positionable Male Elbow	SS-LP-AN10-ST14
	45° Male Elbow	SS-VM-AN8-NS6
	Female Elbow	SS-LF-AN8-NS6
	Union Elbow	SS-LU-AN4
	Male Branch Tee	SS-TTM-AN8-NS4
	Male Run Tee	SS-TMT-AN8-RT4
	Female Branch Tee	SS-TTF-AN8-RT4
	Female Run Tee	SS-TFT-AN8-NS4
	Union Tee	SS-TTT-AN8
	Union Cross	SS-C-AN12

37° FLARED TUBE FITTINGS

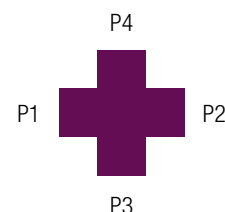
PART NUMBER DESCRIPTION

SS - CM - AN 8 - NS 8 - [] - []

MATERIAL		FITTING TYPE		P1 TYPE		P1 SIZE		P2 TYPE		P2 SIZE		P3 & P4	
SS	316 SS	SL	Sleeve	AN	37° Flare	1	1/16"	Except the same as the P1, the other type follows: NS NPT Thread RT ISO Tapered thread ST SAE/MS Straight Thread		Except the same as the P1, the other type follows: 5 5/16-24 6 3/8-24 7 7/16-20 8 1/2-20 9 9/16-18 12 3/4-16 14 7/8-14 17 1 1/16-12 19 1 3/16-12 21 1 5/16-12 26 1 5/8-12 30 1 7/8-12 40 2 1/2-12		Specify in the same way as P2	
AL	Aluminium	N	Nut	AS	37° Flare Swivel	2	1/8" or 2mm						
B	Brass	CM	Male Connector			3	3/16" or 3mm						
CS	Carbon Steel	CF	Female Connector			4	1/4" or 4mm						
		U	Union			5	5/16"						
		HU	Large Hex Union			6	3/8" or 6mm						
		RA	Reducing Adaptor			8	1/2" or 8mm						
		BU	Bulkhead Union			10	5/8" or 10mm						
		TP	Plug			12	3/4" or 12mm						
		TC	Cap			14	7/8" or 14mm						
		LM	Male Elbow			15	15mm						
		VM	45° Male Elbow			16	1" or 16mm						
		LP	Positionable Male Elbow			18	1 1/8" or 18mm						
		LF	Female Elbow			20	1 1/4" or 20mm						
		LU	Union Elbow			22	22mm						
		TMT	Male Run Tee			24	1 1/2" or 24mm						
		TTM	Male Branch Tee			25	25mm						
		TFT	Female Run Tee			28	28mm						
		TTF	Female Branch Tee			32	2" or 32mm						
		TTP	Positionable Male Branch Tee			38	38mm						
		TTT	Union Tee			50	50mm						
		C	Union Cross										

NB: "Part Number Description" is used for composition rules of Abdex product model, not suitable for specific product part number selection, not random combinations. If in doubt, please contact Abdex.

- P1, P2, P3 and P4 shall be described in the following orders:
- 37° Flare - 37° Flare Swivel - NPT Thread - ISO Tapered thread - SAE/MS Straight Thread - Others
 - Describe in descending order as per size if the end Connection types are the same
 - Describe the end of P1 if all end connections are the same.



6 SERIES FITTINGS

PIPE FITTINGS

FEATURES

- Sizes range from 1/16" to 2"
- Materials include stainless steel, alloy 400, alloy 600, brass and carbon steel
- End connections with NPT, ISO / BSP, SAE, and metric threads are available
- Hardened threads and smoothed surface finishes extend fitting life and prevent sticking of the matching threads
- Radius junction design within elbows provides smooth flow path
- Every fitting is stamped with size, material and heat code



WORKING PRESSURES OF NPT THREAD ENDS

	316 Stainless Steel and Carbon Steel				Brass			
	psig	bar	psig	bar	psig	bar	psig	bar
1/16	11000	757	6700	460	5500	378	3300	227
1/8	10000	690	6500	447	5000	344	3200	220
1/4	8000	551	6600	454	4000	275	3300	227
3/8	7800	537	5300	365	3900	268	2600	179
1/2	7700	530	4900	337	3800	261	2400	165
3/4	7300	502	4600	316	3600	248	2300	158
1	5300	365	4400	303	2600	179	2200	151
1 1/4	6000	410	5000	344	3000	200	2500	172
1 1/2	5000	344	4600	317	2500	172	2300	158
2	3900	268	3900	268	1900	130	1900	130

Working pressure is based on ANSI / ASME B31.3 at ambient temperature.

WORKING PRESSURES OF SAE / MS THREAD ENDS

	316 Stainless Steel and Carbon Steel			
	Non-adjustable		Adjustable	
	psig	bar	psig	bar
5/16-24	4568	315	4568	315
3/8-24				
7/16-20			3626	250
1/2-20				
9/16-18	3626	250	2900	200
3/4-16				
7/8-14	2900	200	2320	160
1 1/16-12				
1 3/16-12				
1 5/16-12	2320	160	1813	125
1 5/8-12				
1 7/8-12				
2 1/2-12	1813	125	1450	100

6 SERIES FITTINGS

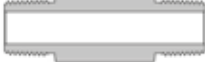
PIPE FITTINGS

WORKING PRESSURES FOR MST STUD ENDS

	316 Stainless Steel and Carbon Steel			
	Non-adjustable		Adjustable	
	psig	bar	psig	bar
M8 x 1	5800	400	4568	315
M10 x 1				
M12 x 1.5				
M14 x 1.5				
M16 x 1.5	4568	315	3626	250
M18 x 1.5				
M20 x 1.5				
M22 x 1.5				
M27 x 2	2900	200	2320	160
M30 x 2				
M33 x 2				
M42 x 2				
M48 x 2	2320	160	1450	100
M60 x 2				

6 SERIES FITTINGS

PIPE FITTINGS

CONFIGURATION	FITTING TYPE	EXAMPLE
	Pipe Plug	SS-PP-MRS14
	Hollow Hex Plug	S4-PI-NS4
	Close Nipple	S1-PCN-RT6
	Special Pipe Nipple	M-PSN-NS6-50.8
	Hex Nipple	INC-PHN-NS8-RP8
	Hex Long Nipple	B-PLN-NS6-76.2
	Reducing Bushing	CS-PRB-NS8-RT4
	Pipe Cap	SS-PC-NS4
	Hex Coupling	SS-PCG-NS12-NS8
	Union Ball Joint	SS-UBJ-NS4
	Adaptor	SS-PA-NS8-ST12
	Male Elbow	SS-PME-NS6
	Street Elbow	SS-PSE-RT6-RT4
	45° Street Elbow	SS-PSV-NS6-NS4
	Female Elbow	SS-PE-NS6
	45° Female Elbow	SS-PVE-NS6
	Male Tee	SS-PMT-NS4
	Female Branch Tee	SS-PTB-NS6

6 SERIES FITTINGS

PIPE FITTINGS

CONFIGURATION	FITTING TYPE	EXAMPLE
	Female Run Tee	SS-PTR-RT6
	Male Street Tee	SS-PST-NS6
	Male Branch Tee	SS-PBT-NS6
	Female Tee	SS-PT-RT8
	Female Cross	SS-PCR-NS6
	Pipe to Pipe Union	SS-PUP-MS20-NS4
	Hand Tight Adaptor Fitting	SS-HF-MS20-FMS20
	Fusible Fittings	SS-GFPP-4-160

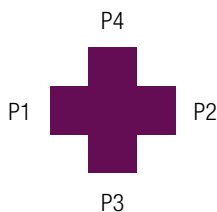
6 SERIES FITTINGS

PART NUMBER DESCRIPTION

MATERIAL		FITTING TYPE		P1 TYPE		P1 SIZE		P2, P3 & P4		SPECIAL APPLICATION		CLEANING & PACKAGING	
SS	316 SS	PP	Pipe Plug	NS	NPT Thread	1	1/8"	Specify in the same way as the P1		NO		FC-01	
S4	304 SS	PI	Hollow Hex Plug	RT	ISO Tapered thread	4	1/4"			S	NACE MR0175	F2	FC-02
S1	321 SS	PCN	Close Nipple	RG	ISO Parallel Thread (Gauge)	5	5/16-24	Classification for Nuclear Facility Application					
M	Alloy 400	PSN	Special Pipe Nipple	BP	ISO Parallel Thread	6	3/8" or 3/8-24						
INC	Alloy 600	PHN	Hex Nipple	RS	ISO Parallel Thread	7	7/16-20						
HC	Alloy C-276	PLN	Hex Long Nipple	MRS	Male Metric Thread	8	1/2" or M8 x 1						
B	Brass	PRB	Reducing Bushing	MS	Male Metric Thread	9	9/16-18						
CS	Carbon Steel	PC	Pipe Cap	ST	Male SAE/MS Straight Thread	10	M10 x 1						
904L	904L SS	PCG	Hex Coupling	US	Female SAE/MS Straight Thread	12	3/4" or M12 x 1.5 or 3/4-16						
		UBJ	Union Ball Joints			14	M14 x 1.5 or 7/8-14						
		PA	Adaptor			16	1" or M16 x 1.5						
		PME	Male Elbow			17	1 1/4" or M20 x 1.5						
		PSE	Street Elbow			18	M18 x 1.5						
		PSV	45° Street Elbow			19	1 3/16-12						
		PE	Female Elbow			20	1 1/4" or M20 x 1.5						
		PVE	45° Female Elbow			21	1 5/16-12						
		PMT	Male Tee			22	M22 x 1.5						
		PTB	Female Branch Tee			24	1 1/2" or M24 x 1.5						
		PTR	Female Run Tee			26	1 5/8-12						
		PST	Male Street Tee			27	M27 x 2						
		PBT	Male Branch Tee			30	1 7/8-12 or M30 x 2						
		PT	Female Tee			32	2"						
		PCR	Female Cross										
		PUP	Pipe to Pipe Union										
		HF	Hand Tight Adaptor Fitting										

P1, P2, P3 and P4 shall be described in the following orders:

- NPT Thread - ISO Tapered thread - ISO Parallel Thread - SAE/MS Straight Thread - Metric Thread - Others
- Male after female but the "PRB" and the "HF" types are not included
- Describe in descending order as per size if the end Connection types are the same
- Describe the end of P1 if all end connections are the same.



NB: "Part Number Description" is used for composition rules of Abdex product model, not suitable for specific product part number selection, not random combinations. If in doubt, please contact Abdex.

Cleaning and Packaging:

FC-01: Standard cleaning and packaging for general industrial procedures.

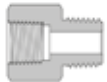
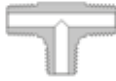
FC-02: Special cleaning and packaging for wetted system components to ensure compliance with product cleanliness requirement as stated in ASTM G93 Level C.

10,000 PSI HIGH PRESSURE THREADED PIPE FITTINGS

FEATURES

- The hardened threads with smooth surface finishing avoid galling and help to extend the fitting service life
- Radius junction design with elbows provides smooth flow path
- Every fitting is stamped with size, material and heat code
- 316 stainless steel is standard material. Other materials are available upon request



CONFIGURATION	FITTING TYPE	EXAMPLE
	Pipe Plug	SS-HPP-NS8-10K
	Hex Nipple	SS-HPHN-NS4-AN6-10K
	Hex Long Nipples	SS-HPLN-NS8-3-10K
	Pipe Caps	SS-HPC-NS6-10K
	Hex Couplings	SS-HPCG-RT6-RT4-10K
	Adaptors	SS-HPA-NS6-RT8-10K
	Male Elbows	SS-HPME-NS2-10K
	Street Elbows	SS-HPSE-NS4-10K
	Female Elbows	SS-HPE-NS8-10K
	Male Tees	SS-HPMT-NS6-10K
	Male Street Tees	SS-HPST-RT4-10K
	Male Branch Tees	SS-HPBT-NS4-10K
	Female Tees	SS-HPT-NS8-10K
	Female Crosses	SS-HPCR-NS6-10K

10,000 PSI HIGH PRESSURE THREADED PIPE FITTINGS

THREAD SPECIFICATIONS

Connection type	Code	Thread type	Thread specifications
NPT	NS	NPT	ASME B1.20.1, SAE AS71051
ISO Tapered	RT	ISO Tapered	ISO 7-1, BS EN 10226-1, JIS B0203
JIC (37° Flare)	AN	SAE/MS	ASME B1.1
ISO Parallel Male	HBP	ISO Parallel	ISO Parallel - ISO 228 JISB0202 BS2779
ISO Parallel Female Swivel	SBP	ISO Parallel	ISO Parallel - ISO 228 JISB0202 BS2779

WORKING TEMPERATURE

Connection type	Temperature rating
NPT	-325°F to 400°F (-198°C to 204°C)
ISO Tapered	-325°F to 400°F (-198°C to 204°C)
JIC (37° Flare)	-423°F to 1200°F (-252°C to 649°C)
ISO Parallel Male	-423°F to 1200°F (-252°C to 649°C)
ISO Parallel Female Swivel	-423°F to 1200°F (-252°C to 649°C)

ELEVATED TEMPERATURE FACTORS

To get the maximum working pressure at elevated temperature, use the maximum working pressure at ambient temperature to multiply the factors in the table below.

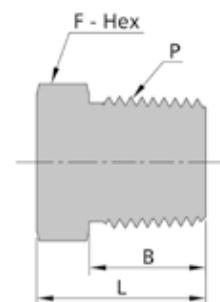
Material	Temperature		Factor
	°F	°C	
316	100	38	1
316	200	93	1
316	300	149	1
316	400	204	0.97
316	500	260	0.90
316	600	316	0.85
316	700	371	0.82
316	800	427	0.80

Data in this table is applied only to the working temperature below 800°F (427°C). For the working temperature above 800°F (427°C) please consult Abdex, and we will provide you a solution.

PIPE PLUGS

Male NPT threads

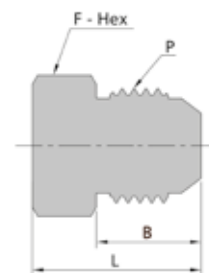
P-NPT Size	Ordering number	Dimensions - in. (mm)			Working pressure psig (bar)
		L	F	B	
1/8	SS-HPP-NS2-10K	0.63 (16.0)	0.44 (11.11)	0.38 (9.7)	10000 (690)
1/4	SS-HPP-NS4-10K	0.87 (22.2)	0.56 (14.3)	0.56 (14.2)	10000 (690)
3/8	SS-HPP-NS6-10K	0.93 (23.6)	0.69 (17.5)	0.56 (14.2)	10000 (690)
1/2	SS-HPP-NS8-10K	1.16 (29.5)	0.87 (22.2)	0.75 (19.1)	10000 (690)
3/4	SS-HPP-NS12	1.25 (31.8)	1.06 (27.0)	0.75 (19.1)	10000 (690)
1	SS-HPP-NS16	1.55 (39.3)	1.37 (34.9)	0.94 (23.9)	10000 (690)



10,000 PSI HIGH PRESSURE THREADED PIPE FITTINGS

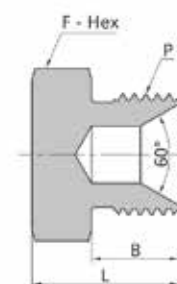
Male JIC

	#	Dimensions - in. (mm)			
P-SAE/MS		L	F	B	psig (bar)
7/16-20	SS-HPP-AN4-10K	0.83 (21.0)	0.50 (12.7)	0.55 (14.0)	10000 (690)
9/16-18	SS-HPP-AN6-10K	0.89 (22.7)	0.63 (15.9)	0.56 (14.1)	10000 (690)
3/4-16	SS-HPP-AN8-10K	1.05 (26.7)	0.81 (20.6)	0.66 (16.7)	10000 (690)
7/8-14	SS-HPP-AN10-10K	1.19 (30.3)	0.94 (23.8)	0.76 (19.3)	10000 (690)
1 1/16-12	SS-HPP-AN12-10K	1.37 (34.9)	1.13 (28.6)	0.86 (21.9)	10000 (690)
1 5/16-12	SS-HPP-AN16-10K	1.51 (38.3)	1.37 (34.9)	0.91 (23.1)	10000 (690)



Male BSP

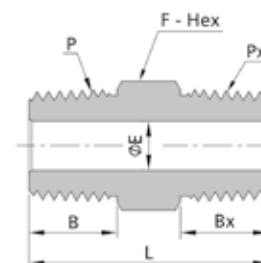
	#	Dimensions - in. (mm)			
P-ISO Parallel		L	F	B	psig (bar)
G 1/4	SS-HPP-HBP4	0.72 (18.2)	0.63 (18.2)	0.43 (11)	10000 (690)
G 3/8	SS-HPP-HBP6	0.8 (20.2)	0.81 (20.6)	0.47 (12)	10000 (690)
G 1/2	SS-HPP-HBP8	0.95 (24.2)	1.00 (25.4)	0.55 (14)	10000 (690)
G 3/4	SS-HPP-HBP12	1.11 (28.2)	1.25 (31.8)	0.63 (16)	10000 (690)
G 1	SS-HPP-HBP16	1.35 (34.2)	1.50 (38.1)	0.75 (19)	10000 (690)



HEX NIPPLES

Male NPT threads

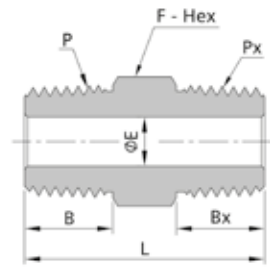
	#	Dimensions - in. (mm)				
P-NPT Px-NPT		L	F	B	Bx	psig (bar)
1/8 1/8	SS-HPHN-NS2-10K	1.05 (26.6)	0.44 (11.11)	0.38 (9.7)	0.38 (9.7)	10000 (690)
1/4 1/8	SS-HPHN-NS4-NS2-10K	1.30 (32.9)	0.56 (14.3)	0.56 (14.3)	0.38 (9.7)	10000 (690)
1/4 1/4	SS-HPHN-NS4-10K	1.47 (37.4)	0.56 (14.3)	0.56 (14.2)	0.56 (14.2)	10000 (690)
3/8 1/8	SS-HPHN-NS6-NS2-10K	1.34 (34.1)	0.69 (17.5)	0.56 (14.2)	0.38 (9.7)	10000 (690)
3/8 1/4	SS-HPHN-NS6-NS4-10K	1.52 (38.6)	0.69 (17.5)	0.56 (14.2)	0.56 (14.2)	10000 (690)
3/8 3/8	SS-HPHN-NS6-10K	1.52 (38.6)	0.69 (17.5)	0.56 (14.2)	0.38 (9.6)	10000 (690)
1/2 1/8	SS-HPHN-NS8-NS2-10K	1.58 (40.2)	0.87 (22.2)	0.75 (19.1)	0.38 (9.7)	10000 (690)
1/2 1/4	SS-HPHN-NS8-NS4-10K	1.76 (44.7)	0.87 (22.2)	0.75 (19.1)	0.56 (14.2)	10000 (690)
1/2 3/8	SS-HPHN-NS8-NS6-10K	1.76 (44.7)	0.87 (22.2)	0.75 (19.1)	0.56 (14.2)	10000 (690)
1/2 1/2	SS-HPHN-NS8-10K	1.94 (49.6)	0.87 (22.2)	0.75 (19.1)	0.75 (19.1)	10000 (690)
3/4 1/8	SS-HPHN-NS12-NS2	1.67 (42.4)	1.06 (27.0)	0.75 (19.1)	0.38 (9.7)	10000 (690)
3/4 1/4	SS-HPHN-NS12-NS4	1.85 (46.9)	1.06 (27.0)	0.75 (19.1)	0.56 (14.2)	10000 (690)
3/4 3/8	SS-HPHN-NS12-NS6	1.85 (46.9)	1.06 (27.0)	0.75 (19.1)	0.56 (14.2)	10000 (690)
3/4 1/2	SS-HPHN-NS12-NS8	2.04 (51.8)	1.06 (27.0)	0.75 (19.1)	0.75 (19.1)	10000 (690)
3/4 3/4	SS-HPHN-NS12	2.04 (51.8)	1.06 (27.0)	0.75 (19.1)	0.75 (19.1)	10000 (690)
1 1/8	SS-HPHN-NS16-NS2	1.96 (49.8)	1.37 (34.9)	0.94 (23.9)	0.38 (9.7)	10000 (690)
1 1/4	SS-HPHN-NS16-NS4	2.14 (54.3)	1.37 (34.9)	0.94 (23.9)	0.56 (14.2)	10000 (690)
1 3/8	SS-HPHN-NS16-NS6	2.14 (54.3)	1.37 (34.9)	0.94 (23.9)	0.56 (14.2)	10000 (690)
1 1/2	SS-HPHN-NS16-NS8	2.33 (59.2)	1.37 (34.9)	0.94 (23.9)	0.75 (19.1)	10000 (690)
1 3/4	SS-HPHN-NS16-NS12	2.33 (59.2)	1.37 (34.9)	0.94 (23.9)	0.75 (19.1)	10000 (690)
1 1	SS-HPHN-NS16	2.52 (64.0)	1.37 (34.9)	0.94 (23.9)	0.94 (23.9)	10000 (690)



10,000 PSI HIGH PRESSURE THREADED PIPE FITTINGS

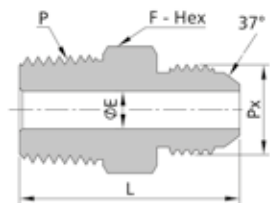
Male NPT threads / Male BSPT threads

		#	Dimensions - in. (mm)				
P-NPT	Px-ISO Tapered		L	F	B	Bx	
1/8	1/8	SS-HPHN-NS2-RT2-10K	1.05 (26.6)	0.44 (11.11)	0.38 (9.7)	0.38 (9.7)	10000 (690)
1/4	1/8	SS-HPHN-NS4-RT2-10K	1.30 (32.9)	0.56 (14.3)	0.56 (14.3)	0.38 (9.7)	10000 (690)
1/4	1/4	SS-HPHN-NS4-RT4-10K	1.47 (37.4)	0.56 (14.3)	0.56 (14.2)	0.56 (14.2)	10000 (690)
3/8	1/8	SS-HPHN-NS6-RT2-10K	1.34 (34.1)	0.69 (17.5)	0.56 (14.2)	0.38 (9.7)	10000 (690)
3/8	1/4	SS-HPHN-NS6-RT4-10K	1.52 (38.6)	0.69 (17.5)	0.56 (14.2)	0.56 (14.2)	10000 (690)
3/8	3/8	SS-HPHN-NS6-RT6-10K	1.52 (38.6)	0.69 (17.5)	0.56 (14.2)	0.56 (14.2)	10000 (690)
1/2	1/8	SS-HPHN-NS8-RT2-10K	1.58 (40.2)	0.87 (22.2)	0.75 (19.1)	0.38 (9.7)	10000 (690)
1/2	1/4	SS-HPHN-NS8-RT4-10K	1.76 (44.7)	0.87 (22.2)	0.75 (19.1)	0.56 (14.2)	10000 (690)
1/2	3/8	SS-HPHN-NS8-RT6-10K	1.76 (44.7)	0.87 (22.2)	0.75 (19.1)	0.56 (14.2)	10000 (690)
1/2	1/2	SS-HPHN-NS8-RT8-10K	1.95 (49.6)	0.87 (22.2)	0.75 (19.1)	0.75 (19.1)	10000 (690)
3/4	1/8	SS-HPHN-NS12-RT4	1.67 (42.4)	1.06 (27.0)	0.75 (19.1)	0.38 (9.7)	10000 (690)
3/4	1/4	SS-HPHN-NS12-RT4	1.85 (46.9)	1.06 (27.0)	0.75 (19.1)	0.56 (14.2)	10000 (690)
3/4	3/8	SS-HPHN-NS12-RT6	1.85 (46.9)	1.06 (27.0)	0.75 (19.1)	0.56 (14.2)	10000 (690)
3/4	1/2	SS-HPHN-NS12-RT8	2.04 (51.8)	1.06 (27.0)	0.75 (19.1)	0.75 (19.1)	10000 (690)
3/4	3/4	SS-HPHN-NS12-RT12	2.04 (51.8)	1.06 (27.0)	0.75 (19.1)	0.75 (19.1)	10000 (690)
1	1/8	SS-HPHN-NS16-RT2	1.96 (49.8)	1.37 (34.9)	0.94 (23.9)	0.38 (9.7)	10000 (690)
1	1/4	SS-HPHN-NS16-RT4	2.14 (54.3)	1.37 (34.9)	0.94 (23.9)	0.56 (14.2)	10000 (690)
1	3/8	SS-HPHN-NS16-RT6	2.14 (54.3)	1.37 (34.9)	0.94 (23.9)	0.56 (14.2)	10000 (690)
1	1/2	SS-HPHN-NS16-RT8	2.33 (59.2)	1.37 (34.9)	0.94 (23.9)	0.75 (19.1)	10000 (690)
1	3/4	SS-HPHN-NS16-RT12	2.33 (59.2)	1.37 (34.9)	0.94 (23.9)	0.75 (19.1)	10000 (690)
1	1	SS-HPHN-NS16-RT16	2.52 (64.0)	1.37 (34.9)	0.94 (23.9)	0.94 (23.9)	10000 (690)



Male NPT threads / Male JIC

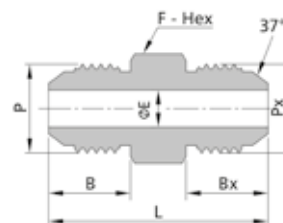
		#	Dimensions - in. (mm)			
P-NPT	Px-SAE/MS		L	F	E	
1/8	7/16-20	SS-HPHN-NS2-AN4-10K	1.23 (31.3)	0.50 (12.7)	0.17 (4.4)	10000 (690)
1/8	9/16-18	SS-HPHN-NS2-AN6-10K	1.31 (33.4)	0.63 (15.9)	0.22 (5.5)	10000 (690)
1/4	7/16-20	SS-HPHN-NS4-AN4-10K	1.46 (37.2)	0.56 (14.3)	0.17 (4.4)	10000 (690)
1/4	9/16-18	SS-HPHN-NS4-AN6-10K	1.49 (37.9)	0.63 (15.9)	0.28 (7.1)	10000 (690)
1/4	3/4-16	SS-HPHN-NS4-AN8-10K	1.65 (41.9)	0.81 (20.6)	0.28 (7.1)	10000 (690)
3/8	9/16-18	SS-HPHN-NS6-AN6-10K	1.52 (38.6)	0.69 (17.5)	0.30 (7.5)	10000 (690)
3/8	3/4-16	SS-HPHN-NS6-AN8-10K	1.62 (41.1)	0.81 (20.6)	0.38 (9.6)	10000 (690)
3/8	7/8-14	SS-HPHN-NS6-AN10-10K	1.79 (45.5)	0.94 (23.8)	0.38 (9.6)	10000 (690)
1/2	7/16-20	SS-HPHN-NS8-AN4-10K	1.75 (44.5)	0.87 (22.2)	0.17 (4.4)	10000 (690)
1/2	9/16-18	SS-HPHN-NS8-AN6-10K	1.75 (44.6)	0.87 (22.2)	0.30 (7.5)	10000 (690)
1/2	3/4-16	SS-HPHN-NS8-AN8-10K	1.86 (47.2)	0.87 (22.2)	0.39 (9.9)	10000 (690)
1/2	7/8-14	SS-HPHN-NS8-AN10-10K	1.98 (50.4)	0.94 (23.8)	0.47 (11.9)	10000 (690)
3/4	3/4-16	SS-HPHN-NS12-AN8	1.94 (49.4)	1.06 (27.0)	0.31 (8.0)	10000 (690)
3/4	7/8-14	SS-HPHN-NS12-AN10	2.05 (52.0)	1.06 (27.0)	0.37 (9.4)	10000 (690)
3/4	1 1/16-12	SS-HPHN-NS12-AN12	2.17 (55.0)	1.13 (28.6)	0.46 (11.6)	10000 (690)
3/4	1 5/16-12	SS-HPHN-NS12-AN16	2.30 (58.4)	1.37 (34.9)	0.57 (14.6)	10000 (690)
1	1 1/16-12	SS-HPHN-NS16-AN12	2.44 (62.0)	1.37 (34.9)	0.46 (11.6)	10000 (690)
1	1 5/16-12	SS-HPHN-NS16-AN16	1.49 (63.2)	1.37 (34.9)	0.57 (14.6)	10000 (690)



10,000 PSI HIGH PRESSURE THREADED PIPE FITTINGS

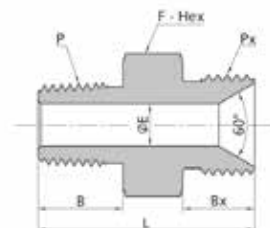
Male JIC

	P-SAE/MS	Px-SAE/MS	#	Dimensions - in. (mm)				
				L	F	B	Bx	
	7/16-20	7/16-20	SS-HPHN-AN4-10K	1.40 (35.6)	0.50 (12.7)	0.55 (14.0)	0.55 (14.0)	10000 (690)
	9/16-18	7/16-20	SS-HPHN-AN6-AN4-10K	1.48 (37.7)	0.63 (15.9)	0.56 (14.3)	0.55 (14.0)	10000 (690)
	9/16-18	9/16-18	SS-HPHN-AN6-10K	1.49 (37.8)	0.63 (15.9)	0.56 (14.1)	0.56 (14.1)	10000 (690)
	3/4-16	9/16-18	SS-HPHN-AN8-AN6-10K	1.65 (41.8)	0.81 (20.6)	0.66 (16.7)	0.56 (14.1)	10000 (690)
	3/4-16	3/4-16	SS-HPHN-AN8-10K	1.75 (44.4)	0.81 (20.6)	0.66 (16.7)	0.66 (16.7)	10000 (690)
	7/8-14	9/16-18	SS-HPHN-AN10-AN6-10K	1.79 (45.4)	0.94 (23.8)	0.76 (19.3)	0.56 (14.1)	10000 (690)
	7/8-14	3/4-16	SS-HPHN-AN10-AN8-10K	1.89 (48.0)	0.94 (23.8)	0.76 (19.3)	0.66 (16.7)	10000 (690)
	7/8-14	7/8-14	SS-HPHN-AN10-10K	1.99 (50.6)	0.94 (23.8)	0.75 (19.3)	0.76 (19.3)	10000 (690)
	1 1/16-12	3/4-16	SS-HPHN-AN12-AN8-10K	2.07 (52.6)	1.13 (28.6)	0.86 (21.9)	0.66 (16.7)	10000 (690)
	1 1/16-12	7/8-14	SS-HPHN-AN12-AN10-10K	2.17 (55.2)	1.13 (28.6)	0.86 (21.9)	0.76 (19.3)	10000 (690)
	1 1/16-12	1 1/16-12	SS-HPHN-AN12-10K	2.28 (57.8)	1.13 (28.6)	0.86 (21.9)	0.86 (21.9)	10000 (690)
	1 5/16-12	7/8-14	SS-HPHN-AN16-AN10-10K	2.31 (58.6)	1.37 (34.9)	0.91 (23.1)	0.76 (19.3)	10000 (690)
	1 5/16-12	1 1/16-12	SS-HPHN-AN16-AN12-10K	2.41 (61.2)	1.37 (34.9)	0.91 (23.1)	0.86 (21.9)	10000 (690)
	1 5/16-12	1 1/16-12	SS-HPHN-AN16-10K	2.46 (62.4)	1.37 (34.9)	0.91 (23.1)	0.91 (23.1)	10000 (690)



Male NPT / Male BSPP threads

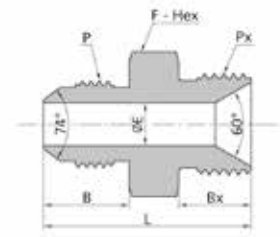
	P-NPT	Px-ISO parallel	#	Dimensions - in. (mm)					
				L	F	B	Bx	E	
	1/8	G 1/4	SS-HPHN-NS2-HBP4	1.15 (29.3)	0.63 (15.9)	0.38 (9.7)	0.43 (11.0)	0.19 (4.7)	10000 (690)
	1/8	G 3/8	SS-HPHN-NS2-HBP6	1.25 (31.8)	0.81 (20.6)	0.38 (9.8)	0.47 (12.0)	0.22 (5.5)	10000 (690)
	1/4	G 1/4	SS-HPHN-NS4-HBP4	1.33 (33.8)	0.63 (15.9)	0.56 (14.2)	0.43 (11.0)	0.19 (4.7)	10000 (690)
	1/4	G 3/8	SS-HPHN-NS4-HBP6	1.43 (36.2)	0.81 (20.6)	0.56 (14.2)	0.47 (12.0)	0.28 (7.1)	10000 (690)
	1/4	G 1/2	SS-HPHN-NS4-HBP8	1.77 (44.9)	1.00 (25.4)	0.56 (14.2)	0.75 (19.1)	0.28 (7.1)	10000 (690)
	3/8	G 1/4	SS-HPHN-NS6-HBP4	1.35 (34.4)	0.69 (17.5)	0.56 (17.5)	0.43 (11.0)	0.19 (4.7)	10000 (690)
	3/8	G 3/8	SS-HPHN-NS6-HBP6	1.43 (36.2)	0.81 (20.6)	0.56 (14.2)	0.47 (12.0)	0.31 (7.9)	10000 (690)
	3/8	G 1/2	SS-HPHN-NS6-HBP8	1.77 (44.9)	1.00 (25.4)	0.56 (14.2)	0.75 (19.1)	0.38 (9.6)	10000 (690)
	1/2	G 1/4	SS-HPHN-NS8-HBP4	1.55 (39.3)	0.69 (17.5)	0.75 (19.1)	0.43 (11.0)	0.19 (4.7)	10000 (690)
	1/2	G 3/8	SS-HPHN-NS8-HBP6	1.62 (41.1)	0.81 (20.6)	0.75 (19.1)	0.47 (12.0)	0.31 (7.9)	10000 (690)
	1/2	G 1/2	SS-HPHN-NS8-HBP8	1.96 (49.8)	1.00 (25.4)	0.75 (19.1)	0.75 (19.1)	0.47 (11.9)	10000 (690)



10,000 PSI HIGH PRESSURE THREADED PIPE FITTINGS

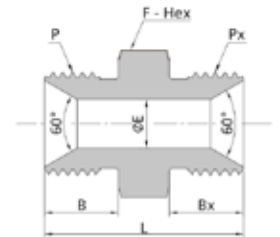
Male JIC / Male BSPP

		#	Dimensions - in. (mm)				
P-SAE/MS	Px-ISO Parallel		L	F	B	Bx	
7/16-20	G 1/4	SS-HPHN-AN4-HBP4	1.27 (32.2)	0.63 (15.9)	0.55 (14.0)	0.43 (11.0)	10000 (690)
7/16-20	G 3/8	SS-HPHN-AN4-HBP6	1.35 (34.2)	0.81 (20.6)	0.55 (14.0)	0.47 (12.0)	10000 (690)
9/16-18	G 1/4	SS-HPHN-AN4-HBP4	1.27 (32.2)	0.63 (15.9)	0.56 (14.1)	0.43 (11.0)	10000 (690)
9/16-18	G 3/8	SS-HPHN-AN6-HBP6	1.35 (34.3)	0.81 (20.6)	0.56 (14.1)	0.47 (12.0)	10000 (690)
9/16-18	G 1/2	SS-HPHN-AN6-HBP8	1.51 (38.3)	1.00 (25.4)	0.56 (14.1)	0.55 (14.0)	10000 (690)
3/4-16	G 1/4	SS-HPHN-AN8-HBP4	1.41 (35.9)	0.81 (20.6)	0.66 (16.7)	0.43 (11.0)	10000 (690)
3/4-16	G 3/8	SS-HPHN-AN8-HBP6	1.45 (36.9)	0.81 (20.6)	0.66 (16.7)	0.47 (12.0)	10000 (690)
3/4-16	G 1/2	SS-HPHN-AN8-HBP8	1.61 (40.9)	1.00 (25.4)	0.66 (16.7)	0.55 (14.0)	10000 (690)
7/8-14	G 1/4	SS-HPHN-AN10-HBP4	1.59 (40.5)	0.94 (23.8)	0.76 (19.3)	0.43 (11.0)	10000 (690)
7/8-14	G 3/8	SS-HPHN-AN10-HBP6	1.63 (41.5)	0.94 (23.8)	0.76 (19.3)	0.47 (12.0)	10000 (690)
7/8-14	G 1/2	SS-HPHN-AN10-HBP8	1.71 (43.5)	1.00 (25.4)	0.76 (19.3)	0.55 (14.0)	10000 (690)
1 1/16-12	G 1/2	SS-HPHN-AN12-HBP8	1.89 (48.1)	1.13 (28.5)	0.86 (21.9)	0.55 (14.0)	10000 (690)
1 1/16-12	G 3/4	SS-HPHN-AN12-HBP12	1.97 (50.1)	1.25 (31.8)	0.86 (21.9)	0.63 (16.0)	10000 (690)
1 1/16-12	G 1	SS-HPHN-AN12-HBP16	2.21 (56.1)	1.50 (38.1)	0.86 (21.9)	0.75 (19.0)	10000 (690)
1 5/16-12	G 1/2	SS-HPHN-AN16-HBP8	2.06 (52.3)	1.37 (34.9)	0.91 (23.1)	0.55 (14.0)	10000 (690)
1 5/16-12	G 3/4	SS-HPHN-AN16-HBP12	2.14 (54.3)	1.37 (34.9)	0.91 (23.1)	0.63 (16.0)	10000 (690)
1 5/16-12	G 1	SS-HPHN-AN16-HBP16	2.26 (57.3)	1.50 (38.1)	0.91 (23.1)	0.75 (19.0)	10000 (690)



Male BSPP

		#	Dimensions - in. (mm)				
P-ISO Parallel	Px-ISO Parallel		L	F	B	Bx	
G 1/4	G 1/4	SS-HPHN-HBP4	1.15 (29.2)	0.63 (15.9)	0.43 (11.0)	0.43 (11.0)	10000 (690)
G 3/8	G 1/4	SS-HPHN-HBP6-HBP4	1.23 (31.2)	0.81 (20.6)	0.47 (12.0)	0.43 (11.0)	10000 (690)
G 3/8	G 3/8	SS-HPHN-HBP6	1.27 (32.2)	0.81 (20.6)	0.47 (12.0)	0.47 (12.0)	10000 (690)
G 1/2	G 1/4	SS-HPHN-HBP8-HBP4	1.39 (35.2)	1.00 (25.4)	0.55 (14.0)	0.43 (11.0)	10000 (690)
G 1/2	G 3/8	SS-HPHN-HBP8-HBP6	1.43 (36.2)	1.00 (25.4)	0.55 (14.0)	0.47 (12.0)	10000 (690)
G 1/2	G 1/2	SS-HPHN-HBP8	1.50 (38.2)	1.00 (25.4)	0.55 (14.0)	0.55 (14.0)	10000 (690)
G 3/4	G 3/4	SS-HPHN-HBP12-HBP6	1.58 (40.2)	1.25 (31.8)	0.63 (16.0)	0.47 (12.0)	10000 (690)
G 3/4	G 1/2	SS-HPHN-HBP12-HBP8	1.66 (42.2)	1.25 (31.8)	0.63 (16.0)	0.55 (14.0)	10000 (690)
G 3/4	G 3/4	SS-HPHN-HBP12	1.74 (44.2)	1.25 (31.8)	0.63 (16.0)	0.63 (16.0)	10000 (690)
G 1	G 1/2	SS-HPHN-HBP16-HBP8	1.90 (48.2)	1.50 (38.1)	0.75 (19.0)	0.55 (14.0)	10000 (690)
G 1	G 3/4	SS-HPHN-HBP16-HBP12	1.98 (50.2)	1.50 (38.1)	0.75 (19.0)	0.63 (16.0)	10000 (690)
G 1	G 1	SS-HPHN-HBP16	2.09 (53.2)	1.50 (38.1)	0.75 (19.0)	0.75 (19.0)	10000 (690)

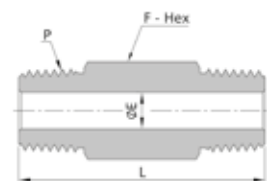


10,000 PSI HIGH PRESSURE THREADED PIPE FITTINGS

HEX LONG NIPPLES

Male NPT threads

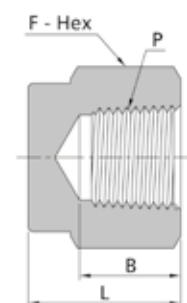
	#	Dimensions - in. (mm)			
P-NPT		L	F	E	psig (bar)
1/8	SS-HPLN-NS2-1.5-10K	1.50 (38.1)	0.44 (11.11)	0.22 (5.5)	10000 (690)
1/8	SS-HPLN-NS2-2-10K	2.00 (50.8)	0.44 (11.11)	0.22 (5.5)	10000 (690)
1/8	SS-HPLN-NS2-2.5-10K	2.50 (63.5)	0.44 (11.11)	0.22 (5.5)	10000 (690)
1/8	SS-HPLN-NS2-3-10K	3.00 (76.2)	0.44 (11.11)	0.22 (5.5)	10000 (690)
1/4	SS-HPLN-NS4-2-10K	2.00 (50.8)	0.56 (14.3)	0.28 (7.1)	10000 (690)
1/4	SS-HPLN-NS4-2.5-10K	2.50 (63.5)	0.56 (14.3)	0.28 (7.1)	10000 (690)
1/4	SS-HPLN-NS4-3-10K	3.00 (76.2)	0.56 (14.3)	0.28 (7.1)	10000 (690)
1/4	SS-HPLN-NS4-4-10K	4.00 (101.6)	0.56 (14.3)	0.28 (7.1)	10000 (690)
3/8	SS-HPLN-NS6-2-10K	2.00 (50.8)	0.69 (17.5)	0.38 (9.6)	10000 (690)
3/8	SS-HPLN-NS6-2.5-10K	2.50 (63.5)	0.69 (17.5)	0.38 (9.6)	10000 (690)
3/8	SS-HPLN-NS6-3-10K	3.00 (76.2)	0.69 (17.5)	0.38 (9.6)	10000 (690)
3/8	SS-HPLN-NS6-4-10K	4.00 (101.6)	0.69 (17.5)	0.38 (9.6)	10000 (690)
1/2	SS-HPLN-NS8-3-10K	3.00 (76.2)	0.87 (22.2)	0.47 (11.9)	10000 (690)
1/2	SS-HPLN-NS8-4-10K	4.00 (101.6)	0.87 (22.2)	0.47 (11.9)	10000 (690)
1/2	SS-HPLN-NS8-6-10K	6.00 (152.4)	0.87 (22.2)	0.47 (11.9)	10000 (690)
3/4	SS-HPLN-NS12-3	3.00 (76.2)	1.06 (27.0)	0.58 (14.8)	10000 (690)
3/4	SS-HPLN-NS12-4	4.00 (101.6)	1.06 (27.0)	0.58 (14.8)	10000 (690)
1	SS-HPLN-NS16-3	3.00 (76.2)	1.37 (34.9)	0.79 (20.0)	10000 (690)
1	SS-HPLN-NS16-4	4.00 (101.6)	1.37 (34.9)	0.79 (20.0)	10000 (690)



PIPE CAPS

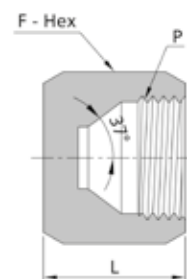
Female NPT threads

	#	Dimensions - in. (mm)			
P-NPT		L	F	B	psig (bar)
1/8	SS-HPC-NS2-10K	0.75 (19.1)	0.56 (14.3)	0.41 (10.4)	10000 (690)
1/4	SS-HPC-NS4-10K	0.91 (23.1)	0.75 (19.1)	0.59 (15.0)	10000 (690)
3/8	SS-HPC-NS6-10K	1.03 (26.2)	0.94 (23.8)	0.59 (15.0)	10000 (690)
1/2	SS-HPC-NS8-10K	1.34 (34.0)	1.19 (30.2)	0.78 (19.8)	10000 (690)
3/4	SS-HPC-NS12	1.62 (36.6)	1.50 (38.1)	0.81 (20.6)	10000 (690)
1	SS-HPC-NS16	1.62 (41.1)	44.5 (1.75)	1.00 (25.4)	10000 (690)



Female JIC

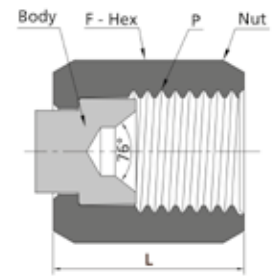
	#	Dimensions - in. (mm)		
P-SAE/MS		L	F	psig (bar)
7/16-20	SS-HPC-AN4-10K	0.59 (15.1)	0.56 (14.3)	10000 (690)
9/16-18	SS-HPC-AN6-10K	0.63 (15.9)	0.69 (17.5)	10000 (690)
3/4-16	SS-HPC-AN8-10K	0.75 (19.1)	0.87 (22.2)	10000 (690)
7/8-14	SS-HPC-AN10-10K	0.84 (21.4)	1.00 (25.4)	10000 (690)
1 1/16-12	SS-HPC-AN12-10K	0.91 (23.0)	1.25 (31.8)	10000 (690)
1 5/16-12	SS-HPC-AN16-10K	1.06 (26.8)	1.50 (38.1)	10000 (690)



10,000 PSI HIGH PRESSURE THREADED PIPE FITTINGS

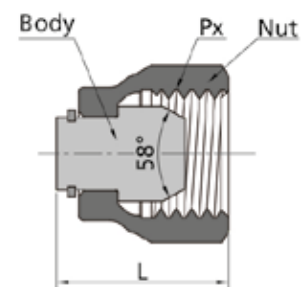
Moveable insert female JIC

	#	Dimensions - in. (mm)		
P-SAE/MS		L	F	psig (bar)
7/16-20	SS-HMC-AN4-10K	0.68 (17.3)	0.56 (14.3)	10000 (690)
9/16-18	SS-HMC-AN6-10K	0.79 (20.0)	0.69 (17.5)	10000 (690)
3/4-16	SS-HMC-AN8-10K	0.89 (22.6)	0.87 (22.2)	10000 (690)
7/8-14	SS-HMC-AN10-10K	0.99 (25.1)	1.00 (25.4)	10000 (690)
1 1/16-12	SS-HMC-AN12-10K	1.03 (26.2)	1.25 (31.8)	10000 (690)
1 5/16-12	SS-HMC-AN16-10K	1.18 (30.0)	1.50 (38.1)	10000 (690)



Moveable insert female BSPP

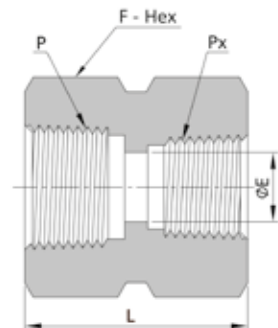
	#	Dimensions - in. (mm)		
Px-ISO Parallel		L	F	psig (bar)
G 1/4	SS-HMC-SBP4	0.70 (17.8)	0.63 (15.9)	10000 (690)
G 3/8	SS-HMC-SBP6	0.80 (20.3)	0.81 (20.6)	10000 (690)
G 1/2	SS-HMC-SBP8	0.94 (23.9)	1.00 (25.4)	10000 (690)
G 3/4	SS-HMC-SBP12	1.06 (26.9)	1.25 (31.8)	10000 (690)
G 1	SS-HMC-SBP16	1.33 (33.8)	1.50 (38.1)	10000 (690)



HEX COUPLINGS

Female NPT threads

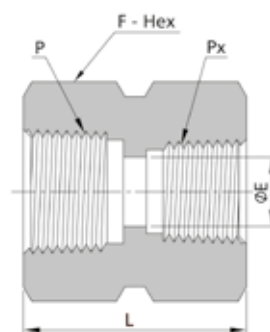
	#	Dimensions - in. (mm)			
P-NPT Px-NPT		L	F	E	psig (bar)
1/8 1/8	SS-HPCG-NS2-10K	0.94 (23.8)	0.56 (14.3)	0.31 (8.0)	10000 (690)
1/4 1/8	SS-HPCG-NS4-NS2-10K	1.14 (28.9)	0.75 (19.1)	0.31 (8.0)	10000 (690)
1/4 1/4	SS-HPCG-NS4-10K	1.32 (33.5)	0.75 (19.1)	0.41 (10.4)	10000 (690)
3/8 1/8	SS-HPCG-NS6-NS2-10K	1.14 (28.9)	0.94 (23.8)	0.31 (8.0)	10000 (690)
3/8 1/4	SS-HPCG-NS6-NS4-10K	1.32 (33.5)	0.94 (23.8)	0.41 (10.4)	10000 (690)
3/8 3/8	SS-HPCG-NS6-10K	1.32 (33.5)	0.94 (23.8)	0.54 (13.8)	10000 (690)
1/2 1/8	SS-HPCG-NS8-NS2-10K	1.35 (34.2)	1.19 (30.2)	0.31 (8.0)	10000 (690)
1/2 1/4	SS-HPCG-NS8-NS4-10K	1.53 (38.8)	1.19 (30.2)	0.41 (10.4)	10000 (690)
1/2 3/8	SS-HPCG-NS8-NS6-10K	1.53 (38.8)	1.19 (30.2)	0.54 (13.8)	10000 (690)
1/2 1/2	SS-HPCG-NS8-10K	1.72 (43.8)	1.19 (30.2)	0.67 (17.0)	10000 (690)
3/4 1/8	SS-HPCG-NS12-NS2	1.40 (35.5)	1.50 (38.1)	0.31 (8.0)	10000 (690)
3/4 1/4	SS-HPCG-NS12-NS4	1.58 (40.1)	1.50 (38.1)	0.41 (10.4)	10000 (690)
3/4 3/8	SS-HPCG-NS12-NS6	1.58 (40.1)	1.50 (38.1)	0.54 (13.8)	10000 (690)
3/4 1/2	SS-HPCG-NS12-NS8	1.79 (45.4)	1.50 (38.1)	0.67 (17.0)	10000 (690)
3/4 3/4	SS-HPCG-NS12	1.84 (46.7)	1.50 (38.1)	0.88 (22.3)	10000 (690)
1 1/8	SS-HPCG-NS16-NS2	1.59 (40.5)	1.75 (44.5)	0.31 (8.0)	10000 (690)
1 1/4	SS-HPCG-NS16-NS4	1.76 (44.8)	1.75 (44.5)	0.41 (10.4)	10000 (690)
1 3/8	SS-HPCG-NS16-NS6	1.76 (44.8)	1.75 (44.5)	0.54 (13.8)	10000 (690)
1 1/2	SS-HPCG-NS16-NS8	1.96 (49.7)	1.75 (44.5)	0.67 (17.0)	10000 (690)
1 3/4	SS-HPCG-NS16-NS12	2.00 (50.7)	1.75 (44.5)	0.88 (22.3)	10000 (690)
1 1	SS-HPCG-NS16	2.19 (55.5)	1.75 (44.5)	1.11 (28.1)	10000 (690)



10,000 PSI HIGH PRESSURE THREADED PIPE FITTINGS

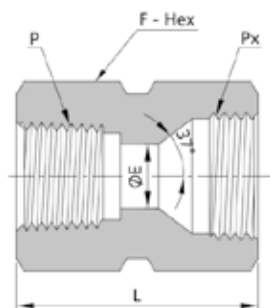
Female NPT threads / Female BSPT threads

		#	Dimensions - in. (mm)			
P-NPT	Px-ISO Tapered		L	F	E	
1/8	1/8	SS-HPCG-NS2-RT2-10K	0.94 (23.8)	0.56 (14.3)	0.31 (8.0)	10000 (690)
1/4	1/8	SS-HPCG-NS4-RT2-10K	1.14 (28.9)	0.75 (19.1)	0.31 (8.0)	10000 (690)
1/4	1/4	SS-HPCG-NS4-RT4-10K	1.32 (33.5)	0.75 (19.1)	0.41 (10.4)	10000 (690)
3/8	1/8	SS-HPCG-NS6-RT2-10K	1.14 (28.9)	0.94 (23.8)	0.31 (8.0)	10000 (690)
3/8	1/4	SS-HPCG-NS6-RT4-10K	1.32 (33.5)	0.94 (23.8)	0.41 (10.4)	10000 (690)
3/8	3/8	SS-HPCG-NS6-RT6-10K	1.32 (33.5)	0.94 (23.8)	0.54 (13.8)	10000 (690)
1/2	1/8	SS-HPCG-NS8-RT2-10K	1.35 (34.2)	1.19 (30.2)	0.31 (8.0)	10000 (690)
1/2	1/4	SS-HPCG-NS8-RT4-10K	1.53 (38.8)	1.19 (30.2)	0.41 (10.4)	10000 (690)
1/2	3/8	SS-HPCG-NS8-RT6-10K	1.53 (38.8)	1.19 (30.2)	0.54 (13.8)	10000 (690)
1/2	1/2	SS-HPCG-NS8-RT8-10K	1.72 (43.8)	1.19 (30.2)	0.67 (17.0)	10000 (690)
3/4	1/8	SS-HPCG-NS12-RT2	1.40 (35.5)	1.50 (38.1)	0.31 (8.0)	10000 (690)
3/4	1/4	SS-HPCG-NS12-RT4	1.58 (40.1)	1.50 (38.1)	0.41 (10.4)	10000 (690)
3/4	3/8	SS-HPCG-NS12-RT6	1.58 (40.1)	1.50 (38.1)	0.54 (13.8)	10000 (690)
3/4	1/2	SS-HPCG-NS12-RT8	1.79 (45.4)	1.50 (38.1)	0.67 (17.0)	10000 (690)
3/4	3/4	SS-HPCG-NS12-RT12	1.84 (46.7)	1.50 (38.1)	0.88 (22.3)	10000 (690)
1	1/8	SS-HPCG-NS16-RT2	1.59 (40.5)	1.75 (44.5)	0.31 (8.0)	10000 (690)
1	1/4	SS-HPCG-NS16-RT4	1.76 (44.8)	1.75 (44.5)	0.41 (10.4)	10000 (690)
1	3/8	SS-HPCG-NS16-RT6	1.76 (44.8)	1.75 (44.5)	0.54 (13.8)	10000 (690)
1	1/2	SS-HPCG-NS16-RT8	1.96 (49.7)	1.75 (44.5)	0.67 (17.0)	10000 (690)
1	3/4	SS-HPCG-NS16-RT12	2.00 (50.7)	1.75 (44.5)	0.88 (22.3)	10000 (690)
1	1	SS-HPCG-NS16-RT16	2.19 (55.5)	1.75 (44.5)	1.11 (28.1)	10000 (690)



Female NPT threads / Female JIC

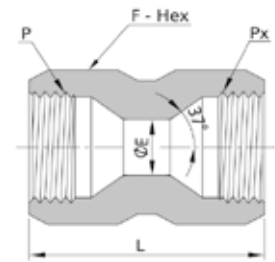
		#	Dimensions - in. (mm)			
P-NPT	Px-SAE/MS		L	F	E	
1/8	7/16-20	SS-HPCG-NS2-AN4-10K	1.12 (28.4)	0.56 (14.3)	0.17 (4.3)	10000 (690)
1/4	7/16-20	SS-HPCG-NS4-AN4-10K	1.33 (33.7)	0.75 (19.1)	0.17 (4.3)	10000 (690)
1/4	9/16-18	SS-HPCG-NS4-AN6-10K	1.36 (34.5)	0.75 (19.1)	0.30 (7.5)	10000 (690)
3/8	7/16-20	SS-HPCG-NS6-AN4-10K	1.33 (33.7)	0.94 (23.8)	0.17 (4.3)	10000 (690)
3/8	9/16-18	SS-HPCG-NS6-AN6-10K	1.36 (34.5)	0.94 (23.8)	0.30 (7.5)	10000 (690)
3/8	3/4-16	SS-HPCG-NS6-AN8-10K	1.44 (36.5)	0.94 (23.8)	0.39 (9.9)	10000 (690)
1/2	9/16-18	SS-HPCG-NS8-AN6-10K	1.56 (39.7)	1.19 (30.2)	0.30 (7.5)	10000 (690)
1/2	3/4-16	SS-HPCG-NS8-AN8-10K	1.64 (41.7)	1.19 (30.2)	0.39 (9.9)	10000 (690)
1/2	7/8-14	SS-HPCG-NS8-AN10-10K	1.74 (44.1)	1.19 (30.2)	0.48 (12.3)	10000 (690)



10,000 PSI HIGH PRESSURE THREADED PIPE FITTINGS

Female JIC

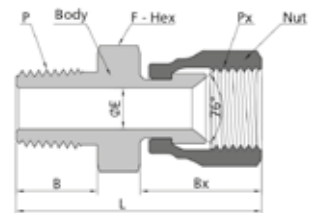
		#	Dimensions - in. (mm)			
P-SAE/MS	Px-SAE/MS		L	F	E	
7/16-20	7/16-20	SS-HPCG-AN4-10K	1.24 (31.5)	0.56 (14.3)	0.17 (4.3)	10000 (690)
9/16-18	7/16-20	SS-HPCG-AN6-AN4-10K	1.27 (32.3)	0.69 (17.5)	0.17 (4.3)	10000 (690)
9/16-18	9/16-18	SS-HPCG-AN6-10K	1.33 (33.8)	0.69 (17.5)	0.30 (7.5)	10000 (690)
3/4-16	9/16-28	SS-HPCG-AN8-AN6-10K	1.39 (35.4)	0.87 (22.2)	0.30 (7.5)	10000 (690)
3/4-16	3/4-16	SS-HPCG-AN8-10K	1.48 (37.6)	0.87 (22.2)	0.39 (9.9)	10000 (690)
7/8-14	3/4-16	SS-HPCG-AN10-AN8-10K	1.57 (40.0)	1.00 (25.4)	0.39 (9.9)	10000 (690)
7/8-14	7/8-14	SS-HPCG-AN10-10K	1.68 (42.6)	1.00 (25.4)	0.48 (12.3)	10000 (690)
1 1/16-12	7/8-14	SS-HPCG-AN12-AN10-10K	1.74 (44.1)	1.25 (31.8)	0.48 (12.3)	10000 (690)
1 1/16-12	1 1/16-12	SS-HPCG-AN12-10K	1.80 (45.8)	1.25 (31.8)	0.61 (15.5)	10000 (690)
1 5/16-12	1 1/16-12	SS-HPCG-AN16-AN12-10K	1.89 (48.1)	1.50 (38.1)	0.61 (15.5)	10000 (690)
1 5/16-12	1 5/16-12	SS-HPCG-AN16-10K	1.97 (50.1)	1.50 (38.1)	0.84 (21.44)	10000 (690)



SWIVEL COUPLINGS

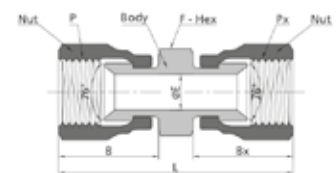
Male NPT threads / Female JIC swivel

		#	Dimensions - in. (mm)				
P-NPT	Px-SAE/MS		L	F	B	Bx	
1/8	7/16-20	SS-HPCG-NS2-AS4	1.39 (35.3)	0.56 (14.3)	0.41 (10.4)	0.81 (20.5)	10000 (690)
1/4	7/16-20	SS-HPCG-NS4-AS4	1.62 (41.2)	0.75 (19.1)	0.59 (15.0)	0.81 (20.5)	10000 (690)
1/4	9/16-18	SS-HPCG-NS4-AS6	1.65 (4.9)	0.75 (19.1)	0.59 (15.0)	0.83 (21.2)	10000 (690)
3/8	7/16-20	SS-HPCG-NS6-AS4	1.68 (42.7)	0.94 (23.8)	0.59 (15.0)	0.81 (20.5)	10000 (690)
3/8	9/16-18	SS-HPCG-NS6-AS6	1.71 (43.4)	0.94 (23.8)	0.59 (15.0)	0.83 (21.2)	10000 (690)
3/8	3/4-16	SS-HPCG-NS6-AS8	1.78 (45.2)	0.94 (23.8)	0.59 (15.0)	0.91 (23.0)	10000 (690)
1/2	9/16-18	SS-HPCG-NS8-AS6	1.97 (50.1)	1.19 (30.2)	0.78 (19.8)	0.83 (21.2)	10000 (690)
1/2	3/4-16	SS-HPCG-NS8-AS8	2.04 (51.9)	1.19 (30.2)	0.78 (19.8)	0.91 (23.0)	10000 (690)
1/2	7/8-14	SS-HPCG-NS8-AS10	2.13 (54.2)	1.19 (30.2)	0.78 (19.8)	1.00 (25.3)	10000 (690)



Female JIC threads / Female JIC threads

		#	Dimensions - in. (mm)				
P-SAE/MS	Px-SAE/MS		L	F	B	Bx	
7/16-20	7/16-20	SS-HPCG-AS4	1.90 (48.2)	0.56 (14.3)	0.81 (20.5)	0.81 (20.5)	10000 (690)
9/16-18	7/16-20	SS-HPCG-AS6-AS4	1.93 (48.9)	0.63 (15.9)	0.83 (21.2)	0.81 (20.5)	10000 (690)
9/16-18	9/16-18	SS-HPCG-AS6	1.95 (49.6)	0.63 (15.9)	0.83 (21.2)	0.83 (21.2)	10000 (690)
3/4-16	9/16-18	SS-HPCG-AS8-AS6	2.14 (54.4)	0.87 (22.2)	0.91 (23.0)	0.83 (21.2)	10000 (690)
3/4-16	3/4-16	SS-HPCG-AS8	2.21 (56.2)	0.87 (22.2)	0.91 (23.0)	0.91 (23.0)	10000 (690)
7/8-14	3/4-16	SS-HPCG-AS10-AS8	2.30 (58.5)	1.00 (25.3)	1.00 (25.3)	0.91 (23.0)	10000 (690)
7/8-14	7/8-14	SS-HPCG-AS10	2.39 (60.8)	1.00 (25.3)	1.00 (25.3)	1.00 (25.3)	10000 (690)
1 1/16-12	7/8-14	SS-HPCG-AS12-AS10	2.60 (66.0)	1.25 (31.8)	1.12 (28.5)	1.00 (25.3)	10000 (690)
1 1/16-12	1 1/16-12	SS-HPCG-AS12	2.72 (69.2)	1.25 (31.8)	1.12 (28.5)	1.12 (28.5)	10000 (690)
1 5/16-12	1 1/16-12	SS-HPCG-AS16-AS12	2.96 (75.2)	1.50 (38.1)	1.24 (31.5)	1.12 (28.5)	10000 (690)
1 5/16-12	1 5/16-12	SS-HPCG-AS16	3.08 (78.2)	1.50 (38.1)	1.24 (31.5)	1.24 (31.5)	10000 (690)

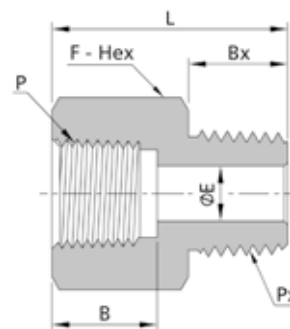


10,000 PSI HIGH PRESSURE THREADED PIPE FITTINGS

ADAPTORS

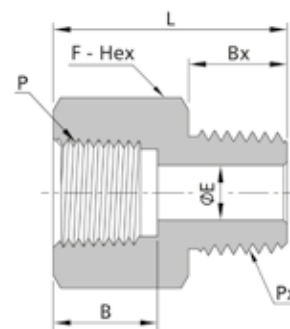
Female NPT threads / Male NPT threads

		#	Dimensions - in. (mm)				psig (bar)
P-NPT	Px-NPT		L	F	B	Bx	
							
1/8	1/8	SS-HPA-NS2-10K	0.96 (24.5)	0.56 (14.3)	0.41 (10.4)	0.38 (9.7)	10000 (690)
1/8	1/4	SS-HPA-NS2-NS4-10K	1.13 (28.8)	0.56 (14.3)	0.41 (10.4)	0.56 (14.2)	10000 (690)
1/8	3/8	SS-HPA-NS2-NS6-10K	1.14 (29.0)	0.69 (17.5)	0.41 (10.4)	0.56 (14.2)	10000 (690)
1/8	1/2	SS-HPA-NS2-NS8-10K	1.08 (27.4)	0.87 (22.2)	0.41 (10.4)	0.75 (19.1)	10000 (690)
1/8	3/4	SS-HPA-NS2-NS12	1.08 (27.4)	1.06 (27.0)	0.41 (10.4)	0.75 (19.1)	10000 (690)
1/4	1/8	SS-HPA-NS4-NS2-10K	1.25 (31.8)	0.75 (19.1)	0.59 (15.0)	0.38 (9.7)	10000 (690)
1/4	1/4	SS-HPA-NS4-10K	1.37 (34.9)	0.75 (19.1)	0.59 (15.0)	0.56 (14.2)	10000 (690)
1/4	3/8	SS-HPA-NS4-NS6-10K	1.37 (34.9)	0.75 (19.1)	0.59 (15.0)	0.56 (14.2)	10000 (690)
1/4	1/2	SS-HPA-NS4-NS8-10K	1.58 (40.1)	0.87 (22.2)	0.59 (15.0)	0.75 (19.1)	10000 (690)
1/4	3/4	SS-HPA-NS4-NS12	1.34 (34.1)	1.06 (27.0)	0.59 (15.0)	0.75 (19.1)	10000 (690)
1/4	1	SS-HPA-NS4-NS16	1.37 (34.8)	1.37 (34.9)	0.59 (15.0)	0.94 (23.9)	10000 (690)
3/8	1/4	SS-HPA-NS6-NS4-10K	1.42 (36.0)	0.94 (23.8)	0.59 (15.0)	0.56 (14.2)	10000 (690)
3/8	3/8	SS-HPA-NS6-10K	1.42 (36.0)	0.94 (23.8)	0.59 (15.0)	0.56 (14.2)	10000 (690)
3/8	1/2	SS-HPA-NS6-NS8-10K	1.61 (41.0)	0.94 (23.8)	0.59 (15.0)	0.75 (19.1)	10000 (690)
3/8	3/4	SS-HPA-NS6-NS12	1.61 (41.0)	1.13 (28.6)	0.59 (15.0)	0.75 (19.1)	10000 (690)
3/8	1	SS-HPA-NS6-NS16	1.47 (37.3)	1.37 (34.9)	0.59 (15.0)	0.94 (23.9)	10000 (690)
1/2	1/4	SS-HPA-NS8-NS4-10K	1.72 (43.1)	1.19 (30.2)	0.78 (19.8)	0.56 (14.2)	10000 (690)
1/2	3/8	SS-HPA-NS8-NS6-10K	1.72 (43.1)	1.19 (30.2)	0.78 (19.8)	0.56 (14.2)	10000 (690)
1/2	1/2	SS-HPA-NS8-10K	1.89 (48.0)	1.19 (30.2)	0.78 (19.8)	0.75 (19.1)	10000 (690)
1/2	3/4	SS-HPA-NS8-NS12	1.89 (48.0)	1.37 (34.9)	0.78 (19.8)	0.75 (19.1)	10000 (690)
1/2	1	SS-HPA-NS8-NS16	2.08 (52.8)	1.37 (34.9)	0.78 (19.8)	0.94 (23.9)	10000 (690)
3/4	1/2	SS-HPA-NS12-NS8	1.89 (48.1)	1.50 (38.1)	0.81 (20.6)	0.75 (19.0)	10000 (690)
3/4	3/4	SS-HPA-NS12	1.89 (48.1)	1.50 (38.1)	0.81 (20.6)	0.75 (19.1)	10000 (690)
3/4	1	SS-HPA-NS12-NS16	2.08 (52.9)	1.50 (38.1)	0.81 (20.6)	0.94 (23.9)	10000 (690)
1	1/2	SS-HPA-NS16-NS8	2.10 (53.3)	1.75 (44.5)	1.00 (25.4)	0.75 (19.1)	10000 (690)
1	3/4	SS-HPA-NS16-NS12	2.10 (53.3)	1.75 (44.5)	1.00 (25.4)	0.75 (19.1)	10000 (690)
1	1	SS-HPA-NS16	2.29 (58.1)	1.75 (44.5)	1.00 (25.4)	0.94 (23.9)	10000 (690)



Female NPT threads / Male BSPT threads

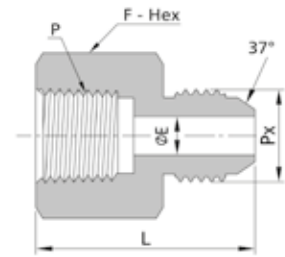
		#	Dimensions - in. (mm)				psig (bar)
P-NPT	Px-ISO Tapered		L	F	B	Bx	
							
1/8	1/8	SS-HPA-NS2-RT2-10K	0.96 (24.5)	0.56 (14.3)	0.41 (10.4)	0.38 (9.7)	10000 (690)
1/8	1/4	SS-HPA-NS2-RT4-10K	1.13 (28.8)	0.56 (14.3)	0.41 (10.4)	0.56 (14.2)	10000 (690)
1/8	3/8	SS-HPA-NS2-RT6-10K	1.14 (29.0)	0.69 (17.5)	0.41 (10.4)	0.56 (14.2)	10000 (690)
1/8	1/2	SS-HPA-NS2-RT8-10K	1.08 (27.4)	0.87 (22.2)	0.41 (10.4)	0.75 (19.1)	10000 (690)
1/4	1/8	SS-HPA-NS4-RT2-10K	1.25 (31.8)	0.75 (19.1)	0.59 (15.0)	0.38 (9.7)	10000 (690)
1/4	1/4	SS-HPA-NS4-RT4-10K	1.37 (34.9)	0.75 (19.1)	0.59 (15.0)	0.56 (14.2)	10000 (690)
1/4	3/8	SS-HPA-NS4-RT6-10K	1.37 (34.9)	0.75 (19.1)	0.59 (15.0)	0.56 (14.2)	10000 (690)
1/4	1/2	SS-HPA-NS4-RT8-10K	1.58 (40.1)	0.87 (22.2)	0.59 (15.0)	0.75 (19.1)	10000 (690)
3/8	1/4	SS-HPA-NS6-RT4-10K	1.42 (36.0)	0.94 (23.8)	0.59 (15.0)	0.56 (14.2)	10000 (690)
3/8	3/8	SS-HPA-NS6-RT6-10K	1.42 (36.0)	0.94 (23.8)	0.59 (15.0)	0.56 (14.2)	10000 (690)
3/8	1/2	SS-HPA-NS6-RT8-10K	1.61 (41.0)	0.94 (23.8)	0.59 (15.0)	0.75 (19.1)	10000 (690)
1/2	1/4	SS-HPA-NS8-RT4-10K	1.72 (43.1)	1.19 (30.2)	0.78 (19.8)	0.56 (14.2)	10000 (690)
1/2	3/8	SS-HPA-NS8-RT6-10K	1.72 (43.1)	1.19 (30.2)	0.78 (19.8)	0.56 (14.2)	10000 (690)
1/2	1/2	SS-HPA-NS8-RT8-10K	1.89 (48.0)	1.19 (30.2)	0.78 (19.8)	0.75 (19.1)	10000 (690)



10,000 PSI HIGH PRESSURE THREADED PIPE FITTINGS

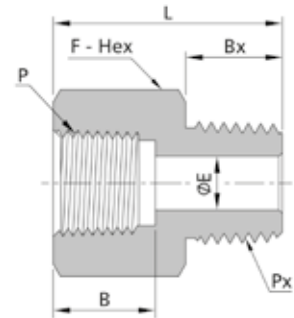
Female NPT threads / Male JIC

		#	Dimensions - in. (mm)			
P-NPT	Px-SAE/MS		L	F	B	
1/8	7/16-20	SS-HPA-NS2-AN4-10K	1.09 (27.8)	0.56 (14.3)	0.17 (4.4)	10000 (690)
1/4	7/16-20	SS-HPA-NS4-AN4-10K	1.32 (33.5)	0.75 (19.1)	0.17 (4.4)	10000 (690)
1/4	9/16-18	SS-HPA-NS4-AN6-10K	1.32 (33.5)	0.75 (19.1)	0.30 (7.5)	10000 (690)
3/8	9/16-18	SS-HPA-NS6-AN6-10K	1.37 (34.8)	0.94 (23.8)	0.30 (7.5)	10000 (690)
3/8	3/4-16	SS-HPA-NS6-AN8-10K	1.47 (37.4)	0.94 (23.8)	0.39 (9.9)	10000 (690)
1/2	3/4-16	SS-HPA-NS8-AN8-10K	1.72 (43.6)	1.19 (30.2)	0.39 (9.9)	10000 (690)
1/2	7/8-14	SS-HPA-NS8-AN10-10K	1.82 (46.2)	1.19 (30.2)	0.48 (12.3)	10000 (690)
1/2	1 1/16-12	SS-HPA-NS8-AN12-10K	1.92 (48.8)	1.19 (30.2)	0.61 (15.5)	10000 (690)
3/4	1 1/16-12	SS-HPA-NS12-AN12	1.89 (47.9)	1.50 (38.1)	0.46 (11.6)	10000 (690)
1	1 5/16-12	SS-HPA-NS16-AN16	2.18 (55.3)	1.75 (44.5)	0.57 (14.6)	10000 (690)



Female BSPT threads / Male NPT threads

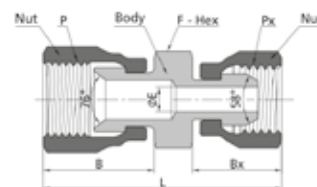
		#	Dimensions - in. (mm)				
P-ISO Tapered	Px-NPT		L	F	B	Bx	
1/8	1/8	SS-HPA-RT2-NS2-10K	0.96 (24.5)	0.56 (14.3)	0.41 (10.4)	0.38 (9.7)	10000 (690)
1/8	1/4	SS-HPA-RT2-NS4-10K	1.13 (28.8)	0.56 (14.3)	0.41 (10.4)	0.56 (14.2)	10000 (690)
1/8	3/8	SS-HPA-RT2-NS6-10K	1.14 (29.0)	0.69 (17.5)	0.41 (10.4)	0.56 (14.2)	10000 (690)
1/8	1/2	SS-HPA-RT2-NS8-10K	1.08 (27.4)	0.87 (22.2)	0.41 (10.4)	0.75 (19.1)	10000 (690)
1/4	1/8	SS-HPA-RT4-NS2-10K	1.25 (31.8)	0.75 (19.1)	0.59 (15.0)	0.38 (9.7)	10000 (690)
1/4	1/4	SS-HPA-RT4-NS4-10K	1.37 (34.9)	0.75 (19.1)	0.59 (15.0)	0.56 (14.2)	10000 (690)
1/4	3/8	SS-HPA-RT4-NS6-10K	1.37 (34.9)	0.75 (19.1)	0.59 (15.0)	0.56 (14.2)	10000 (690)
1/4	1/2	SS-HPA-RT4-NS8-10K	1.58 (40.1)	0.87 (22.2)	0.59 (15.0)	0.75 (19.1)	10000 (690)
3/8	1/4	SS-HPA-RT6-NS4-10K	1.42 (36.0)	0.94 (23.8)	0.59 (15.0)	0.56 (14.2)	10000 (690)
3/8	3/8	SS-HPA-RT6-NS6-10K	1.42 (36.0)	0.94 (23.8)	0.59 (15.0)	0.56 (14.2)	10000 (690)
3/8	1/2	SS-HPA-RT6-NS8-10K	1.61 (41.0)	0.94 (23.8)	0.59 (15.0)	0.75 (19.1)	10000 (690)
1/2	1/4	SS-HPA-RT8-NS4-10K	1.72 (43.1)	1.19 (30.2)	0.78 (19.8)	0.56 (14.2)	10000 (690)
1/2	3/8	SS-HPA-RT8-NS6-10K	1.72 (43.1)	1.19 (30.2)	0.78 (19.8)	0.56 (14.2)	10000 (690)
1/2	1/2	SS-HPA-RT8-NS8-10K	1.89 (48.0)	1.19 (30.2)	0.78 (19.8)	0.75 (19.1)	10000 (690)



10,000 PSI HIGH PRESSURE THREADED PIPE FITTINGS

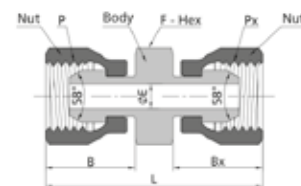
Female swivel JIC / Swivel BSPP threads

		#	Dimensions - in. (mm)				
P-SAE/MS	Px-BSPP		L	F	B	Bx	psig (bar)
7/16-20	G 1/4	SS-HPCG-AS4-SBP4	1.76 (44.7)	0.63 (15.9)	0.81 (20.5)	0.57 (17.0)	10000 (690)
7/16-20	G 3/8	SS-HPCG-AS4-SBP6	1.88 (47.7)	0.81 (20.6)	0.81 (20.5)	0.75 (19.0)	10000 (690)
9/16-18	G 1/4	SS-HPCG-AS6-SBP4	1.79 (45.4)	0.63 (15.9)	0.83 (21.2)	0.67 (17.0)	10000 (690)
9/16-18	G 3/8	SS-HPCG-AS6-SBP6	1.91(48.4)	0.81 (20.6)	0.83 (21.2)	0.75 (21.2)	10000 (690)
9/16-18	G 1/2	SS-HPCG-AS6-SBP8	2.10 (53.4)	1.00 (25.4)	0.83 (21.2)	0.87 (22.0)	10000 (690)
3/4-16	G 1/4	SS-HPCG-AS8-SBP4	1.98 (50.2)	0.87 (22.2)	0.91 (23.0)	0.67 (17.0)	10000 (690)
3/4-16	G 3/8	SS-HPCG-AS8-SBP6	2.06 (52.2)	0.87 (22.2)	0.91 (23.0)	0.75 (19.0)	10000 (690)
3/4-16	G 1/2	SS-HPCG-AS8-SBP8	2.17 (55.2)	1.00 (25.4)	0.91 (23.0)	0.87 (22.0)	10000 (690)
7/8-14	G 1/4	SS-HPCG-AS10-SBP4	2.07 (52.5)	1.00 (25.4)	1.00 (25.3)	0.67 (17.0)	10000 (690)
7/8-14	G 3/8	SS-HPCG-AS10-SBP6	2.15 (54.5)	1.00 (25.4)	1.00 (25.3)	0.75 (19.0)	10000 (690)
7/8-14	G 1/2	SS-HPCG-AS10-SBP8	2.26 (57.5)	1.00 (25.4)	1.00 (25.3)	0.87 (22.0)	10000 (690)
1 1/16-12	G 1/2	SS-HPCG-AS12-SBP8	2.47 (62.7)	1.25 (31.8)	1.12 (28.5)	0.87 (22.0)	10000 (690)
1 1/16-12	G 3/4	SS-HPCG-AS12-SBP12	2.59 (65.7)	1.25 (31.8)	1.12 (28.5)	0.98 (25.0)	10000 (690)
1 1/16-12	G 1	SS-HPCG-AS12-SBP16	2.98 (75.7)	1.50 (38.1)	1.12 (28.5)	1.26 (32.0)	10000 (690)
1 5/16-12	G 1/2	SS-HPCG-AS16-SBP8	2.70 (68.7)	1.50 (38.1)	1.24 (31.5)	0.87 (22.0)	10000 (690)
1 5/16-12	G 3/4	SS-HPCG-AS16-SBP12	2.82 (71.7)	1.50 (38.1)	1.24 (31.5)	0.98 (25.0)	10000 (690)
1 5/16-12	G 1	SS-HPCG-AS16-SBP16	3.10 (78.7)	1.50 (38.1)	1.24 (31.5)	1.26 (32.0)	10000 (690)



Swivel female BSPP threads

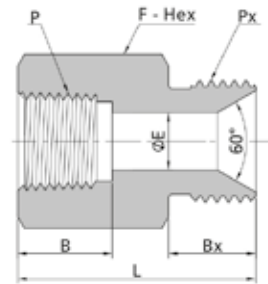
		#	Dimensions - in. (mm)				
P-ISO Parallel	Px-BSPP		L	F	B	Bx	psig (bar)
G 1/4	G 1/4	SS-HPCG-SBP4	1.62 (41.2)	0.63 (15.9)	0.67 (17.0)	0.67 (17.0)	10000 (690)
G 3/8	G 1/4	SS-HPCG-SBP6-SBP4	1.74 (44.2)	0.81 (20.6)	0.75 (19.0)	0.67 (17.0)	10000 (690)
G 3/8	G 3/8	SS-HPCG-SBP6	1.82 (46.2)	0.81 (20.6)	0.75 (19.0)	0.75 (19.0)	10000 (690)
G 1/2	G 1/4	SS-HPCG-SBP8-SBP4	1.94 (49.2)	1.00 (25.4)	0.87 (22.0)	0.67 (17.0)	10000 (690)
G 1/2	G 3/8	SS-HPCG-SBP8-SBP6	2.02 (51.2)	1.00 (25.4)	0.87 (22.0)	0.75 (19.0)	10000 (690)
G 1/2	G 1/2	SS-HPCG-SBP8	2.13 (54.2)	1.00 (25.4)	0.87 (22.0)	0.87 (22.0)	10000 (690)
G 3/4	G 3/8	SS-HPCG-SBP12-SBP6	2.21 (56.2)	1.25 (31.8)	0.98 (25.0)	0.75 (19.0)	10000 (690)
G 3/4	G 1/2	SS-HPCG-SBP12-SBP8	2.33 (59.2)	1.25 (31.8)	0.98 (25.0)	0.87 (22.0)	10000 (690)
G 3/4	G 3/4	SS-HPCG-SBP12	2.45 (62.2)	1.25 (31.8)	0.98 (25.0)	0.98 (25.0)	10000 (690)
G 1	G 1/2	SS-HPCG-SBP16-SBP8	2.72 (69.2)	1.50 (38.1)	1.26 (32.0)	0.87 (22.0)	10000 (690)
G 1	G 3/4	SS-HPCG-SBP16-SBP12	2.84 (72.2)	1.50 (38.1)	1.26 (32.0)	0.98 (25.0)	10000 (690)
G 1	G 1	SS-HPCG-SBP16	3.12 (79.2)	1.50 (38.1)	1.26 (32.0)	1.26 (32.0)	10000 (690)



10,000 PSI HIGH PRESSURE THREADED PIPE FITTINGS

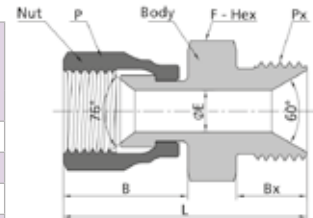
Female NPT threads / Male BSPP threads

		#	Dimensions - in. (mm)					 psig (bar)
P-NPT	Px-ISO Parallel		L	F	B	Bx	E	
1/8	G 1/4	SS-HPA-NS2-HBP4	1.02 (25.8)	0.63 (15.9)	0.41 (10.4)	0.43 (11.0)	0.19 (4.7)	10000 (690)
1/8	G 3/8	SS-HPA-NS2-HBP6	1.06 (26.8)	0.81 (20.6)	0.41 (10.4)	0.47 (12.0)	0.31 (7.9)	10000 (690)
1/4	G 1/4	SS-HPA-NS4-HBP4	1.25 (31.7)	0.75 (19.1)	0.59 (15.0)	0.43 (11.0)	0.19 (4.7)	10000 (690)
1/4	G 3/8	SS-HPA-NS4-HBP6	1.29 (32.7)	0.81 (20.6)	0.59 (15.0)	0.47 (12.0)	0.31 (7.9)	10000 (690)
1/4	G 1/2	SS-HPA-NS4-HBP8	1.37 (34.7)	1.00 (25.4)	0.59 (15.0)	0.55 (14.0)	0.41 (10.4)	10000 (690)
3/8	G 1/4	SS-HPA-NS6-HBP4	1.31 (33.2)	0.94 (23.8)	0.59 (15.0)	0.43 (11.0)	0.19 (4.7)	10000 (690)
3/8	G 3/8	SS-HPA-NS6-HBP6	1.35 (34.2)	0.94 (23.8)	0.59 (15.0)	0.47 (12.0)	0.31 (7.9)	10000 (690)
3/8	G 1/2	SS-HPA-NS6-HBP8	1.43 (36.2)	1.00 (25.4)	0.59 (15.0)	0.55 (14.0)	0.44 (11.1)	10000 (690)
1/2	G 1/4	SS-HPA-NS8-HBP4	1.57 (39.9)	1.19 (30.2)	0.78 (19.8)	0.43 (11.0)	0.19 (4.7)	10000 (690)
1/2	G 3/8	SS-HPA-NS8-HBP6	1.61 (40.9)	1.19 (30.2)	0.78 (19.8)	0.47 (12.0)	0.31 (7.9)	10000 (690)
1/2	G 1/2	SS-HPA-NS8-HBP8	1.69 (42.9)	1.19 (30.2)	0.78 (19.8)	0.55 (14.0)	0.44 (11.1)	10000 (690)



SAE/MS swivel female threads / Male BSPP threads

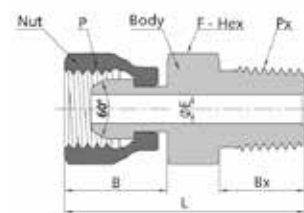
		#	Dimensions - in. (mm)				 psig (bar)
Px-ISO Parallel	Px-BSPP		L	F	B	Bx	
7/16-20	G 1/4	SS-HPA-AS4-HBP4	1.52 (38.7)	0.63 (15.9)	0.81 (20.5)	0.43 (11.0)	10000 (690)
7/16-20	G 3/8	SS-HPA-AS4-HBP6	1.60 (40.7)	0.81 (20.6)	0.81 (20.5)	0.47 (12.0)	10000 (690)
9/16-18	G 1/4	SS-HPA-AS6-HBP4	1.55 (39.4)	0.63 (15.9)	0.83 (21.2)	0.43 (11.0)	10000 (690)
9/16-18	G 3/8	SS-HPA-AS6-HBP6	1.63 (41.4)	0.81 (20.6)	0.83 (21.2)	0.47 (12.0)	10000 (690)
9/16-18	G 1/2	SS-HPA-AS6-HBP8	1.79 (45.4)	1.00 (25.4)	0.83 (21.2)	0.55 (14.0)	10000 (690)
3/4-16	G 1/4	SS-HPA-AS8-HBP4	1.74 (44.2)	0.87 (22.2)	0.91 (23.0)	0.43 (11.0)	10000 (690)
3/4-16	G 3/8	SS-HPA-AS8-HBP6	1.78 (45.2)	0.87 (22.2)	0.91 (23.0)	0.47 (12.0)	10000 (690)
3/4-16	G 1/2	SS-HPA-AS8-HBP8	1.86 (47.2)	1.00 (25.4)	0.91 (23.0)	0.55 (14.0)	10000 (690)
7/8-14	G 1/4	SS-HPA-AS10-HBP4	1.83 (46.5)	1.00 (25.4)	1.00 (25.3)	0.43 (11.0)	10000 (690)
7/8-14	G 3/8	SS-HPA-AS10-HBP6	1.87 (47.5)	1.00 (25.4)	1.00 (25.3)	0.47 (12.0)	10000 (690)
7/8-14	G 1/2	SS-HPA-AS10-HBP8	1.95 (49.5)	1.00 (25.4)	1.00 (25.3)	0.55 (14.0)	10000 (690)
1 1/16-12	G 1/2	SS-HPA-AS12-HBP8	2.15 (54.7)	1.25 (31.8)	1.12 (28.5)	0.55 (14.0)	10000 (690)
1 1/16-12	G 3/4	SS-HPA-AS12-HBP12	2.23 (56.7)	1.25 (31.8)	1.12 (28.5)	0.63 (16.0)	10000 (690)
1 1/16-12	G 1	SS-HPA-AS12-HBP16	2.47 (62.7)	1.50 (38.1)	1.12 (28.5)	0.75 (19.0)	10000 (690)
1 5/16-12	G 1/2	SS-HPA-AS16-HBP8	2.39 (60.7)	1.50 (38.1)	1.24 (31.5)	0.55 (14.0)	10000 (690)
1 5/16-12	G 3/4	SS-HPA-AS16-HBP12	2.47 (62.7)	1.50 (38.1)	1.24 (31.5)	0.63 (16.0)	10000 (690)
1 5/16-12	G 1	SS-HPA-AS16-HBP12	2.59 (65.7)	1.50 (38.1)	1.24 (31.5)	0.75 (19.0)	10000 (690)



10,000 PSI HIGH PRESSURE THREADED PIPE FITTINGS

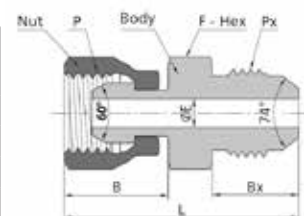
Female swivel BSPP threads / Male NPT threads

	Px-ISO Parallel	Px-NPT	#	Dimensions - in. (mm)				
				L	F	B	Bx	
	G 1/4	1/8	SS-HPA-SBP4-NS2	1.39 (35.3)	0.63 (15.9)	0.67 (17.0)	0.38 (9.7)	10000 (690)
	G 1/4	1/4	SS-HPA-SBP4-NS4	1.57 (39.8)	0.63 (15.9)	0.67 (17.0)	0.56 (14.2)	10000 (690)
	G 1/4	3/8	SS-HPA-SBP4-NS6	1.59 (40.4)	0.69 (17.5)	0.67 (17.0)	0.56 (14.2)	10000 (690)
	G 3/8	1/4	SS-HPA-SBP6-NS4	1.70 (43.2)	0.81 (20.6)	0.75 (19.0)	0.56 (14.2)	10000 (690)
	G 3/8	3/8	SS-HPA-SBP6-NS6	1.70 (43.2)	0.81 (20.6)	0.75 (19.0)	0.56 (14.2)	10000 (690)
	G 3/8	1/2	SS-HPA-SBP6-NS8	1.91 (48.5)	0.87 (22.2)	0.75 (19.0)	0.75 (19.1)	10000 (690)
	G 1/2	1/4	SS-HPA-SBP8-NS4	1.88 (47.8)	1.00 (25.4)	0.87 (22.0)	0.56 (14.2)	10000 (690)
	G 1/2	3/8	SS-HPA-SBP8-NS6	1.88 (47.8)	1.00 (25.4)	0.87 (22.0)	0.56 (14.2)	10000 (690)
	G 1/2	1/2	SS-HPA-SBP8-NS8	2.07 (52.7)	1.00 (25.4)	0.87 (22.0)	0.75 (19.1)	10000 (690)
	G 3/4	1/2	SS-HPA-SBP12-NS8	2.30 (58.5)	1.25 (31.8)	0.98 (25.0)	0.75 (19.1)	10000 (690)
	G 1	1/2	SS-HPA-SBP16-NS8	2.63 (66.7)	1.50 (38.1)	1.26 (32.0)	0.75 (19.1)	10000 (690)



Female swivel BSPP threads / Male JIC threads

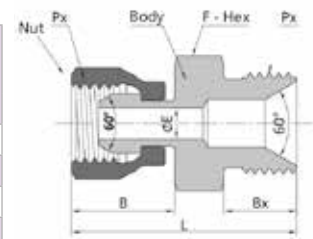
	Px-ISO Parallel	Px-SAE/MS	#	Dimensions - in. (mm)				
				L	F	B	Bx	
	G 1/4	7/16-20	SS-HPA-SBP4-AN4	1.50 (38.2)	0.63 (15.9)	0.67 (17.0)	0.55 (14.0)	10000 (690)
	G 1/4	9/16-18	SS-HPA-SBP4-AN6	1.51 (38.3)	0.63 (15.9)	0.67 (17.0)	0.56 (14.1)	10000 (690)
	G 1/4	3/4-16	SS-HPA-SBP4-AN8	1.65 (41.9)	0.81 (20.6)	0.67 (17.0)	0.66 (16.7)	10000 (690)
	G 1/4	7/8-14	SS-HPA-SBP4-AN10	1.83 (46.5)	0.94 (23.8)	0.67 (17.0)	0.76 (19.3)	10000 (690)
	G 3/8	7/16-20	SS-HPA-SBP6-AN4	1.62 (41.2)	0.81 (20.6)	0.75 (19.0)	0.55 (14.0)	10000 (690)
	G 3/8	9/16-18	SS-HPA-SBP6-AN6	1.63 (41.3)	0.81 (20.6)	0.75 (19.0)	0.56 (14.1)	10000 (690)
	G 3/8	3/4-16	SS-HPA-SBP6-AN8	1.73 (43.9)	0.81 (20.6)	0.75 (19.0)	0.66 (16.7)	10000 (690)
	G 3/8	7/8-14	SS-HPA-SBP6-AN10	1.91 (48.5)	0.94 (23.8)	0.75 (19.0)	0.76 (19.3)	10000 (690)
	G 1/2	9/16-18	SS-HPA-SBP8-AN6	1.82 (46.3)	1.00 (25.4)	0.87 (22.0)	0.56 (14.1)	10000 (690)
	G 1/2	3/4-16	SS-HPA-SBP8-AN8	1.93 (48.9)	1.00 (25.4)	0.87 (22.0)	0.66 (16.7)	10000 (690)
	G 1/2	7/8-14	SS-HPA-SBP8-AN10	2.03 (51.5)	1.00 (25.4)	0.87 (22.0)	0.76 (19.3)	10000 (690)
	G 1/2	1 1/16-12	SS-HPA-SBP8-AN12	2.21 (56.1)	1.13 (28.6)	0.87 (22.0)	0.86 (21.9)	10000 (690)
	G 1/2	1 5/16-12	SS-HPA-SBP8-AN16	2.37 (60.3)	1.37 (34.9)	0.87 (22.0)	0.91 (23.1)	10000 (690)
	G 3/4	1 1/16-12	SS-HPA-SBP12-AN12	2.33 (59.1)	1.25 (31.8)	0.98 (25.0)	0.86 (21.9)	10000 (690)
	G 3/4	1 5/16-12	SS-HPA-SBP12-AN16	2.49 (63.3)	1.37 (34.9)	0.98 (25.0)	0.91 (23.1)	10000 (690)
	G 1	1 5/16-12	SS-HPA-SBP16-AN12	2.71 (69.1)	1.50 (38.1)	1.26 (32.0)	0.86 (21.9)	10000 (690)
	G 1	1 1/16-12	SS-HPA-SBP16-AN16	2.77 (70.3)	1.50 (38.1)	1.26 (32.0)	0.91 (23.1)	10000 (690)



10,000 PSI HIGH PRESSURE THREADED PIPE FITTINGS

Female swivel BSPP threads / Male BSPP threads

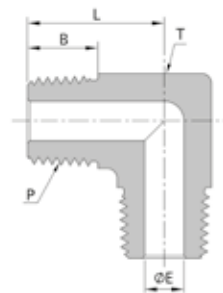
		#	Dimensions - in. (mm)				
P-ISO Parallel	Px-ISO Parallel		L	F	B	Bx	
G 1/4	G 1/4	SS-HPA-SBP4-HBP4	1.39 (35.2)	0.63 (15.9)	0.67 (17.0)	0.43 (11.0)	10000 (690)
G 3/8	G 1/4	SS-HPA-SBP6-HBP4	1.50 (38.2)	0.81 (20.6)	0.75 (19.0)	0.43 (11.0)	10000 (690)
G 3/8	G 3/8	SS-HPA-SBP6-HBP6	1.54 (39.2)	0.81 (20.6)	0.75 (19.0)	0.47 (12.0)	10000 (690)
G 1/2	G 1/4	SS-HPA-SBP8-HBP4	1.70 (43.2)	1.00 (25.4)	0.87 (22.0)	0.43 (11.0)	10000 (690)
G 1/2	G 3/8	SS-HPA-SBP8-HBP6	1.74 (44.2)	1.00 (25.4)	0.87 (22.0)	0.47 (12.0)	10000 (690)
G 1/2	G 1/2	SS-HPA-SBP8-HBP8	1.82 (46.2)	1.00 (25.4)	0.87 (22.0)	0.55 (14.0)	10000 (690)
G 3/4	G 3/8	SS-HPA-SBP12-HBP6	1.94 (49.2)	1.25 (31.8)	0.98 (25.0)	0.47 (12.0)	10000 (690)
G 3/4	G 1/2	SS-HPA-SBP12-HBP8	2.02 (51.2)	1.25 (31.8)	0.98 (25.0)	0.55 (14.0)	10000 (690)
G 3/4	G 3/4	SS-HPA-SBP12-HBP12	2.09 (53.2)	1.25 (31.8)	0.98 (25.0)	0.63 (16.0)	10000 (690)
G 1	G 1/2	SS-HPA-SBP16-HBP8	2.41 (61.2)	1.50 (38.1)	1.26 (32.0)	0.55 (14.0)	10000 (690)
G 1	G 3/4	SS-HPA-SBP16-HBP12	2.49 (63.2)	1.50 (38.1)	1.26 (32.0)	0.63 (16.0)	10000 (690)
G 1	G 1	SS-HPA-SBP16-HBP16	2.61 (66.2)	1.50 (38.1)	1.26 (32.0)	0.75 (19.0)	10000 (690)



MALE ELBOWS

Male NPT threads

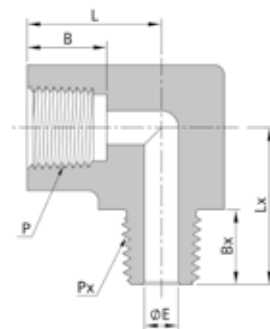
		#	Dimensions - in. (mm)				
P-NPT			L	B	E	T	
1/8		SS-HPME-NS2-10K	0.74 (18.8)	0.38 (9.7)	0.22 (5.5)	0.50 (12.7)	10000 (690)
1/4		SS-HPME-NS4-10K	1.00 (25.3)	0.56 (14.2)	0.28 (7.1)	0.63 (15.9)	10000 (690)
3/8		SS-HPME-NS6-10K	1.10 (28.0)	0.56 (14.2)	0.38 (9.6)	0.75 (19.1)	10000 (690)
1/2		SS-HPME-NS8-10K	1.44 (36.6)	0.75 (19.1)	0.47 (11.9)	1.00 (25.4)	10000 (690)
3/4		SS-HPME-NS12	1.56 (39.6)	0.75 (19.1)	0.58 (14.8)	1.37 (34.9)	10000 (690)
1		SS-HPME-NS16	1.89 (48.0)	0.94 (23.9)	0.79 (20.0)	1.50 (38.1)	10000 (690)



STREET ELBOWS

Male NPT threads / Female NPT threads

		#	Dimensions - in. (mm)				
P-NPT	Px-NPT		L	B	E	Lx	
1/8	1/8	SS-HPSE-NS2-10K	0.74 (18.8)	0.41 (10.4)	0.22 (5.5)	0.82 (20.9)	10000 (690)
1/8	1/4	SS-HPSE-NS2-NS4-10K	0.78 (19.8)	0.41 (10.4)	0.28 (7.1)	1.00 (25.5)	10000 (690)
1/8	3/8	SS-HPSE-NS2-NS6-10K	0.95 (24.2)	0.41 (10.4)	0.31 (8.0)	1.07 (27.2)	10000 (690)
1/4	1/4	SS-HPSE-NS4-10K	0.99 (25.2)	0.59 (15.0)	0.28 (7.1)	1.06 (7.1)	10000 (690)
1/4	3/8	SS-HPSE-NS4-NS6-10K	0.99 (25.2)	0.59 (15.0)	0.38 (9.6)	1.06 (7.1)	10000 (690)
1/4	1.2	SS-HPSE-NS4-NS8-10K	1.15 (29.1)	0.59 (15.0)	0.41 (10.4)	1.40 (35.5)	10000 (690)
3/8	3/8	SS-HPSE-NS6-10K	1.20 (30.6)	0.59 (15.0)	0.38 (9.6)	1.20 (30.6)	10000 (690)
3/8	1/2	SS-HPSE-NS6-NS8-10K	1.20 (30.6)	0.59 (15.0)	0.47 (11.9)	1.38 (35.0)	10000 (690)
1/2	1/2	SS-HPSE-NS8-10K	1.55 (39.4)	0.78 (19.8)	0.47 (11.9)	1.61 (40.8)	10000 (690)
1/2	3/4	SS-HPSE-NS8-NS12	1.43 (36.2)	0.78 (19.8)	0.58 (14.8)	1.61 (40.8)	10000 (1034)
1/2	1	SS-HPSE-NS8-NS16	1.45 (36.9)	0.78 (19.8)	0.67 (17.0)	1.86 (47.3)	10000 (1034)
3/4	3/4	SS-HPSE-NS12	1.61 (40.8)	0.81 (20.6)	0.58 (14.8)	1.77 (44.9)	10000 (1034)
3/4	1	SS-HPSE-NS12-NS16	1.63 (41.4)	0.81 (20.6)	0.79 (20.0)	1.86 (47.3)	10000 (1034)
1	1	SS-HPSE-NS16	1.91 (48.5)	1.00 (25.4)	0.79 (20.0)	2.07 (52.5)	10000 (1034)

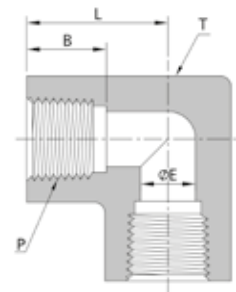


10,000 PSI HIGH PRESSURE THREADED PIPE FITTINGS

FEMALE ELBOWS

Female NPT threads

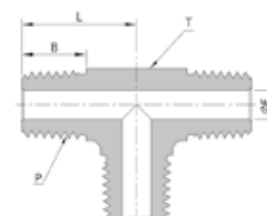
	#	Dimensions - in. (mm)				
P-NPT		L	B	E	T	psig (bar)
1/8	SS-HPF-NS2-10K	0.79 (20.1)	0.41 (10.4)	0.31 (8.0)	0.63 (15.9)	10000 (690)
1/4	SS-HPF-NS4-10K	0.99 (25.4)	0.59 (15.0)	0.41 (10.4)	0.75 (19.1)	10000 (690)
3/8	SS-HPF-NS6-10K	1.20 (30.6)	0.59 (15.0)	0.54 (13.8)	1.00 (25.4)	10000 (690)
1/2	SS-HPF-NS8-10K	1.55 (39.3)	0.78 (19.8)	0.67 (17.0)	1.37 (34.9)	10000 (690)
3/4	SS-HPF-NS12	1.49 (37.8)	0.81 (20.6)	0.88 (22.3)	1.50 (38.1)	10000 (690)
1	SS-HPF-NS16	2.07 (52.5)	1.00 (25.4)	1.11 (28.1)	1.75 (44.5)	10000 (690)



MALE TEES

Male NPT threads

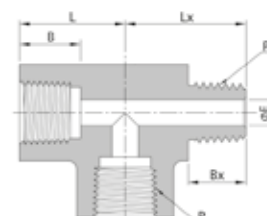
	#	Dimensions - in. (mm)				
P-NPT		L	B	E	T	psig (bar)
1/8	SS-HPMT-NS2 -10K	0.74 (18.8)	0.38 (9.7)	0.22 (5.5)	0.50 (12.7)	10000 (690)
1/4	SS-HPMT-NS4 -10K	1.00 (25.3)	0.56 (14.2)	0.28 (7.1)	0.63 (15.9)	10000 (690)
3/8	SS-HPMT-NS6 -10K	1.10 (28.0)	0.56 (14.2)	0.38 (9.6)	0.75 (19.1)	10000 (690)
1/2	SS-HPMT-NS8 -10K	1.44 (36.6)	0.75 (19.1)	0.47 (11.9)	1.00 (25.4)	10000 (690)
3/4	SS-HPMT-NS12	1.56 (39.6)	0.75 (19.1)	0.58 (14.8)	1.37 (34.9)	10000 (690)
1	SS-HPMT-NS16	1.89 (48.0)	0.94 (23.9)	0.79 (20.0)	1.50 (38.1)	10000 (690)



MALE STREET TEES

NPT Threads

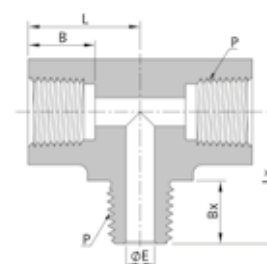
	#	Dimensions - in. (mm)				
P-NPT		L	B	Lx	Bx	psig (bar)
1/8	SS-HPST-NS2-10K	0.76 (19.4)	0.41 (10.4)	0.82 (20.9)	0.38 (9.7)	10000 (690)
1/4	SS-HPST-NS4-10K	0.99 (25.2)	0.59 (15.0)	1.06 (27.0)	0.56 (14.2)	10000 (690)
3/8	SS-HPST-NS6-10K	1.20 (30.6)	0.59 (15.0)	1.20 (30.6)	0.56 (14.2)	10000 (690)
1/2	SS-HPST-NS8 -10K	1.55 (39.4)	0.78 (19.8)	1.61 (40.8)	0.75 (19.1)	10000 (690)
3/4	SS-HPST-NS12	1.72 (43.8)	0.81 (20.6)	1.68 (42.7)	0.75 (19.1)	10000 (690)
1	SS-HPST-NS16	2.07 (52.5)	1.00 (25.4)	2.06 (52.3)	0.94 (23.9)	10000 (690)



MALE BRANCH TEES

NPT Threads

	#	Dimensions - in. (mm)				
P-NPT		L	B	Lx	Bx	psig (bar)
1/8	SS-HPBT-NS2-10K	0.74 (18.8)	0.41 (10.4)	0.82 (20.9)	0.38 (9.7)	10000 (690)
1/4	SS-HPBT-NS4-10K	0.99 (25.2)	0.59 (15.0)	1.06 (27.0)	0.56 (14.2)	10000 (690)
3/8	SS-HPBT-NS6-10K	1.20 (30.6)	0.59 (15.0)	1.20 (30.6)	0.56 (14.2)	10000 (690)
1/2	SS-HPBT-NS8-10K	1.48 (37.6)	0.78 (19.8)	1.61 (40.8)	0.75 (19.1)	10000 (690)
3/4	SS-HPBT-NS12	1.61 (40.8)	0.81 (20.6)	1.77 (44.9)	0.75 (19.1)	10000 (690)
1	SS-HPBT-NS16	1.91 (48.5)	1.00 (25.4)	2.07 (52.5)	0.94 (23.9)	10000 (690)

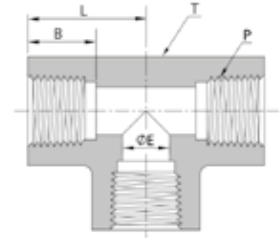


10,000 PSI HIGH PRESSURE THREADED PIPE FITTINGS

FEMALE TEES

Female NPT Threads

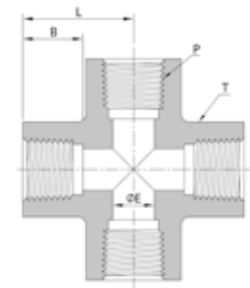
	#	Dimensions - in. (mm)				
P-NPT		L	B	E	T	psig (bar)
1/8	SS-HPT-NS2-10K	0.74 (18.8)	0.41 (10.4)	0.31 (8.0)	0.63 (15.9)	10000 (690)
1/4	SS-HPT-NS4-10K	0.99 (25.2)	0.59 (15.0)	0.41 (10.4)	0.75 (19.1)	10000 (690)
3/8	SS-HPT-NS6-10K	1.20 (30.6)	0.59 (15.0)	0.54 (13.8)	1.00 (25.4)	10000 (690)
1/2	SS-HPT-NS8-10K	1.55 (39.3)	0.78 (19.8)	0.67 (17.0)	1.37 (34.9)	10000 (690)
3/4	SS-HPT-NS12	1.49 (37.8)	0.81 (20.6)	0.88 (22.3)	1.50 (38.1)	10000 (690)
1	SS-HPT-NS16	2.07 (52.5)	1.00 (25.4)	1.11 (28.1)	1.75 (44.5)	10000 (690)



FEMALE CROSSES

Female NPT Threads

	#	Dimensions - in. (mm)				
P-NPT		L	B	E	T	psig (bar)
1/8	SS-HPCR-NS2-10K	0.74 (18.8)	0.41 (10.4)	0.31 (8.0)	0.63 (15.9)	10000 (690)
1/4	SS-HPCR-NS4-10K	0.99 (25.2)	0.59 (15.0)	0.41 (10.4)	0.75 (19.1)	10000 (690)
3/8	SS-HPCR-NS6-10K	1.20 (30.6)	0.59 (15.0)	0.54 (13.8)	1.00 (25.4)	10000 (690)
1/2	SS-HPCR-NS8-10K	1.49 (37.9)	0.78 (19.8)	0.67 (17.0)	1.37 (34.9)	10000 (690)
3/4	SS-HPCR-NS12	1.49 (37.8)	0.81 (20.6)	0.88 (22.3)	1.50 (38.1)	10000 (690)
1	SS-HPCR-NS16	1.91 (48.5)	1.00 (25.4)	1.11 (28.1)	1.75 (44.5)	10000 (690)



15,000 PSI HIGH PRESSURE THREADED PIPE FITTINGS

FEATURES

- The hardened threads with smooth surface avoid galling and help to extend the fitting service life
- Radius junction design with elbows provides smooth flow path
- Every fitting is stamped with size, material, and heat code
- 316 stainless steel standard material. Other materials are available upon request
- Available to NACE MR-01-75



CONFIGURATION	FITTING TYPE	EXAMPLE
	Pipe Plug	SS-HPP-NS4
	Hex Nipple	SS-HPHN-NS4
	Pipe Cap	SS-HPC-NS6
	Zero-Clearance Union	SS-HPZC-NS8
	Hex Coupling	SS-HPCG-NS4
	Hex Long Nipple	SS-HPLN-NS4-50.8
	Street Elbow	SS-HPSE-NS6
	Adaptor	SS-HPA-NS4
	Male Elbow	SS-HPME-NS4
	Female Elbow	SS-HPE-NS8
	Male Tee	SS-HPMT-NS2
	Male Street Tee	SS-HPST-NS4
	Male Branch Tee	SS-HPBT-NS6
	Female Tee	SS-HPT-NS8
	Female Crosses	SS-HPCR-NS4

15,000 PSI HIGH PRESSURE THREADED PIPE FITTINGS

THREAD SPECIFICATIONS

Connection type	Code		Thread specifications
NPT	NS	NPT	ASME B1.0.79, SAE AS71051
ISO Tapered	RT	ISO Tapered	ISO 7-1, BS EN 10226-1, JIS B0203
Heavy-duty SAE/MS (Accordance with SAE J1926-2)	SH	SAE/MS	ASME B1.1
JIC (37° Flare)	AN	SAE/MS	ASME B1.1
Type "M" male	HM	SAE/MS	ASME B1.1

WORKING TEMPERATURE

Connection type	Temperature rating
NPT	-325°F (-198°C) to 400°F (204°C)
ISO Tapered	-325°F (-198°C) to 400°F (204°C)
Heavy-duty SAE/MS (Accordance with SAE J1926-2)	0°F (-17.8°C) to 400°F (204°C)
JIC (37° Flare)	-420°F (-251°C) to 1200°F (649°C)
Type "M" male	-420°F (-251°C) to 1200°F (649°C)

ELEVATED TEMPERATURE FACTORS

To get the maximum working pressure at elevated temperature, use the maximum working pressure at ambient temperature to multiply the factors in the table below.

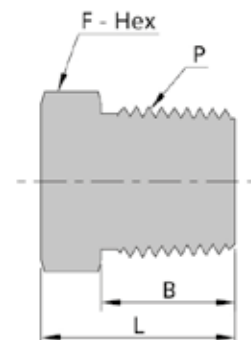
Material	Temperature		Factor
	°F	°C	
316	100	38	1
316	200	93	1
316	300	149	1
316	400	204	0.97
316	500	260	0.90
316	600	316	0.85
316	700	371	0.82
316	800	427	0.80

Date in this table is applied only to the working temperature below 800°F (427°C).

PIPE PLUGS

Male NPT threads

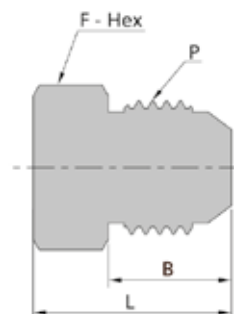
	#	Dimensions - in. (mm)			
P-NPT		L	F	B	psig (bar)
1/8	SS-HPP-NS2	0.63 (16.0)	0.44 (11.11)	0.38 (9.7)	15000 (1034)
1/4	SS-HPP-NS4	0.87 (22.2)	0.56 (14.3)	0.56 (14.2)	15000 (1034)
3/8	SS-HPP-NS6	0.93 (23.6)	0.69 (17.5)	0.56 (14.2)	15000 (1034)
1/2	SS-HPP-NS8	1.16 (29.5)	0.87 (22.2)	0.75 (19.1)	15000 (1034)
3/4	SS-HPP-NS12	1.25 (31.8)	1.06 (27.0)	0.75 (19.1)	10000 (690)
1	SS-HPP-NS16	1.55 (39.3)	1.37 (34.9)	0.94 (23.9)	10000 (690)



15,000 PSI HIGH PRESSURE THREADED PIPE FITTINGS

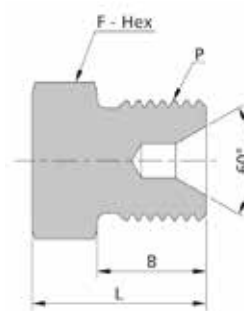
Male JIC

	#	Dimensions - in. (mm)			
P-SAE/MS		L	F	B	psig (bar)
7/16-20	SS-HPP-AN4	0.83 (21.0)	0.50 (12.7)	0.55 (14.0)	20000 (1379)
9/16-18	SS-HPP-AN6	0.89 (22.7)	0.63 (15.9)	0.56 (14.1)	20000 (1379)
3/4-16	SS-HPP-AN8	1.05 (26.7)	0.81 (20.6)	0.66 (16.7)	20000 (1379)
7/8-14	SS-HPP-AN10	1.19 (30.3)	0.94 (23.8)	0.76 (19.3)	20000 (1379)
1 1/16-12	SS-HPP-AN12	1.37 (34.9)	1.13 (28.6)	0.86 (21.9)	15000 (1034)
1 5/16-12	SS-HPP-AN16	1.51 (38.3)	1.37 (34.9)	0.91 (23.1)	15000 (1034)



Type "M" male

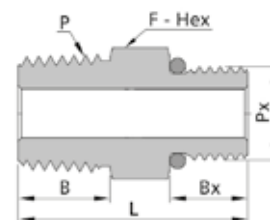
	#	Dimensions - in. (mm)			
P-SAE/MS		L	F	B	psig (bar)
9/16-18	SS-HPP-HM9	0.84 (21.3)	0.63 (15.9)	0.50 (12.7)	60000 (4137)
3/4-16	SS-HPP-HM12	1.01 (25.6)	0.75 (19.1)	0.63 (16.0)	30000 (2068)
7/8-14	SS-HPP-HM14	1.21 (30.8)	1.00 (25.4)	0.76 (19.2)	50000 (3447)
1-12	SS-HPP-HM16	1.10 (27.9)	1.00 (25.4)	0.64 (16.3)	30000 (2068)
1 5/16-12	SS-HPP-HM21	1.22 (30.9)	1.37 (34.9)	0.62 (15.7)	20000 (1379)



HEX NIPPLES

Male NPT threads / Male SAE/MS straight threads

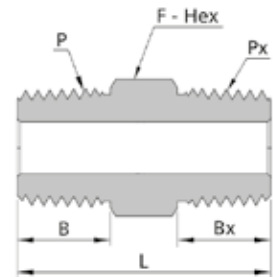
	#	Dimensions - in. (mm)				
P-NPT Px-SAE/MS		L	F	B	Bx	psig (bar)
1/4 7/16-20	SS-HPHN-NS4-SH7	1.35 (34.2)	0.56 (14.3)	0.56 (14.2)	0.43 (11.0)	9137 (630)
1/4 9/16-18	SS-HPHN-NS4-SH9	1.43 (36.4)	0.69 (17.5)	0.56 (14.2)	0.47 (12.0)	9137 (630)
3/8 7/16-20	SS-HPHN-NS6-SH7	1.39 (35.4)	0.69 (17.5)	0.56 (14.2)	0.43 (11.0)	9137 (630)
3/8 9/16-18	SS-HPHN-NS6-SH9	1.43 (36.4)	0.69 (17.5)	0.56 (14.2)	0.47 (12.0)	9137 (630)
3/8 3/4-16	SS-HPHN-NS6-SH12	1.56 (39.6)	0.87 (22.2)	0.56 (14.2)	0.55 (14.0)	9137 (630)
1/2 9/16-18	SS-HPHN-NS8-SH9	1.67 (42.5)	0.87 (22.2)	0.75 (19.1)	0.47 (12.0)	9137 (630)
1/2 3/4-16	SS-HPHN-NS8-SH12	1.75 (44.5)	0.87 (22.2)	0.75 (19.1)	0.55 (14.0)	9137 (630)
1/2 7/8-14	SS-HPHN-NS8-SH14	1.88 (47.7)	1.00 (25.4)	0.75 (19.1)	0.63 (16.0)	9137 (630)
3/4 9/16-18	SS-HPHN-NS12-SH9	1.76 (44.7)	1.06 (27.0)	0.75 (19.1)	0.47 (12.0)	9137 (630)
3/4 3/4-16	SS-HPHN-NS12-SH12	1.84 (46.7)	1.06 (27.0)	0.75 (19.1)	0.55 (14.0)	9137 (630)
3/4 7/8-14	SS-HPHN-NS12-SH14	1.92 (48.7)	1.06 (27.0)	0.75 (19.1)	0.63 (16.0)	9137 (630)
1 3/4-16	SS-HPHN-NS16-SH12	2.13 (54.2)	1.37 (34.9)	0.94 (23.9)	0.55 (14.0)	9137 (630)
1 7/8-14	SS-HPHN-NS16-SH14	2.21 (56.1)	1.37 (34.9)	0.94 (23.9)	0.63 (16.0)	9137 (630)



15,000 PSI HIGH PRESSURE THREADED PIPE FITTINGS

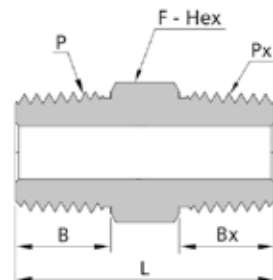
Male NPT threads

		#	Dimensions - in. (mm)				
P-NPT	Px-NPT		L	F	B	Bx	psig (bar)
1/8	1/8	SS-HPHN-NS2	1.05 (26.6)	0.44 (11.11)	0.38 (9.7)	0.38 (9.7)	15000 (1034)
1/4	1/8	SS-HPHN-NS2-NS4	1.30 (32.9)	0.56 (14.3)	0.56 (14.2)	0.38 (9.7)	15000 (1034)
1/4	1/4	SS-HPHN-NS4	1.47 (37.4)	0.56 (14.3)	0.56 (14.2)	0.56 (14.2)	15000 (1034)
3/8	1/8	SS-HPHN-NS6-NS2	1.34 (34.1)	0.69 (17.5)	0.56 (14.2)	0.38 (9.7)	15000 (1034)
3/8	1/4	SS-HPHN-NS6-NS4	1.52 (38.6)	0.69 (17.5)	0.56 (14.2)	0.56 (14.2)	15000 (1034)
3/8	3/8	SS-HPHN-NS6	1.52 (38.6)	0.69 (17.5)	0.56 (14.2)	0.56 (14.2)	15000 (1034)
1/2	1/8	SS-HPHN-NS8-NS2	1.58 (40.2)	0.87 (22.2)	0.75 (19.1)	0.38 (9.7)	15000 (1034)
1/2	1/4	SS-HPHN-NS8-NS4	1.76 (44.7)	0.87 (22.2)	0.75 (19.1)	0.56 (14.2)	15000 (1034)
1/2	3/8	SS-HPHN-NS8-NS6	1.76 (44.7)	0.87 (22.2)	0.75 (19.1)	0.56 (14.2)	15000 (1034)
1/2	1/2	SS-HPHN-NS8	1.95 (49.6)	0.87 (22.2)	0.75 (19.1)	0.75 (19.1)	15000 (1034)



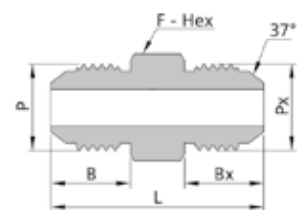
Male NPT threads / Male ISO Tapered threads

		#	Dimensions - in. (mm)				
P-NPT	Px-ISO Tapered		L	F	B	Bx	psig (bar)
1/8	1/8	SS-HPHN-NS2-RT2	1.05 (26.6)	0.44 (11.11)	0.38 (9.7)	0.38 (9.7)	15000 (1034)
1/4	1/8	SS-HPHN-NS4-RT2	1.30 (32.9)	0.56 (14.3)	0.56 (14.2)	0.38 (9.7)	15000 (1034)
1/4	1/4	SS-HPHN-NS4-RT4	1.47 (37.4)	0.56 (14.3)	0.56 (14.2)	0.56 (14.2)	15000 (1034)
3/8	1/8	SS-HPHN-NS6-RT2	1.34 (34.1)	0.69 (17.5)	0.56 (14.2)	0.38 (9.7)	15000 (1034)
3/8	1/4	SS-HPHN-NS6-RT4	1.52 (38.6)	0.69 (17.5)	0.56 (14.2)	0.56 (14.2)	15000 (1034)
3/8	3/8	SS-HPHN-NS6-RT6	1.52 (38.6)	0.69 (17.5)	0.56 (14.2)	0.56 (14.2)	15000 (1034)
1/2	1/8	SS-HPHN-NS8-RT2	1.58 (40.2)	0.87 (22.2)	0.75 (19.1)	0.38 (9.7)	15000 (1034)
1/2	1/4	SS-HPHN-NS8-RT4	1.76 (44.7)	0.87 (22.2)	0.75 (19.1)	0.56 (14.2)	15000 (1034)
1/2	3/8	SS-HPHN-NS8-RT6	1.76 (44.7)	0.87 (22.2)	0.75 (19.1)	0.56 (14.2)	15000 (1034)
1/2	1/2	SS-HPHN-NS8-RT8	1.95 (49.6)	0.87 (22.2)	0.75 (19.1)	0.75 (19.1)	15000 (1034)



Male JIC

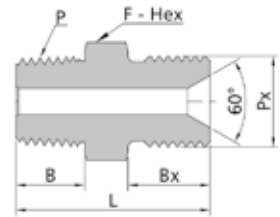
		#	Dimensions - in. (mm)				
Px-SAE/MS	Px-SAE/MS		L	F	B	Bx	psig (bar)
7/16-20	7/16-20	SS-HPHN-AN4	1.40 (35.6)	0.50 (12.7)	0.55 (14.0)	0.55 (14.0)	20000 (1379)
9/16-18	7/16-20	SS-HPHN-AN6-AN4	1.48 (37.7)	0.63 (15.9)	0.55 (14.0)	0.56 (14.1)	20000 (1379)
9/16-18	9/16-18	SS-HPHN-AN6	1.49 (37.8)	0.63 (15.9)	0.56 (14.1)	0.56 (14.1)	20000 (1379)
3/4-16	9/16-18	SS-HPHN-AN8-AN6	1.65 (41.8)	0.81 (20.6)	0.56 (14.1)	0.66 (16.7)	20000 (1379)
3/4-16	3/4-16	SS-HPHN-AN8	1.75 (44.4)	0.81 (20.6)	0.66 (16.7)	0.66 (16.7)	20000 (1379)
7/8-14	9/16-18	SS-HPHN-AN10-AN16	1.79 (45.4)	0.94 (23.8)	0.56 (14.1)	0.76 (19.3)	20000 (1379)
7/8-14	3/4-16	SS-HPHN-AN10-AN8	1.89 (48.0)	0.94 (23.8)	0.66 (16.7)	0.76 (19.3)	20000 (1379)
7/8-14	7/8-14	SS-HPHN-AN10	1.99 (50.6)	0.94 (23.8)	0.76 (19.3)	0.76 (19.3)	20000 (1379)
1 1/16-12	3/4-16	SS-HPHN-AN12-AN8	2.07 (52.6)	1.13 (28.6)	0.66 (16.7)	0.86 (21.9)	15000 (1034)
1 1/16-12	7/8-14	SS-HPHN-AN12-AN10	2.17 (55.2)	1.13 (28.6)	0.76 (19.3)	0.86 (21.9)	15000 (1034)
1 1/16-12	1 1/16-12	SS-HPHN-AN12	2.28 (57.8)	1.13 (28.6)	0.86 (21.9)	0.86 (21.9)	15000 (1034)
1 5/16-12	7/8-14	SS-HPHN-AN16-AN10	2.31 (58.6)	1.37 (34.9)	0.76 (19.3)	0.91 (23.1)	15000 (1034)
1 5/16-12	1 1/16-12	SS-HPHN-AN16-AN12	2.41 (61.2)	1.37 (34.9)	0.86 (21.9)	0.91 (23.1)	15000 (1034)
1 5/16-12	1 5/16-12	SS-HPHN-AN12	2.46 (62.4)	1.37 (34.9)	0.91 (23.1)	0.91 (23.1)	15000 (1034)



15,000 PSI HIGH PRESSURE THREADED PIPE FITTINGS

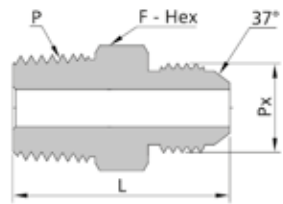
Male NPT threads / Type "M" male

		#	Dimensions - in. (mm)				
P-NPT	Px-SAE/MS		L	F	B	Bx	
1/8	9/16-18	SS-HPHN-NS2-HM9	1.22 (31.0)	0.63 (15.9)	0.38 (9.7)	0.50 (12.7)	15000 (1034)
1/8	3/4-16	SS-HPHN-NS2-HM12	13.9 (35.3)	0.75 (19.1)	0.38 (9.7)	0.63 (16.0)	15000 (1034)
1/4	9/16-18	SS-HPHN-NS4-HM9	1.40 (35.5)	0.63 (15.9)	0.56 (14.2)	0.50 (12.7)	15000 (1034)
1/4	3/4-16	SS-HPHN-NS4-HM12	1.57 (39.8)	0.75 (19.1)	0.56 (14.2)	0.63 (16.0)	15000 (1034)
1/4	7/8-14	SS-HPHN-NS4-HM14	1.77 (45.0)	1.00 (25.4)	0.56 (14.2)	0.75 (19.2)	15000 (1034)
3/8	9/16-18	SS-HPHN-NS6-HM9	1.42 (36.2)	0.69 (17.5)	0.56 (14.2)	0.50 (12.7)	15000 (1034)
3/8	3/4-16	SS-HPHN-NS6-HM12	1.57 (39.8)	0.75 (19.1)	0.56 (14.2)	0.63 (16.0)	15000 (1034)
3/8	7/8-14	SS-HPHN-NS6-HM14	1.96 (49.9)	1.00 (25.4)	0.75 (19.1)	0.76 (19.2)	15000 (1034)
1/2	9/16-18	SS-HPHN-NS8-HM9	1.66 (42.2)	0.87 (22.2)	0.75 (19.1)	0.50 (12.7)	15000 (1034)
1/2	3/4-16	SS-HPHN-NS8-HM12	1.79 (45.5)	0.87 (22.2)	0.75 (19.1)	0.63 (16.0)	15000 (1034)
1/2	7/8-14	SS-HPHN-NS8-HM14	1.96 (49.9)	1.00 (25.4)	0.75 (19.1)	0.76 (19.2)	15000 (1034)
1/2	1-12	SS-HPHN-NS8-HM16	1.85 (47.0)	1.00 (25.4)	0.75 (19.1)	0.64 (16.3)	15000 (1034)
3/4	9/16-18	SS-HPHN-NS12-HM9	1.75 (44.4)	1.06 (27.0)	0.75 (19.1)	0.50 (12.7)	10000 (690)
3/4	3/4-16	SS-HPHN-NS12-HM12	1.88 (47.7)	1.06 (27.0)	0.75 (19.1)	0.63 (16.0)	10000 (690)
3/4	7/8-14	SS-HPHN-NS12-HM14	2.00 (50.9)	1.06 (27.0)	0.75 (19.1)	0.76 (19.2)	10000 (690)
3/4	1-12	SS-HPHN-NS12-HM16	1.89 (48.0)	1.06 (27.0)	0.75 (19.1)	0.64 (16.3)	10000 (690)
1	1-12	SS-HPHN-NS16-HM16	2.18 (55.4)	1.37 (34.9)	0.94 (23.9)	0.64 (16.3)	10000 (690)
1	1 5/16-12	SS-HPHN-NS16-HM21	2.16 (54.8)	1.37 (34.9)	0.94 (23.9)	0.62 (15.7)	10000 (690)



Male NPT thread / Male JIC thread

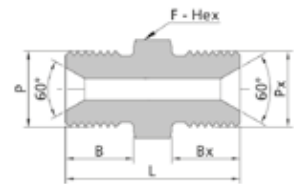
		#	Dimensions - in. (mm)			
P-NPT	Px-SAE/MS		L	F	B	
1/8	7/16-20	SS-HPHN-NS2-AN4	1.23 (31.3)	0.50 (12.7)	0.17 (4.4)	15000 (1034)
1/8	9/16-18	SS-HPHN-NS2-AN6	1.31 (33.4)	0.63 (15.9)	0.19 (4.8)	15000 (1034)
1/4	7/16-20	SS-HPHN-NS4-AN4	1.46 (37.2)	0.56 (14.3)	0.17 (4.4)	15000 (1034)
1/4	9/16-18	SS-HPHN-NS4-AN6	1.49 (39.7)	0.63 (15.9)	0.23 (5.8)	15000 (1034)
1/4	3/4-16	SS-HPHN-NS4-AN8	1.65 (41.9)	0.81 (20.6)	0.25 (6.4)	15000 (1034)
3/8	9/16-18	SS-HPHN-NS6-AN6	1.52 (38.5)	0.69 (17.5)	0.23 (5.8)	15000 (1034)
3/8	3/4-16	SS-HPHN-NS6-AN8	1.62 (41.1)	0.81 (20.6)	0.31 (7.9)	15000 (1034)
3/8	7/8-14	SS-HPHN-NS6-AN10	1.79 (45.5)	0.94 (23.8)	0.31 (7.9)	15000 (1034)
1/2	7/16-20	SS-HPHN-NS8-AN4	1.75 (44.5)	0.87 (22.2)	0.17 (4.4)	15000 (1034)
1/2	9/16-18	SS-HPHN-NS8-AN6	1.75 (44.6)	0.87 (22.2)	0.23 (5.8)	15000 (1034)
1/2	3/4-16	SS-HPHN-NS8-AN8	1.86 (47.2)	0.87 (22.2)	0.31 (8.0)	15000 (1034)
1/2	7/8-14	SS-HPHN-NS8-AN10	1.98 (50.4)	0.94 (23.8)	0.37 (9.4)	15000 (1034)



15,000 PSI HIGH PRESSURE THREADED PIPE FITTINGS

Type "M" male

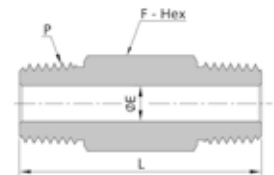
		#	Dimensions - in. (mm)				
Px-SAE/MS	Px-SAE/MS		L	F	B	Bx	
9/16-18	9/16-18	SS-HPHN-HM9	1.34 (34.0)	0.63 (15.9)	0.50 (12.7)	0.50 (12.7)	60000 (4137)
3/4-16	9/16-18	SS-HPHN-HM12-HM9	1.51 (38.3)	0.75 (19.1)	0.63 (16.0)	0.50 (12.7)	30000 (2068)
3/4-16	3/4-16	SS-HPHN-HM12	1.64 (41.6)	0.75 (19.1)	0.63 (16.0)	0.63 (16.0)	30000 (2068)
7/8-14	9/16-18	SS-HPHN-HM14-HM9	1.71 (43.5)	1.00 (25.4)	0.76 (19.2)	0.50 (12.7)	50000 (3447)
7/8-14	3/4-16	SS-HPHN-HM14-HM12	1.84 (46.8)	1.00 (25.4)	0.76 (19.2)	0.63 (16.0)	30000 (2068)
7/8-14	7/8-14	SS-HPHN-HM14	1.97 (50.0)	1.00 (25.4)	0.76 (19.2)	0.76 (19.2)	50000 (3447)
1-12	9/16-18	SS-HPHN-HM16-HM9	1.60 (40.6)	1.00 (25.4)	0.64 (16.3)	0.50 (12.7)	30000 (2068)
1-12	3/4-16	SS-HPHN-HM16-HM12	1.73 (43.9)	1.00 (25.4)	0.64 (16.3)	0.63 (16.0)	30000 (2068)
1-12	7/8-14	SS-HPHN-HM16-HM14	1.85 (47.1)	1.00 (25.4)	0.64 (16.3)	0.76 (19.2)	30000 (2068)
1-12	1-12	SS-HPHN-HM16	1.74 (44.2)	1.00 (25.4)	0.64 (16.3)	0.64 (16.3)	30000 (2068)
1 5/16-12	1-12	SS-HPHN-HM21-HM16	1.86 (47.2)	0.37 (34.9)	0.62 (15.7)	0.64 (16.3)	20000 (1379)
1 5/16-12	1 5/16-12	SS-HPHN-HM21	1.83 (46.6)	1.37 (34.9)	0.62 (15.7)	0.62 (15.7)	20000 (1379)



HEX LONG NIPPLES

Male NPT threads

		#	Dimensions - in. (mm)			
P-NPT			L	F	B	
1/8		SS-HPLN-NS2-1.5	1.50 (38.1)	0.44 (11.11)	0.19 (4.8)	15000 (1034)
1/8		SS-HPLN-NS2-2	2.00 (50.8)	0.44 (11.11)	0.19 (4.8)	15000 (1034)
1/8		SS-HPLN-NS2-2.5	2.50 (63.5)	0.44 (11.11)	0.19 (4.8)	15000 (1034)
1/8		SS-HPLN-NS2-3	3.00 (76.2)	0.44 (11.11)	0.19 (4.8)	15000 (1034)
1/4		SS-HPLN-NS4-2	2.00 (50.8)	0.56 (14.3)	0.25 (6.4)	15000 (1034)
1/4		SS-HPLN-NS4-2.5	2.50 (63.5)	0.56 (14.3)	0.25 (6.4)	15000 (1034)
1/4		SS-HPLN-NS4-3	3.00 (76.2)	0.56 (14.3)	0.25 (6.4)	15000 (1034)
1/4		SS-HPLN-NS4-4	4.00 (101.6)	0.56 (14.3)	0.25 (6.4)	15000 (1034)
3/8		SS-HPLN-NS6-2	2.00 (50.8)	0.69 (17.5)	0.31 (7.9)	15000 (1034)
3/8		SS-HPLN-NS6-2.5	2.50 (62.5)	0.69 (17.5)	0.31 (7.9)	15000 (1034)
3/8		SS-HPLN-NS6-3	3.00 (76.2)	0.69 (17.5)	0.31 (7.9)	15000 (1034)
3/8		SS-HPLN-NS6-4	4.00 (101.6)	0.69 (17.5)	0.31 (7.9)	15000 (1034)
1/2		SS-HPLN-NS8-3	3.00 (76.2)	22.2 (0.87)	0.38 (9.6)	15000 (1034)
1/2		SS-HPLN-NS8-4	4.00 (101.6)	22.2 (0.87)	0.38 (9.6)	15000 (1034)
1/2		SS-HPLN-NS8-6	6.00 (152.4)	22.2 (0.87)	0.38 (9.6)	15000 (1034)

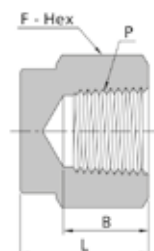


15,000 PSI HIGH PRESSURE THREADED PIPE FITTINGS

PIPE CAPS

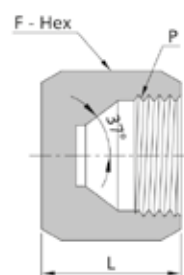
Female NPT threads

	#	Dimensions - in. (mm)			
P-NPT		L	F	B	psig (bar)
1/8	SS-HPC-NS2	0.75 (19.1)	0.63 (15.9)	0.41 (10.4)	15000 (1034)
1/4	SS-HPC-NS4	0.91 (23.8)	0.94 (23.8)	0.59 (15.0)	15000 (1034)
3/8	SS-HPC-NS6	1.03 (26.2)	1.13 (28.6)	0.59 (15.0)	15000 (1034)
1/2	SS-HPC-NS8	1.34 (34.0)	1.37 (34.9)	0.78 (19.8)	15000 (1034)



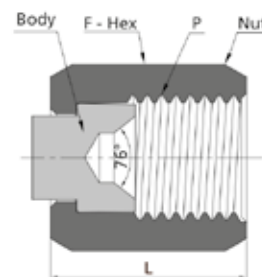
Female JIC

	#	Dimensions - in. (mm)		
P-SAE/MS		L	F	psig (bar)
7/16-20	SS-HPC-AN4	0.62 (15.8)	0.56 (14.3)	20000 (1379)
9/16-18	SS-HPC-AN6	0.72 (18.3)	0.69 (17.5)	20000 (1379)
3/4-16	SS-HPC-AN8	0.83 (21.2)	0.87 (22.2)	20000 (1379)
7/8-14	SS-HPC-AN10	0.98 (24.9)	1.00 (25.4)	20000 (1379)
1 1/16-12	SS-HPC-AN12	1.09 (27.8)	1.25 (31.8)	15000 (1034)
1 5/16-12	SS-HPC-AN16	1.30 (33.0)	1.50 (38.1)	15000 (1034)



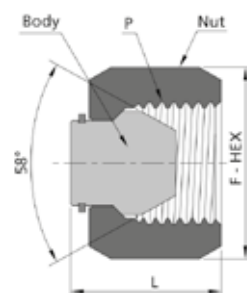
Moveable insert female JIC

	#	Dimensions - in. (mm)		
P-SAE/MS		L	F	psig (bar)
7/16-20	SS-HMC-AN4	0.68 (17.3)	0.56 (14.3)	20000 (1379)
9/16-18	SS-HMC-AN6	0.79 (20.0)	0.69 (17.5)	20000 (1379)
3/4-16	SS-HMC-AN8	0.89 (22.6)	0.87 (22.2)	20000 (1379)
7/8-14	SS-HMC-AN10	0.99 (25.1)	1.00 (25.4)	20000 (1379)
1 1/16-12	SS-HMC-AN12	1.03 (26.2)	1.25 (31.8)	15000 (1034)
1 5/16-12	SS-HMC-AN16	1.18 (30.0)	1.50 (38.1)	15000 (1034)



Moveable insert type "M" female

	#	Dimensions - in. (mm)		
P-SAE/MS		L	F	psig (bar)
9/16-18	SS-HMC-HM9	0.85 (21.6)	0.69 (17.5)	60000 (4137)
3/4-16	SS-HMC-HM12	0.91 (23.1)	1.00 (25.4)	30000 (2068)
7/8-14	SS-HMC-HM14	1.28 (32.5)	1.19 (30.2)	50000 (3447)
1-12	SS-HMC-HM16	1.25 (31.8)	1.25 (31.8)	30000 (2068)
1 5/16-12	SS-HMC-HM21	1.18 (30.0)	1.50 (38.1)	20000 (1379)

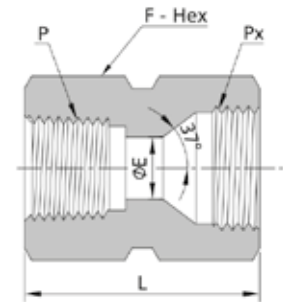


15,000 PSI HIGH PRESSURE THREADED PIPE FITTINGS

HEX COUPLINGS

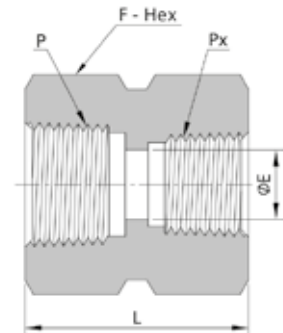
Female NPT threads / JIC Female threads

		#	Dimensions - in. (mm)			 psig (bar)
P-NPT	Px-SAE/MS		L	F	E	
1/8	7/16-20	SS-HPCG-NS2-AN4	1.12 (28.4)	0.63 (15.9)	0.17 (4.3)	15000 (1034)
1/4	7/16-20	SS-HPCG-NS4-AN4	1.33 (33.7)	0.94 (23.8)	0.17 (4.3)	15000 (1034)
1/4	9/16-18	SS-HPCG-NS4-AN6	1.36 (34.5)	0.94 (23.8)	0.30 (7.5)	15000 (1034)
3/8	7/16-20	SS-HPCG-NS6-AN4	1.33 (33.7)	1.13 (28.6)	0.17 (4.3)	15000 (1034)
3/8	9/16-18	SS-HPCG-NS6-AN6	1.36 (34.5)	1.13 (28.6)	0.30 (7.5)	15000 (1034)
3/8	3/4-16	SS-HPCG-NS6-AN8	1.44 (36.5)	1.13 (28.6)	0.39 (9.9)	15000 (1034)
1/2	9/16-18	SS-HPCG-NS8-AN6	1.56 (39.7)	1.37 (34.9)	0.30 (7.5)	15000 (1034)
1/2	3/4-16	SS-HPCG-NS8-AN8	1.64 (41.7)	1.37 (34.9)	0.39 (9.9)	15000 (1034)
1/2	7/8-14	SS-HPCG-NS8-AN10	1.74 (44.1)	1.37 (34.9)	0.48 (12.3)	15000 (1034)



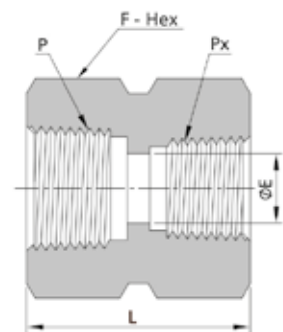
Female NPT threads / Female ISO Tapered threads

		#	Dimensions - in. (mm)			 psig (bar)
P-NPT	Px-ISO Tapered		L	F	E	
1/8	1/8	SS-HPCG-NS2-RT2	0.94 (23.8)	0.63 (15.9)	0.31 (8.0)	15000 (1034)
1/4	1/8	SS-HPCG-NS4-RT2	1.14 (28.9)	0.94 (23.8)	0.31 (8.0)	15000 (1034)
1/4	1/4	SS-HPCG-NS4-RT4	1.32 (33.5)	0.94 (23.8)	0.41 (10.4)	15000 (1034)
3/8	1/8	SS-HPCG-NS6-RT2	1.14 (28.9)	1.13 (28.6)	0.31 (8.0)	15000 (1034)
3/8	1/4	SS-HPCG-NS6-RT4	1.32 (33.5)	1.13 (28.6)	0.41 (10.4)	15000 (1034)
3/8	3/8	SS-HPCG-NS6-RT6	1.32 (33.5)	1.13 (28.6)	0.54 (13.8)	15000 (1034)
1/2	1/8	SS-HPCG-NS8-RT2	1.35 (34.2)	1.37 (34.9)	0.31 (8.0)	15000 (1034)
1/2	1/4	SS-HPCG-NS8-RT4	1.53 (38.8)	1.37 (34.9)	0.41 (10.4)	15000 (1034)
1/2	3/8	SS-HPCG-NS8-RT6	1.53 (38.8)	1.37 (34.9)	0.54 (13.8)	15000 (1034)
1/2	1/2	SS-HPCG-NS8-RT8	1.72 (43.8)	1.37 (34.9)	0.67 (17.0)	15000 (1034)



Female NPT threads

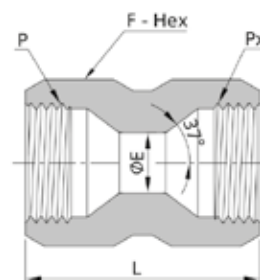
		#	Dimensions - in. (mm)			 psig (bar)
P-NPT	Px-NPT		L	F	E	
1/8	1/8	SS-HPCG-NS2	0.94 (23.8)	0.63 (15.9)	0.31 (8.0)	15000 (1034)
1/4	1/8	SS-HPCG-NS4-NS2	1.14 (28.9)	0.94 (23.8)	0.31 (8.0)	15000 (1034)
1/4	1/4	SS-HPCG-NS4	1.32 (33.5)	0.94 (23.8)	0.41 (10.4)	15000 (1034)
3/8	1/8	SS-HPCG-NS6-NS2	1.14 (28.9)	1.13 (28.6)	0.31 (8.0)	15000 (1034)
3/8	1/4	SS-HPCG-NS6-NS4	1.32 (33.5)	1.13 (28.6)	0.41 (10.4)	15000 (1034)
3/8	3/8	SS-HPCG-NS6	1.32 (33.5)	1.13 (28.6)	0.54 (13.8)	15000 (1034)
1/2	1/8	SS-HPCG-NS8-NS2	1.35 (34.2)	1.37 (34.9)	0.31 (8.0)	15000 (1034)
1/2	1/4	SS-HPCG-NS8-NS4	1.53 (38.8)	1.37 (34.9)	0.41 (10.4)	15000 (1034)
1/2	3/8	SS-HPCG-NS8-NS6	1.53 (38.8)	1.37 (34.9)	0.54 (13.8)	15000 (1034)
1/2	1/2	SS-HPCG-NS8	1.72 (43.8)	1.37 (34.9)	0.67 (17.0)	15000 (1034)



15,000 PSI HIGH PRESSURE THREADED PIPE FITTINGS

Female JIC

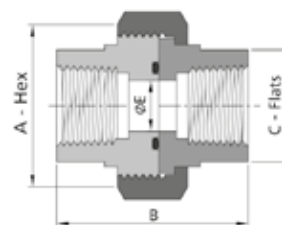
		#	Dimensions - in. (mm)			
P-SAE/MS	Px-SAE/MS		L	F	E	
7/16-20	7/16-20	SS-HPCG-AN4	1.24 (31.5)	0.56 (14.3)	0.17 (4.3)	20000 (1379)
9/16-18	7/16-20	SS-HPCG-AN6-AN4	1.27 (32.3)	0.69 (17.5)	0.17 (4.3)	20000 (1379)
9/16-18	9/16-18	SS-HPCG-AN6	1.33 (33.8)	0.69 (17.5)	0.30 (7.5)	20000 (1379)
3/4-16	9/16-18	SS-HPCG-AN8-AN4	1.39 (35.4)	0.87 (22.2)	0.30 (7.5)	20000 (1379)
3/4-16	3/4-16	SS-HPCG-AN8	1.48 (37.6)	0.87 (22.2)	0.39 (9.9)	20000 (1379)
7/8-14	3/4-16	SS-HPCG-AN10-AN8	1.57 (40.0)	1.00 (25.4)	0.39 (9.9)	20000 (1379)
7/8-14	7/8-14	SS-HPCG-AN10	1.68 (42.6)	1.00 (25.4)	0.48 (12.3)	20000 (1379)
1 1/16-12	7/8-14	SS-HPCG-AN12-AN10	1.74 (44.1)	1.37 (34.8)	0.48 (12.3)	15000 (1034)
1 1/16-12	1 1/16-12	SS-HPCG-AN12	1.80 (45.8)	1.25 (31.8)	0.61 (15.5)	15000 (1034)
1 5/16-12	1 1/16-12	SS-HPCG-AN16-AN12	1.89 (48.1)	1.50 (38.1)	0.61 (15.5)	15000 (1034)
1 5/16-12	1 5/16-12	SS-HPCG-AN16	1.97 (50.1)	1.50 (38.1)	0.84 (21.44)	15000 (1034)



ZERO-CLEARANCE UNIONS

Female NPT threads

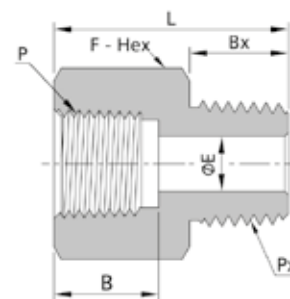
		#	Dimensions - in. (mm)				
P-NPT			A	B	C	E	
1/8		SS-HPZC-NS2	1.06 (27.0)	1.75 (44.5)	0.62 (15.8)	0.31 (8.0)	15000 (1034)
1/4		SS-HPZC-NS4	1.50 (38.1)	2.00 (50.8)	0.94 (23.8)	0.41 (10.4)	15000 (1034)
3/8		SS-HPZC-NS6	1.75 (44.5)	2.25 (57.2)	1.12 (28.5)	0.54 (13.8)	15000 (1034)
1/2		SS-HPZC-NS8	2.00 (50.8)	2.50 (63.5)	1.37 (34.9)	0.67 (17.0)	15000 (1034)
3/4		SS-HPZC-NS12	2.25 (57.2)	2.75 (69.9)	1.50 (38.1)	0.88 (22.3)	10000 (690)



ADAPTORS

Female NPT threads / Male NPT threads

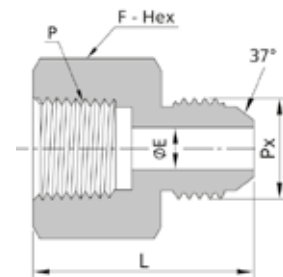
		#	Dimensions - in. (mm)				
P-NPT	Px-NPT		L	F	B	Bx	
1/8	1/8	SS-HPA-NS2	0.96 (24.5)	0.63 (15.9)	0.41 (10.4)	0.38 (9.7)	15000 (1034)
1/8	1/4	SS-HPA-NS2-NS4	1.13 (28.8)	0.63 (15.9)	0.41 (10.4)	0.56 (14.2)	15000 (1034)
1/8	3/8	SS-HPA-NS2-NS6	1.14 (29.0)	0.69 (17.5)	0.41 (10.4)	0.56 (14.2)	15000 (1034)
1/8	1/2	SS-HPA-NS2-NS8	1.08 (27.4)	0.87 (22.2)	0.41 (10.4)	0.75 (19.1)	15000 (1034)
1/8	3/4	SS-HPA-NS2-NS12	1.08 (27.4)	1.06 (27.0)	0.41 (10.4)	0.75 (19.1)	10000 (690)
1/4	1/8	SS-HPA-NS4-NS2	1.25 (31.8)	0.94 (23.8)	0.59 (15.0)	0.38 (9.7)	15000 (1034)
1/4	1/4	SS-HPA-NS4	1.37 (34.9)	0.94 (23.8)	0.59 (15.0)	0.56 (14.2)	15000 (1034)
1/4	3/8	SS-HPA-NS4-NS6	1.37 (34.9)	0.94 (23.8)	0.59 (15.0)	0.56 (14.2)	15000 (1034)
1/4	1/2	SS-HPA-NS4-NS8	1.58 (40.1)	0.94 (23.8)	0.59 (15.0)	0.75 (19.1)	15000 (1034)
1/4	3/4	SS-HPA-NS4-NS12	1.34 (34.1)	1.06 (27.0)	0.59 (15.0)	0.75 (19.1)	10000 (690)
1/4	1	SS-HPA-NS4-NS16	1.37 (34.8)	1.37 (34.9)	0.59 (15.0)	0.94 (23.9)	10000 (690)
3/8	1/4	SS-HPA-NS6-NS4	1.42 (36.0)	1.13 (28.6)	0.59 (15.0)	0.56 (14.2)	15000 (1034)
3/8	3/8	SS-HPA-NS6	1.42 (36.0)	1.13 (28.6)	0.59 (15.0)	0.56 (14.2)	15000 (1034)
3/8	1/2	SS-HPA-NS6-NS8	1.61 (41.0)	1.13 (28.6)	0.59 (15.0)	0.75 (19.1)	15000 (1034)
3/8	3/4	SS-HPA-NS6-NS12	1.61 (41.0)	1.13 (28.6)	0.59 (15.0)	0.75 (19.1)	10000 (690)
3/8	1	SS-HPA-NS6-NS16	1.47 (37.3)	1.37 (34.9)	0.59 (15.0)	0.94 (23.9)	10000 (690)
1/2	1/4	SS-HPA-NS8-NS4	1.72 (43.1)	1.37 (34.9)	0.78 (19.8)	0.56 (14.2)	15000 (1034)
1/2	3/8	SS-HPA-NS8-NS6	1.72 (43.1)	1.37 (34.9)	0.78 (19.8)	0.56 (14.2)	15000 (1034)
1/2	1/2	SS-HPA-NS8	1.89 (48.0)	1.37 (34.9)	0.78 (19.8)	0.75 (19.1)	15000 (1034)



15,000 PSI HIGH PRESSURE THREADED PIPE FITTINGS

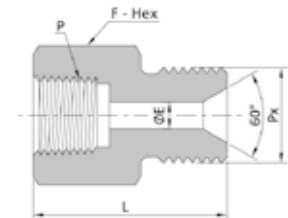
Female NPT threads / Male JIC

		#	Dimensions - in. (mm)			 psig (bar)
P-NPT	Px-SAE/MS		L	F	B	
1/8	7/16-20	SS-HPA-NS2-AN4	1.09 (27.8)	0.63 (15.9)	0.17 (4.4)	15000 (1034)
1/4	7/16-20	SS-HPA-NS4-AN4	1.32 (33.5)	0.94 (23.8)	0.17 (4.4)	15000 (1034)
1/4	9/16-18	SS-HPA-NS4-AN6	1.32 (33.5)	0.94 (23.8)	0.23 (5.8)	15000 (1034)
3/8	9/16-18	SS-HPA-NS6-AN6	1.37 (34.8)	1.13 (28.6)	0.23 (5.8)	15000 (1034)
3/8	3/4-16	SS-HPA-NS6-AN8	1.47 (37.4)	1.13 (28.6)	0.31 (8.0)	15000 (1034)
1/2	3/4-16	SS-HPA-NS8-AN8	1.72 (43.6)	1.37 (34.9)	0.31 (8.0)	15000 (1034)
1/2	7/8-14	SS-HPA-NS8-AN10	1.82 (46.2)	1.37 (34.9)	0.41 (10.4)	15000 (1034)
1/2	1 1/16-12	SS-HPA-NS8-AN12	1.92 (48.8)	1.37 (34.9)	0.46 (11.6)	15000 (1034)



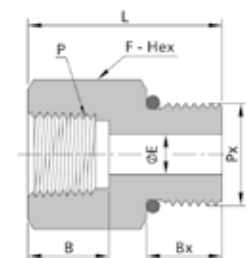
Female NPT threads / Type "M" male

		#	Dimensions - in. (mm)			 psig (bar)
P-NPT	Px-SAE/MS		L	F	E	
1/8	9/16-18	SS-HPA-NS2-HM9	1.13 (28.6)	0.63 (15.9)	0.09 (2.4)	15000 (1034)
1/4	9/16-18	SS-HPA-NS4-HM9	1.37 (34.9)	0.94 (23.8)	0.09 (2.4)	15000 (1034)
1/4	3/4-16	SS-HPA-NS4-HM12	1.50 (38.1)	0.94 (23.8)	0.29 (7.4)	15000 (1034)
3/8	9/16-18	SS-HPA-NS6-HM9	1.44 (36.5)	1.13 (28.6)	0.09 (2.4)	15000 (1034)
3/8	3/4-16	SS-HPA-NS6-HM12	1.56 (39.7)	1.13 (28.6)	0.29 (7.4)	15000 (1034)
1/2	9/16-18	SS-HPA-NS8-HM9	1.63 (41.3)	1.37 (34.9)	0.09 (2.4)	15000 (1034)
1/2	3/4-16	SS-HPA-NS8-HM12	1.75 (44.4)	1.37 (34.9)	0.29 (7.4)	15000 (1034)
1/2	7/8-14	SS-HPA-NS8-HM14	1.87 (47.6)	1.37 (34.9)	0.15 (3.8)	15000 (1034)
3/4	1-12	SS-HPA-NS12-HM16	1.87 (47.6)	1.50 (38.1)	0.39 (10.0)	10000 (690)
1	1 5/16-12	SS-HPA-NS16-HM21	2.06 (52.4)	1.75 (44.5)	0.69 (17.5)	10000 (690)



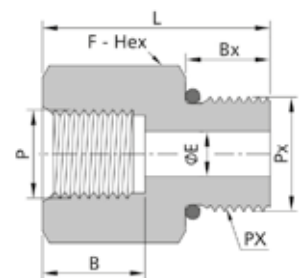
Female NPT threads / Male SAE/MS straight threads

		#	Dimensions - in. (mm)					 psig (bar)
P-NPT	Px-SAE/MS		L	F	B	Bx	E	
1/4	7/16-20	SS-HPA-NS4-SH7	1.20 (30.5)	0.94 (23.8)	0.59 (15.0)	0.43 (11.0)	0.18 (4.5)	9137 (630)
3/8	9/16-18	SS-HPA-NS6-SH9	1.29 (32.7)	1.13 (28.6)	0.59 (15.0)	0.47 (12.0)	0.30 (7.5)	9137 (630)
1/2	3/4-16	SS-HPA-NS8-SH12	1.61 (40.9)	1.37 (34.9)	0.78 (19.8)	0.55 (14.0)	0.39 (10.0)	9137 (630)
3/4	7/8-14	SS-HPA-NS12-SH14	1.67 (42.5)	1.50 (38.1)	0.81 (20.6)	0.63 (16.0)	0.49 (12.5)	9137 (630)



Female SAE/MS straight threads / Male SAE/MS straight threads

		#	Dimensions - in. (mm)				 psig (bar)
P-SAE/MS	Px-SAE/MS		L	F	B	Bx	
7/16-20	9/16-18	SS-HPA-SH7-SH9	1.25 (31.8)	0.81 (20.6)	0.55 (14.0)	0.47 (12.0)	9137 (630)
7/16-20	3/4-16	SS-HPA-SH7-SH12	1.25 (31.8)	0.87 (22.2)	0.55 (14.0)	0.55 (14.0)	9137 (630)
9/16-28	3/4-16	SS-HPA-SH9-SH12	1.42 (36.0)	1.00 (25.4)	0.61 (15.5)	0.55 (14.0)	9137 (630)
9/16-28	7/8-14	SS-HPA-SH9-SH14	1.42 (36.0)	1.00 (25.4)	0.61 (15.5)	0.63 (16.0)	9137 (630)
3/4-16	7/8-14	SS-HPA-SH12-SH14	1.65 (41.8)	30.2 (30.2)	0.69 (17.5)	0.63 (16.0)	9137 (630)

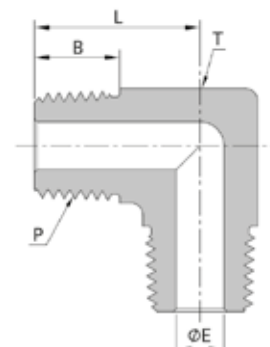


15,000 PSI HIGH PRESSURE THREADED PIPE FITTINGS

MALE ELBOWS

Male NPT threads

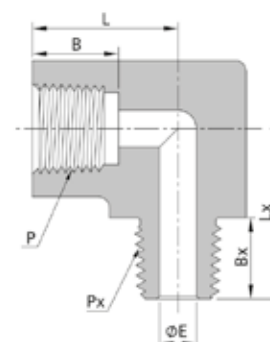
	#	Dimensions - in. (mm)				
P-NPT		L	B	E	T	psig (bar)
1/8	SS-HPME-NS2	0.74 (18.8)	0.38 (9.7)	0.19 (4.8)	0.50 (12.7)	15000 (1034)
1/4	SS-HPME-NS4	1.00 (25.3)	0.56 (14.2)	0.25 (6.4)	0.63 (15.9)	15000 (1034)
3/8	SS-HPME-NS6	1.10 (28.0)	0.56 (14.2)	0.31 (7.9)	0.75 (19.1)	15000 (1034)
1/2	SS-HPME-NS8	1.44 (36.6)	0.75 (19.1)	0.38 (9.6)	1.00 (25.4)	15000 (1034)



STREET ELBOWS

Female NPT threads / Male NPT threads

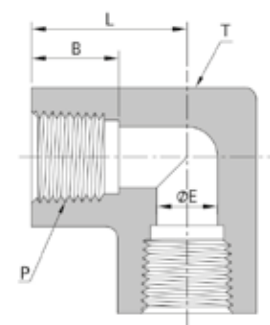
	#	Dimensions - in. (mm)					
P-NPT Px-NPT		L	B	E	Lx	Bx	psig (bar)
1/8 1/8	SS-HPSE-NS2	0.74 (18.8)	0.41 (10.4)	0.19 (4.8)	0.82 (20.9)	0.38 (9.7)	15000 (1034)
1/8 1/4	SS-HPSE-NS2-NS4	0.78 (19.8)	0.41 (10.4)	0.25 (6.4)	1.00 (25.5)	0.56 (14.2)	15000 (1034)
1/8 3/8	SS-HPSE-NS2-NS6	0.95 (24.2)	0.41 (10.4)	0.31 (7.9)	1.07 (27.2)	0.56 (14.2)	15000 (1034)
1/4 1/4	SS-HPSE-NS4	0.99 (25.2)	0.59 (15.0)	0.25 (6.4)	1.06 (27.0)	0.56 (14.2)	15000 (1034)
1/4 3/8	SS-HPSE-NS4-NS6	0.99 (25.2)	0.59 (15.0)	0.31 (7.9)	1.06 (27.0)	0.56 (14.2)	15000 (1034)
1/4 1/2	SS-HPSE-NS4-NS8	1.15 (29.1)	0.59 (15.0)	0.38 (9.6)	1.40 (35.5)	0.75 (19.1)	15000 (1034)
3/8 3/8	SS-HPSE-NS6	1.20 (30.6)	0.59 (15.0)	0.31 (7.9)	1.20 (30.6)	0.56 (14.2)	15000 (1034)
3/8 1/2	SS-HPSE-NS6-NS8	1.20 (30.6)	0.59 (15.0)	0.38 (9.6)	1.38 (35.0)	0.75 (19.1)	15000 (1034)
3/8 3/4	SS-HPSE-NS6-NS12	1.23 (31.2)	0.59 (15.0)	0.54 (13.8)	1.56 (39.6)	0.75 (19.1)	10000 (1034)
1/2 1/2	SS-HPSE-NS8	1.55 (39.4)	0.78 (19.8)	0.38 (9.6)	1.61 (9.6)	0.75 (19.1)	15000 (1034)



FEMALE ELBOWS

Female NPT threads

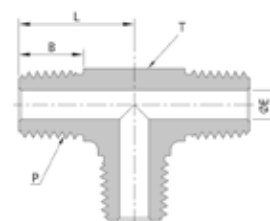
	#	Dimensions - in. (mm)				
P-NPT		L	B	E	T	psig (bar)
1/8	SS-HPE-NS2	0.79 (20.1)	0.41 (10.4)	0.31 (8.0)	0.63 (15.9)	15000 (1034)
1/4	SS-HPE-NS4	0.99 (25.2)	0.59 (15.0)	0.41 (10.4)	0.75 (19.1)	15000 (1034)
3/8	SS-HPE-NS6	1.20 (30.6)	0.59 (15.0)	0.54 (13.8)	1.00 (25.4)	15000 (1034)
1/2	SS-HPE-NS8	1.55 (39.3)	0.78 (19.8)	0.67 (17.0)	1.37 (34.9)	15000 (1034)



MALE TEES

Male NPT threads

	#	Dimensions - in. (mm)				
P-NPT		L	B	E	T	psig (bar)
1/8	SS-HPMT-NS2	0.74 (18.8)	0.38 (9.7)	0.19 (4.8)	0.50 (12.7)	15000 (1034)
1/4	SS-HPMT-NS4	1.00 (25.3)	0.56 (14.2)	0.25 (6.4)	0.63 (15.9)	15000 (1034)
3/8	SS-HPMT-NS6	1.10 (28.0)	0.56 (14.2)	0.31 (7.9)	0.75 (19.1)	15000 (1034)
1/2	SS-HPMT-NS8	1.44 (36.6)	0.75 (19.1)	0.38 (9.6)	1.00 (25.4)	15000 (1034)

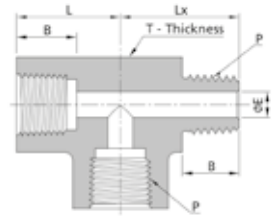


15,000 PSI HIGH PRESSURE THREADED PIPE FITTINGS

MALE STREET TEES

NPT Threads

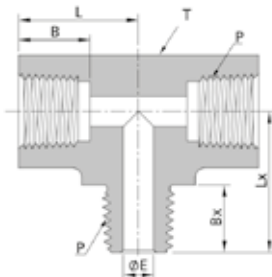
	#	Dimensions - in. (mm)						
P-NPT		L	B	Lx	Bx	E	T	psig (bar)
1/8	SS-HPST-NS2	0.76 (19.4)	0.41 (10.4)	0.82 (20.9)	0.38 (9.7)	0.19 (4.8)	0.63 (15.9)	15000 (1034)
1/4	SS-HPST-NS4	0.99 (25.4)	0.59 (15.0)	1.06 (27.0)	0.56 (14.2)	0.25 (6.4)	0.75 (19.1)	15000 (1034)
3/8	SS-HPST-NS6	1.20 (30.6)	0.59 (15.0)	1.20 (30.6)	0.56 (14.2)	0.31 (7.9)	1.00 (25.4)	15000 (1034)
1/2	SS-HPST-NS8	1.55 (39.4)	0.78 (19.8)	1.61 (40.8)	0.75 (19.1)	0.38 (9.6)	1.37 (34.9)	15000 (1034)
3/4	SS-HPST-NS12	1.72 (43.8)	0.81 (20.6)	1.68 (42.7)	0.75 (19.1)	0.58 (14.8)	1.50 (38.1)	10000 (690)
1	SS-HPST-NS16	2.07 (52.5)	1.00 (25.4)	2.06 (52.3)	0.94 (23.9)	0.79 (20.0)	1.75 (44.5)	10000 (690)



MALE BRANCH TEES

NPT Threads

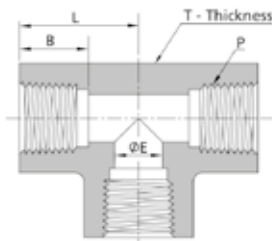
	#	Dimensions - in. (mm)						
P-NPT		L	B	Lx	Bx	E	T	psig (bar)
1/8	SS-HPBT-NS2	0.74 (18.8)	0.41 (10.4)	0.82 (20.9)	0.38 (9.7)	0.19 (4.8)	0.63 (15.9)	15000 (1034)
1/4	SS-HPBT-NS4	0.99 (25.4)	0.59 (15.0)	1.06 (27.0)	0.56 (14.2)	0.25 (6.4)	0.75 (19.1)	15000 (1034)
3/8	SS-HPBT-NS6	1.20 (30.6)	0.59 (15.0)	1.20 (30.6)	0.56 (14.2)	0.31 (7.9)	1.00 (25.4)	15000 (1034)
1/2	SS-HPBT-NS8	1.48 (37.6)	0.78 (19.8)	1.61 (40.8)	0.75 (19.1)	0.38 (9.6)	1.37 (34.9)	15000 (1034)
3/4	SS-HPBT-NS12	1.61 (40.8)	0.81 (20.6)	1.77 (44.9)	0.75 (19.1)	0.58 (14.8)	1.50 (38.1)	10000 (690)
1	SS-HPBT-NS16	1.91 (48.5)	1.00 (25.4)	2.07 (52.5)	0.94 (23.9)	0.79 (20.0)	1.75 (44.5)	10000 (690)



FEMALE TEES

Female NPT threads

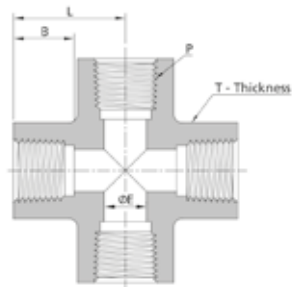
	#	Dimensions - in. (mm)				
P-NPT		L	B	E	T	psig (bar)
1/8	SS-HPT-NS2	0.79 (20.1)	0.41 (10.4)	0.31 (8.0)	0.63 (15.9)	15000 (1034)
1/4	SS-HPT-NS4	0.99 (25.4)	0.59 (15.0)	0.41 (10.4)	0.75 (19.1)	15000 (1034)
3/8	SS-HPT-NS6	1.20 (30.6)	0.59 (15.0)	0.54 (13.8)	1.00 (25.4)	15000 (1034)
1/2	SS-HPT-NS8	1.55 (39.3)	0.78 (19.8)	0.67 (17.0)	1.37 (34.9)	15000 (1034)



FEMALE CROSSES

Female NPT threads

	#	Dimensions - in. (mm)				
P-NPT		L	B	E	T	psig (bar)
1/8	SS-HPCR-NS2	0.74 (18.9)	0.41 (10.4)	0.31 (8.0)	0.63 (15.9)	15000 (1034)
1/4	SS-HPCR-NS4	0.99 (25.4)	0.59 (15.0)	0.41 (10.4)	0.75 (19.1)	15000 (1034)
3/8	SS-HPCR-NS6	1.20 (30.6)	0.59 (15.0)	0.54 (13.8)	1.00 (25.4)	15000 (1034)
1/2	SS-HPCR-NS8	1.49 (37.9)	0.78 (19.8)	0.67 (17.0)	1.37 (34.9)	15000 (1034)



15,000 PSI HIGH PRESSURE PART NUMBER DESCRIPTION

MATERIAL		FITTING TYPE		P1 CONNECTION TYPE		P1 SIZE		P2 CONNECTION TYPE		P2 SIZE		P3 & P4	
SS	316 SS	HPH	Pipe Plugs	NS	NPT	NS and RT Size		Specify in the same way as the P1		Specify in the same way as the P1		Specify in the same way as the P1	
		HPHN	Hex Nipples	RT	ISO Tapered	2	1/8"						
		HPLN	Hex Long Nipples	SH	Heavy-duty SAE/MS (Accordance with SAE J1926-2)	4	1/4"						
		HPC	Pipe Caps	AN	JIC (37° Flare)	6	3/8"						
		HPCG	Hex Couplings	HM	Type "M" Male	8	1/2"						
		HPZC	Zero-Clearance Unions			12	3/4"						
		HPA	Adaptors			16	1"						
		HPME	Male Elbows			SH Size							
		HPSE	Street Elbows			7	7/16-20						
		HPE	Female Elbows			9	9/16-18						
		HPMT	Male Tees			12	3/4-16						
		HPST	Male Street Tees			AN Size							
		HPST	Male Branch Tees			4	7/16-20						
		HPT	Female Tees			6	9/16-18						
		HPCR	Female Cross			8	3/4-16						
						10	7/8-14						
						12	1 1/16-12						
						16	1 5/16-12						
						HM Size							
						9	9/16-18						
						12	3/4-16						
						14	7/8-14						
						18	1-12						
						21	1 5/16-12						

NB: "Part Number Description" is used for composition rules of Abdex product model, not suitable for specific product part number selection, not random combinations. If in doubt, please contact Abdex.

P1, P2, P3 and P4 shall be described in the following orders:

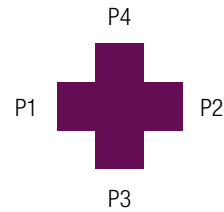
- Female thread end is the first
- NPT-ISO Tapered-Heavy Duty SAE/MS - JIC (37° Flare)-HM
- Describe the descending order as per size if the end Connection types are the same
- Describe the end P1 if all end connections are the same.

P1

P4

P2

P3



NB: "Part Number Description" is used for composition rules of Abdex product model, not suitable for specific product part number selection, not random combinations. If in doubt, please contact Abdex.

P1, P2, P3 and P4 shall be described in the following orders:

- Female thread end is the first
- NPT-ISO Tapered-Heavy Duty SAE/MS - JIC (37° Flare)-HM
- Describe the descending order as per size if the end Connection types are the same
- Describe the end P1 if all end connections are the same.



20,000 / 60,000 PSI HIGH PRESSURE ADAPTORS & COUPLINGS

FEATURES

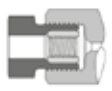
- The hardened threads with smooth surface finishing avoid galling and help to extend the fitting service life
- Every fitting is stamped with size, material, and heat code
- 316 stainless steel is standard material. Other materials are available upon request
- Available to NACE MR-01-75

Ordering number with designator "CP" as for "two-piece" male to male female to male adaptors. They are identical to the "one-piece" designs in length can be ordered by substituting "CP" for "MP" to the "one-piece" adaptor part number listed.



CONFIGURATION	FITTING TYPE	EXAMPLE
	20 Series Male to 20 Series Male	SS-MMA-2MP9-2MP6
	20 Series Male to Male NPT Thread	SS-MMA-2MP9-NS4
	20 Series Male to Male JIC	SS-MMA-2MP6-HM9
	20 Series Male to Type "M" Male	SS-MMA-2MP6-HM9
	60 Series Male to 20 Series Male	SS-MMA-6MP6-2MP4
	60 Series Male to 60 Series Male	SS-MMA-6MP9-6MP4
	60 Series Male to Male NPT Thread	SS-MMA-6MP6-NS4
	60 Series Male to Male JIC	SS-MMA-6MP6-AN6
	60 Series Male to Type "M" Male	SS-MMA-6MP4-HM16
	Type "M" Male to 20 Series Coned and Threaded Nipples	SS-MMA-HM9-2CT6
	Type "M" Male to 60 Series Coned and Threaded Nipples	SS-MMA-HM9-6CT9
	20 Series Female to Female NPT Thread	SS-FFC-2FH6-NS4
	60 Series Female to 15 Series Female	SS-FFC-6FH4-FH8
	60 Series Female to 20 Series Female	SS-FFC-6FH6-2FH4
	60 Series Female to Female NPT Thread	SS-FFC-6FH6-NS4
	20 Series Female to 20 Series Male	SS-FMA-2FH6-2MP9
	20 Series Female to 60 Series Male	SS-FMA-2FH9-6MP4
	20 Series Female to Male NPT Thread	SS-FMA-2FH9-NS4
	20 Series Female to Type "M" Male	SS-FMA-2FH9-HM9
	60 Series Female to 20 Series Male	SS-FMA-6FH9-2MP4
	60 Series Female to 60 Series Male	SS-FMA-6FH6-6MP6
	60 Series Female to Male NPT Thread	SS-FMA-6FH6-NS4
	60 Series Female to Type "M" Male	SS-FMA-6FH6-HM9
	Female NPT Thread to 20 Series Male	SS-FMA-NS4-2CT6
	Female NPT Thread to 20 Series Coned and Threaded Nipples	SS-FMA-NS4-2CT6
	Female NPT Thread to 60 Series Male	SS-FMA-NS6-6MP4
	Female NPT Thread to 60 Series Coned and Threaded Nipples	SS-FMA-NS6-6CT6

20,000 / 60,000 PSI HIGH PRESSURE ADAPTORS & COUPLINGS

CONFIGURATION	FITTING TYPE	EXAMPLE
	Female NPT Thread	NS
	Male NPT Thread	NS
	20 Series Male	2MP
	20 Series Male	2CP
	20 Series Female	2FH
	20 Series Coned and Threaded Nipples	2CT
	Male JIC	AN
	60 Series Male	6MP
	60 Series Male	6CP
	60 Series Female	6FH
	60 Series Coned and Threaded Nipples	6CT
	Type "M" Male	HM

THREAD SIZES

2MP4 / 2CP4 / 2FH4: 7/16-20	2CT4: 1/4-28	6MP4 / 6CP4 / 6FH4: 9/16-18	NS2: 1/8-27 NPT	AN4: 7/16-20	HM9: 9/16-18
2MP6 / 2CP6 / 2FH6: 9/16-18	2CT6: 3/8-28	6MP6 / 6CP6 / 6FH6: 3/4-16	NS4: 9/16-18	AN6: 9/16-18	HM12: 3/4-16
2MP9 / 2CP9 / 2FH9: 13/16-16	2CT9: 9/16-18	6MP9 / 6CP9 / 6FH9: 1 1/18-12	NS6: 1/4-18 NPT	AN8: 3/4-16	HM14: 7/8-14
2MP12 / 2CP12 / 2FH12: 3/4-14	2CT12: 3/4-16	6CT4: 1/4-28	NS8: 1/2-14 NPT	AN10: 7/8-14	HM16: 1-12
2MP16 / 2CP16 / 2FH16: 1 3/8-12	2CT16: 1 1/4	6CT6: 3/8-24	NS12: 3/4-14 NPT	AN12: 1 1/16-12	HM21: 1 5/16-12
		6CT9: 9/16-18	NS16: 1-11.5 NPT	AN16: 1-5/16-12	

20,000 / 60,000 PSI HIGH PRESSURE ADAPTORS & COUPLINGS

20,000 psi Medium pressure male to male NPT threads

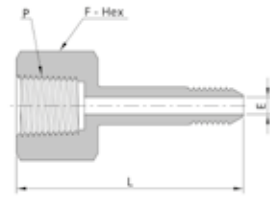
 P-Connection	Px-Connection	#	Dimensions - in. (mm)			 psig (bar)
			L	F	E	
2MP4	1/8 NPT	SS-MMA-2MP4-NS2	1.37 (34.9)	0.50 (12.7)	0.11 (2.8)	15000 (1034)
2MP4	1/4 NPT	SS-MMA-2MP4-NS4	1.56 (39.7)	0.56 (14.3)	0.11 (2.8)	15000 (1034)
2MP4	3/8 NPT	SS-MMA-2MP4-NS6	1.63 (41.3)	0.69 (17.5)	0.11 (2.8)	15000 (1034)
2MP4	1/2 NPT	SS-MMA-2MP4-NS8	1.87 (47.6)	0.87 (22.2)	0.11 (2.8)	15000 (1034)
2MP4	3/4 NPT	SS-MMA-2MP4-NS12	1.94 (49.2)	1.06 (27.0)	0.11 (2.8)	10000 (690)
2MP4	1 NPT	SS-MMA-2MP4-NS16	2.25 (57.2)	1.37 (34.9)	0.11 (2.8)	10000 (690)
2MP6	1/8 NPT	SS-MMA-2MP6-NS2	1.56 (39.7)	0.63 (15.9)	0.19 (4.8)	15000 (1034)
2MP6	1/4 NPT	SS-MMA-2MP6-NS4	1.75 (44.5)	0.63 (15.9)	0.20 (5.2)	15000 (1034)
2MP6	3/8 NPT	SS-MMA-2MP6-NS6	1.75 (44.5)	0.69 (17.5)	0.20 (5.2)	15000 (1034)
2MP6	1/2 NPT	SS-MMA-2MP6-NS8	2.00 (50.8)	0.87 (22.2)	0.20 (5.2)	15000 (1034)
2MP6	3/4 NPT	SS-MMA-2MP6-NS12	2.06 (52.4)	1.06 (27.0)	0.20 (5.2)	10000 (690)
2MP6	1 NPT	SS-MMA-2MP6-NS16	2.37 (60.3)	1.37 (34.9)	0.20 (5.2)	10000 (690)
2MP9	1/8 NPT	SS-MMA-2MP9-NS2	1.87 (47.6)	0.94 (23.8)	0.19 (4.8)	15000 (1034)
2MP9	1/4 NPT	SS-MMA-2MP9-NS4	2.06 (52.4)	0.94 (23.8)	0.25 (6.4)	15000 (1034)
2MP9	3/8 NPT	SS-MMA-2MP9-NS6	2.06 (52.4)	0.94 (23.8)	0.31 (7.9)	15000 (1034)
2MP9	1/2 NPT	SS-MMA-2MP9-NS8	2.25 (57.2)	0.94 (23.8)	0.31 (7.9)	15000 (1034)
2MP9	3/4 NPT	SS-MMA-2MP9-NS12	2.31 (58.7)	1.06 (27.0)	0.31 (7.9)	10000 (690)
2MP9	1 NPT	SS-MMA-2MP9-NS16	2.56 (65.1)	1.37 (34.9)	0.31 (7.9)	10000 (690)
2MP12	1/8 NPT	SS-MMA-2MP12-NS2	2.13 (54.0)	1.19 (30.2)	0.19 (4.8)	15000 (1034)
2MP12	1/4 NPT	SS-MMA-2MP12-NS4	2.31 (58.7)	1.19 (30.2)	0.25 (6.4)	15000 (1034)
2MP12	3/8 NPT	SS-MMA-2MP12-NS6	2.31 (58.7)	1.19 (30.2)	0.31 (7.9)	15000 (1034)
2MP12	1/2 NPT	SS-MMA-2MP12-NS8	2.50 (63.5)	1.19 (30.2)	0.38 (9.6)	15000 (1034)
2MP12	3/4 NPT	SS-MMA-2MP12-NS12	2.50 (63.5)	1.19 (30.2)	0.44 (11.1)	10000 (690)
2MP12	1 NPT	SS-MMA-2MP12-NS16	2.75 (69.9)	1.37 (34.9)	0.44 (11.1)	10000 (690)
2MP16	1/8 NPT	SS-MMA-2MP16-NS2	2.69 (68.3)	1.50 (38.1)	0.19 (4.8)	15000 (1034)
2MP16	1/4 NPT	SS-MMA-2MP16-NS4	2.81 (71.4)	1.50 (38.1)	0.25 (6.4)	15000 (1034)
2MP16	3/8 NPT	SS-MMA-2MP16-NS6	2.81 (71.4)	1.50 (38.1)	0.31 (7.9)	15000 (1034)
2MP16	1/2 NPT	SS-MMA-2MP16-NS8	3.06 (77.8)	1.50 (38.1)	0.38 (9.6)	15000 (1034)
2MP16	3/4 NPT	SS-MMA-2MP16-NS12	3.06 (82.6)	1.50 (38.1)	0.56 (14.3)	10000 (690)
2MP16	1 NPT	SS-MMA-2MP16-NS16	3.25 (82.6)	1.50 (38.1)	0.56 (14.3)	10000 (690)



20,000 / 60,000 PSI HIGH PRESSURE ADAPTORS & COUPLINGS

Female NPT threads to 20,000 psi medium pressure coned and threaded nipples

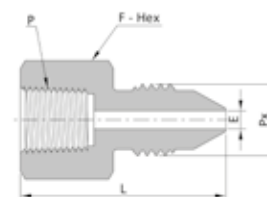
 P-Connection	Px-Connection	#	Dimensions - in. (mm)			 psig (bar)
			L	F	E	
1/8 NPT	2CT4	SS-FMA-NS2-2CT4	1.50 (38.1)	0.63 (15.9)	0.11 (2.8)	15000 (1034)
1/8 NPT	2CT6	SS-FMA-NS2-2CT6	1.75 (44.5)	0.63 (15.9)	0.20 (5.2)	15000 (1034)
1/8 NPT	2CT9	SS-FMA-NS2-2CT9	1.94 (49.2)	0.63 (15.9)	0.31 (7.9)	15000 (1034)
1/8 NPT	2CT12	SS-FMA-NS2-2CT12	2.13 (54.0)	0.87 (22.2)	0.31 (7.9)	15000 (1034)
1/8 NPT	2CT16	SS-FMA-NS2-2CT16	2.81 (71.4)	1.13 (28.6)	0.31 (7.9)	15000 (1034)
1/4 NPT	2CT4	SS-FMA-NS4-2CT4	1.75 (44.5)	0.94 (23.8)	0.11 (2.8)	15000 (1034)
1/4 NPT	2CT6	SS-FMA-NS4-2CT6	2.00 (50.8)	0.94 (23.8)	0.20 (5.2)	15000 (1034)
1/4 NPT	2CT9	SS-FMA-NS4-2CT9	2.19 (55.6)	0.94 (23.8)	0.31 (7.9)	15000 (1034)
1/4 NPT	2CT19	SS-FMA-NS4-2CT12	2.44 (61.9)	1.13 (28.6)	0.41 (10.4)	15000 (1034)
1/4 NPT	2CT16	SS-FMA-NS4-2CT16	2.94 (74.5)	1.13 (28.6)	0.41 (10.4)	15000 (1034)
3/8 NPT	2CT6	SS-FMA-NS6-2CT6	2.06 (52.4)	1.13 (28.6)	0.20 (5.2)	15000 (1034)
3/8 NPT	2CT9	SS-FMA-NS6-2CT9	2.25 (57.2)	1.13 (28.6)	0.31 (7.9)	15000 (1034)
3/8 NPT	2CT12	SS-FMA-NS6-2CT12	2.50 (63.5)	1.13 (28.6)	0.44 (11.1)	15000 (1034)
3/8 NPT	2CT16	SS-FMA-NS6-2CT16	3.00 (76.2)	1.13 (28.6)	0.56 (14.3)	15000 (1034)
1/2 NPT	2CT9	SS-FMA-NS8-2CT9	2.50 (63.5)	1.37 (34.9)	0.31 (7.9)	15000 (1034)
1/2 NPT	2CT12	SS-FMA-NS8-2CT12	2.75 (69.9)	1.37 (34.9)	0.44 (11.1)	15000 (1034)
1/2 NPT	2CT16	SS-FMA-NS8-2CT16	3.25 (82.6)	1.37 (34.9)	0.56 (14.3)	15000 (1034)
3/4 NPT	2CT9	SS-FMA-NS12-2CT9	2.56 (65.1)	1.50 (38.1)	0.31 (7.9)	10000 (1034)
3/4 NPT	2CT12	SS-FMA-NS12-2CT12	2.81 (71.4)	1.50 (38.1)	0.44 (11.1)	10000 (1034)
3/4 NPT	2CT16	SS-FMA-NS12-2CT16	3.39 (86.0)	1.50 (38.1)	0.56 (14.3)	10000 (1034)
1 NPT	2CT12	SS-FMA-NS16-2CT12	3.13 (79.4)	1.75 (44.5)	0.44 (11.1)	10000 (690)
1 NPT	2CT16	SS-FMA-NS16-2CT16	3.61 (92.2)	1.75 (44.5)	0.56 (14.3)	10000 (690)



20,000 / 60,000 PSI HIGH PRESSURE ADAPTORS & COUPLINGS

Female NPT threads to 20,000 psi medium pressure male

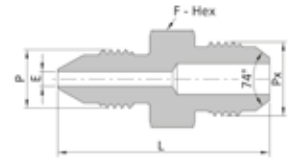
 P-Connection	Px-Connection	#	Dimensions - in. (mm)			 psig (bar)
			L	F	E	
1/8 NPT	2MP4	SS-FMA-NS2-2MP4	1.25 (31.8)	0.63 (15.9)	0.11 (2.8)	15000 (1034)
1/8 NPT	2MP6	SS-FMA-NS2-2MP6	1.37 (34.9)	0.63 (15.9)	0.20 (5.2)	15000 (1034)
1/8 NPT	2MP9	SS-FMA-NS2-2MP9	1.50 (38.1)	0.94 (23.8)	0.31 (7.9)	15000 (1034)
1/8 NPT	2MP12	SS-FMA-NS2-2MP12	1.75 (44.5)	1.19 (30.2)	0.31 (7.9)	15000 (1034)
1/4 NPT	2MP16	SS-FMA-NS2-2MP16	2.37 (60.3)	1.50 (38.1)	0.3 (7.9)	15000 (1034)
1/4 NPT	2MP4	SS-FMA-NS4-2MP4	1.44 (36.5)	0.94 (23.8)	0.11 (2.8)	15000 (1034)
1/4 NPT	2MP6	SS-FMA-NS4-2MP6	1.63 (41.3)	0.94 (23.8)	0.20 (5.2)	15000 (1034)
1/4 NPT	2MP9	SS-FMA-NS4-2MP9	1.75 (44.5)	0.94 (23.8)	0.31 (7.9)	15000 (1034)
1/4 NPT	2MP12	SS-FMA-NS4-2MP12	1.87 (47.6)	1.19 (30.2)	0.41 (10.4)	15000 (1034)
1/4 NPT	2MP16	SS-FMA-NS4-2MP16	2.37 (60.3)	1.50 (38.1)	0.41 (10.4)	15000 (1034)
3/8 NPT	2MP4	SS-FMA-NS6-2MP4	1.50 (38.1)	1.13 (28.6)	0.11 (2.8)	15000 (1034)
3/8 NPT	2MP6	SS-FMA-NS6-2MP6	1.69 (42.9)	1.13 (28.6)	0.20 (5.2)	15000 (1034)
3/8 NPT	2MP9	SS-FMA-NS6-2MP9	1.81 (46.0)	1.13 (28.6)	0.31 (7.9)	15000 (1034)
3/8 NPT	2MP12	SS-FMA-NS6-2MP12	2.00 (50.8)	1.19 (30.2)	0.44 (11.1)	15000 (1034)
3/8 NPT	2MP16	SS-FMA-NS6-2MP16	2.37 (60.3)	1.50 (38.1)	0.56 (14.3)	15000 (1034)
1/2 NPT	2MP4	SS-FMA-NS8-2MP4	1.75 (44.5)	1.37 (34.9)	0.11 (2.8)	15000 (1034)
1/2 NPT	2MP6	SS-FMA-NS8-2MP6	1.87 (47.6)	1.37 (34.9)	0.20 (5.2)	15000 (1034)
1/2 NPT	2MP9	SS-FMA-NS8-2MP9	2.06 (52.4)	1.37 (34.9)	0.31 (7.9)	15000 (1034)
1/2 NPT	2MP12	SS-FMA-NS8-2MP12	2.19 (55.6)	1.37 (34.9)	0.44 (11.1)	15000 (1034)
1/2 NPT	2MP16	SS-FMA-NS8-2MP16	2.56 (65.1)	1.50 (38.1)	0.56 (14.3)	15000 (1034)
3/4 NPT	2MP4	SS-FMA-NS12-2MP4	1.81 (46.0)	1.50 (38.1)	0.11 (2.8)	10000 (690)
3/4 NPT	2MP6	SS-FMA-NS12-2MP6	1.94 (49.2)	1.50 (38.1)	0.20 (5.2)	10000 (690)
3/4 NPT	2MP9	SS-FMA-NS12-2MP9	2.13 (54.0)	1.50 (38.1)	0.31 (7.9)	10000 (690)
3/4 NPT	2MP12	SS-FMA-NS12-2MP12	2.13 (58.7)	1.50 (38.1)	0.44 (11.1)	10000 (690)
3/4 NPT	2MP16	SS-FMA-NS12-2MP16	2.75 (69.9)	1.50 (38.1)	0.56 (14.3)	10000 (690)
1 NPT	2MP4	SS-FMA-NS16-2MP4	2.06 (52.4)	1.75 (44.5)	0.11 (2.8)	10000 (690)
1 NPT	2MP6	SS-FMA-NS16-2MP6	2.19 (55.6)	1.75 (44.5)	0.20 (5.2)	10000 (690)
1 NPT	2MP9	SS-FMA-NS16-2MP9	2.44 (61.9)	1.75 (44.5)	0.31 (7.9)	10000 (690)
1 NPT	2MP12	SS-FMA-NS16-2MP12	2.56 (63.5)	1.75 (44.5)	0.44 (11.1)	10000 (690)
1 NPT	2MP16	SS-FMA-NS16-2MP16	3.06 (77.8)	1.75 (44.5)	0.56 (14.3)	10000 (690)



20,000 / 60,000 PSI HIGH PRESSURE ADAPTORS & COUPLINGS

20,000 psi Medium pressure male to male JIC

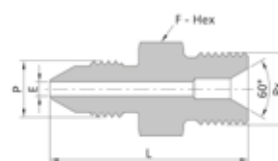
 P-Connection	 Px-Connection	#	Dimensions - in. (mm)			 psig (bar)
			L	F	E	
2MP4	1/4 JIC	SS-MMA-2MP4-AN4	1.50 (38.1)	0.50 (12.7)	0.11 (2.8)	20000 (1379)
2MP4	3/8 JIC	SS-MMA-2MP4-AN6	1.63 (41.3)	0.63 (15.9)	0.11 (2.8)	20000 (1379)
2MP4	1/2 JIC	SS-MMA-2MP4-AN8	1.75 (44.5)	0.81 (20.6)	0.11 (2.8)	20000 (1379)
2MP4	5/8 JIC	SS-MMA-2MP4-AN10	1.87 (47.6)	0.94 (23.8)	0.11 (2.8)	20000 (1379)
2MP4	3/4 JIC	SS-MMA-2MP4-AN12	2.06 (52.4)	1.13 (28.6)	0.11 (2.8)	15000 (1034)
2MP4	1 JIC	SS-MMA-2MP4-AN16	2.19 (55.6)	1.37 (34.9)	0.11 (2.8)	15000 (1034)
2MP6	1/4 JIC	SS-MMA-2MP6-AN4	1.75 (44.5)	0.63 (15.9)	0.17 (4.4)	20000 (1379)
2MP6	3/8 JIC	SS-MMA-2MP6-AN6	1.75 (44.5)	0.63 (15.9)	0.20 (5.2)	20000 (1379)
2MP6	1/2 JIC	SS-MMA-2MP6-AN8	1.87 (47.6)	0.81 (20.6)	0.20 (5.2)	20000 (1379)
2MP6	5/8 JIC	SS-MMA-2MP6-AN10	2.06 (52.4)	0.94 (23.8)	0.20 (5.2)	20000 (1379)
2MP6	3/4 JIC	SS-MMA-2MP6-AN12	2.25 (57.2)	1.13 (28.6)	0.20 (5.2)	15000 (1034)
2MP6	1 JIC	SS-MMA-2MP6-AN16	2.37 (60.3)	1.37 (34.9)	0.20 (5.2)	15000 (1034)
2MP9	1/4 JIC	SS-MMA-2MP9-AN4	2.00 (50.8)	0.94 (23.8)	0.17 (4.4)	20000 (1379)
2MP9	3/8 JIC	SS-MMA-2MP9-AN6	2.06 (52.4)	0.94 (23.8)	0.23 (5.8)	20000 (1379)
2MP9	1/2 JIC	SS-MMA-2MP9-AN8	2.13 (54.0)	0.94 (23.8)	0.31 (7.9)	20000 (1379)
2MP9	3/8 JIC	SS-MMA-2MP9-AN10	2.25 (57.2)	0.94 (23.8)	0.31 (7.9)	20000 (1379)
2MP9	3/4 JIC	SS-MMA-2MP9-AN12	2.44 (61.9)	1.13 (28.6)	0.31 (7.9)	15000 (1034)
2MP9	1 JIC	SS-MMA-2MP9-AN16	2.56 (65.1)	1.37 (34.9)	0.31 (7.9)	15000 (1034)
2MP12	1/4 JIC	SS-MMA-2MP12-AN4	2.31 (58.7)	1.19 (30.2)	0.17 (4.4)	20000 (1379)
2MP12	3/8 JIC	SS-MMA-2MP12-AN6	2.31 (58.7)	1.19 (30.2)	0.23 (5.8)	20000 (1379)
2MP12	1/2 JIC	SS-MMA-2MP12-AN8	2.37 (60.3)	1.19 (30.2)	0.31 (7.9)	20000 (1379)
2MP12	5/8 JIC	SS-MMA-2MP12-AN10	2.50 (63.5)	1.19 (30.2)	0.37 (9.4)	20000 (1379)
2MP12	3/4 JIC	SS-MMA-2MP12-AN12	2.63 (66.7)	1.19 (30.2)	0.44 (11.1)	15000 (1034)
2MP12	1 JIC	SS-MMA-2MP12-AN16	2.69 (68.3)	1.37 (34.9)	0.44 (11.1)	15000 (1034)
2MP16	1/4 JIC	SS-MMA-2MP16-AN4	2.81 (71.4)	1.50 (38.1)	0.17 (4.4)	20000 (1379)
2MP16	3/8 JIC	SS-MMA-2MP16-AN6	2.81 (71.4)	1.50 (38.1)	0.23 (5.8)	20000 (1379)
2MP16	1/2 JIC	SS-MMA-2MP16-AN8	2.94 (74.6)	1.50 (38.1)	0.31 (7.9)	20000 (1379)
2MP16	5/8 JIC	SS-MMA-2MP16-AN10	3.06 (77.8)	1.50 (38.1)	0.37 (9.4)	20000 (1379)
2MP16	3/4 JIC	SS-MMA-2MP16-AN12	3.13 (79.4)	1.50 (38.1)	0.46 (11.6)	15000 (1034)
2MP16	1 JIC	SS-MMA-2MP16-AN16	3.19 (81.0)	1.50 (38.1)	0.56 (14.3)	15000 (1034)



20,000 / 60,000 PSI HIGH PRESSURE ADAPTORS & COUPLINGS

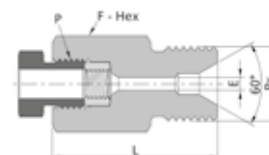
20,000 psi Medium pressure male to type "M" male

		#	Dimensions - in. (mm)			 psig (bar)
P-Connection	Px-Connection		L	F	E	
2MP4	HM9	SS-MMA-2MP4-HM9	1.52 (38.7)	0.63 (15.9)	0.09 (2.4)	20000 (1379)
2MP4	HM12	SS-MMA-2MP4-HM12	1.69 (43.0)	0.75 (19.1)	0.11 (2.8)	20000 (1379)
2MP4	HM14	SS-MMA-2MP4-HM14	1.90 (48.2)	1.00 (25.4)	0.11 (2.8)	20000 (1379)
2MP4	HM16	SS-MMA-2MP4-HM16	1.78 (45.3)	1.00 (25.4)	0.11 (2.8)	20000 (1379)
2MP4	HM21	SS-MMA-2MP4-HM21	1.90 (48.3)	1.37 (34.9)	0.11 (2.8)	20000 (1379)
2MP6	HM9	SS-MMA-2MP6-HM9	1.67 (42.4)	0.63 (15.9)	0.09 (2.4)	20000 (1379)
2MP6	HM12	SS-MMA-2MP6-HM12	1.84 (46.7)	0.75 (19.1)	0.20 (5.2)	20000 (1379)
2MP6	HM14	SS-MMA-2MP6-HM14	2.04 (51.9)	1.00 (25.4)	0.15 (3.8)	20000 (1379)
2MP6	HM16	SS-MMA-2MP6-HM16	1.93 (49.0)	1.00 (25.4)	0.20 (5.2)	20000 (1379)
2MP6	HM21	SS-MMA-2MP6-HM21	2.05 (52.0)	1.37 (34.9)	0.20 (5.2)	20000 (1379)
2MP9	HM9	SS-MMA-2MP9-HM9	1.95 (49.6)	0.94 (23.8)	0.09 (2.4)	20000 (1379)
2MP6	HM12	SS-MMA-2MP9-HM12	2.08 (52.9)	0.94 (23.8)	0.29 (7.4)	20000 (1379)
2MP9	HM14	SS-MMA-2MP9-HM14	2.23 (56.7)	1.00 (25.4)	0.15 (3.8)	20000 (1379)
2MP9	HM16	SS-MMA-2MP9-HM16	2.12 (53.8)	1.00 (25.4)	0.31 (7.9)	20000 (1379)
2MP9	HM12	SS-MMA-2MP9-HM21	2.24 (56.8)	1.37 (34.9)	0.31 (7.9)	20000 (1379)
2MP12	HM9	SS-MMA-2MP12-HM9	2.22 (56.3)	1.19 (30.2)	0.09 (2.4)	20000 (1379)
2MP12	HM12	SS-MMA-2MP12-HM12	2.35 (59.6)	1.19 (30.2)	0.29 (7.4)	20000 (1379)
2MP12	HM14	SS-MMA-2MP12-HM14	2.47 (62.8)	1.19 (30.2)	0.15 (3.8)	20000 (1379)
2MP12	HM16	SS-MMA-2MP12-HM16	2.36 (59.9)	1.19 (30.2)	0.39 (10.0)	20000 (1379)
2MP12	HM21	SS-MMA-2MP12-HM21	2.41 (61.1)	1.37 (34.9)	0.44 (11.1)	20000 (1379)
2MP16	HM9	SS-MMA-2MP16-HM9	2.77 (70.3)	1.50 (38.1)	0.09 (2.4)	20000 (1379)
2MP16	HM12	SS-MMA-2MP16-HM12	2.90 (73.6)	1.50 (38.1)	0.29 (7.4)	20000 (1379)
2MP16	HM14	SS-MMA-2MP16-HM14	3.02 (76.8)	1.50 (38.1)	0.15 (3.8)	20000 (1379)
2MP16	HM16	SS-MMA-2MP16-HM16	2.91 (73.9)	1.50 (38.1)	0.39 (10.0)	20000 (1379)
2MP16	HM21	SS-MMA-2MP16-HM21	2.89 (73.3)	1.50 (38.1)	0.56 (14.3)	20000 (1379)



20,000 psi Medium pressure female to type "M" male

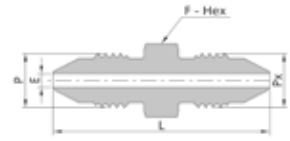
		#	Dimensions - in. (mm)			 psig (bar)
P-Connection	Px-Connection		L	F	E	
2FH4	HM9	SS-FMA-2FH4-HM9	1.19 (30.2)	0.63 (15.9)	0.09 (2.4)	20000 (1379)
2FH4	HM12	SS-FMA-2FH4-HM12	1.31 (33.3)	0.75 (19.1)	0.11 (2.8)	20000 (1379)
2FH4	HM14	SS-FMA-2FH4-HM14	1.50 (38.1)	1.00 (25.4)	0.11 (2.8)	20000 (1379)
2FH6	HM9	SS-FMA-2FH6-HM9	1.37 (34.9)	0.75 (19.1)	0.09 (2.4)	20000 (1379)
2FH6	HM12	SS-FMA-2FH6-HM12	1.50 (38.1)	0.75 (19.1)	0.09 (2.4)	20000 (1379)
2FH6	HM14	SS-FMA-2FH6-HM14	1.63 (41.3)	1.00 (25.4)	0.15 (3.8)	20000 (1379)
2FH6	HM16	SS-FMA-2FH6-HM16	1.63 (41.3)	1.00 (25.4)	0.20 (5.2)	20000 (1379)
2FH9	HM9	SS-FMA-2FH9-HM9	1.69 (42.9)	1.00 (25.4)	0.09 (2.4)	20000 (1379)
2FH9	HM12	SS-FMA-2FH9-HM12	1.81 (46.0)	1.00 (25.4)	0.29 (7.4)	20000 (1379)
2FH9	HM14	SS-FMA-2FH9-HM14	1.94 (49.2)	1.00 (25.4)	0.15 (3.8)	20000 (1379)
2FH9	HM16	SS-FMA-2FH9-HM16	1.81 (46.0)	1.00 (25.4)	0.31 (7.9)	20000 (1379)
2FH9	HM21	SS-FMA-2FH9-HM21	1.81 (46.0)	1.37 (34.9)	0.31 (7.9)	20000 (1379)
2FH12	HM14	SS-FMA-2FH9-HM14	2.19 (55.6)	1.37 (34.9)	0.15 (3.8)	20000 (1379)
2FH12	HM16	SS-FMA-2FH9-HM16	2.13 (54.0)	1.37 (34.9)	0.39 (10.0)	20000 (1379)
2FH12	HM21	SS-FMA-2FH9-HM21	2.00 (50.8)	1.37 (34.9)	0.44 (11.1)	20000 (1379)
2FH16	HM21	SS-FMA-2FH16-HM21	2.56 (65.1)	1.75 (44.5)	0.56 (14.3)	20000 (1379)



20,000 / 60,000 PSI HIGH PRESSURE ADAPTORS & COUPLINGS

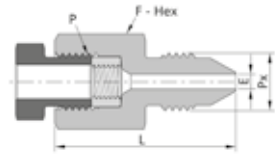
20,000 psi Medium pressure male to 20,000 psi medium pressure male

 P-Connection	Px-Connection	#	Dimensions - in. (mm)			 psig (bar)
			L	F	E	
2MP4	2MP4	SS-MMA-2MP4	1.63 (41.3)	0.50 (12.7)	0.11 (2.8)	20000 (1379)
2MP6	2MP4	SS-MMA-2MP6-2MP4	1.87 (47.6)	0.63 (15.9)	0.11 (2.8)	20000 (1379)
2MP6	2MP6	SS-MMA-2MP6	2.00 (50.8)	0.63 (15.9)	0.20 (5.2)	20000 (1379)
2MP9	2MP4	SS-MMA-2MP9-2MP4	2.13 (54.0)	0.94 (23.8)	0.11 (2.8)	20000 (1379)
2MP9	2MP6	SS-MMA-2MP9-2MP6	2.31 (58.7)	0.94 (23.8)	0.20 (5.2)	20000 (1379)
2MP9	2MP9	SS-MMA-2MP9	2.50 (63.5)	0.94 (23.8)	0.31 (7.9)	20000 (1379)
2MP12	2MP4	SS-MMA-2MP12-2MP4	2.44 (61.9)	1.19 (30.2)	0.11 (2.8)	20000 (1379)
2MP12	2MP6	SS-MMA-2MP12-2MP6	2.56 (65.1)	1.19 (30.2)	0.20 (5.2)	20000 (1379)
2MP12	2MP9	SS-MMA-2MP12-2MP9	2.75 (69.9)	1.19 (30.2)	0.31 (7.9)	20000 (1379)
2MP12	2MP12	SS-MMA-2MP12	2.94 (74.6)	1.19 (30.2)	0.44 (11.1)	20000 (1379)
2MP16	2MP4	SS-MMA-2MP16-2MP4	3.00 (76.2)	1.50 (38.1)	0.11 (2.8)	20000 (1379)
2MP16	2MP6	SS-MMA-2MP16-2MP6	3.13 (79.4)	1.50 (38.1)	0.20 (5.2)	20000 (1379)
2MP16	2MP9	SS-MMA-2MP16-2MP9	3.31 (84.2)	1.50 (38.1)	0.31 (7.9)	20000 (1379)
2MP16	2MP12	SS-MMA-2MP16-2MP12	3.44 (87.4)	1.50 (38.1)	0.44 (11.1)	20000 (1379)
2MP16	2MP16	SS-MMA-2MP16	3.94 (100.2)	1.50 (38.1)	0.56 (14.3)	20000 (1379)



20,000 psi Medium pressure female to 20,000 psi medium pressure male

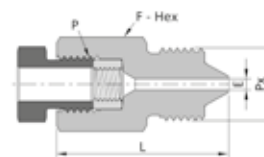
 P-Connection	Px-Connection	#	Dimensions - in. (mm)			 psig (bar)
			L	F	E	
2FH4	2MP4	SS-FMA-2FH4-2MP4	1.37 (34.9)	0.63 (15.9)	0.11 (2.8)	20000 (1379)
2FH4	2MP6	SS-FMA-2FH4-2MP6	1.50 (38.1)	0.63 (15.9)	0.11 (2.8)	20000 (1379)
2FH4	2MP9	SS-FMA-2FH4-2MP9	1.63 (41.3)	0.94 (23.8)	0.11 (2.8)	20000 (1379)
2FH4	2MP12	SS-FMA-2FH4-2MP12	1.75 (44.5)	1.19 (30.2)	0.11 (2.8)	20000 (1379)
2FH4	2MP16	SS-FMA-2FH4-2MP16	2.37 (60.3)	1.50 (38.1)	0.11 (2.8)	20000 (1379)
2FH6	2MP4	SS-FMA-2FH6-2MP4	1.69 (42.9)	0.75 (19.1)	0.11 (2.8)	20000 (1379)
2FH6	2MP6	SS-FMA-2FH6-2MP6	1.69 (42.9)	0.75 (19.1)	0.20 (5.2)	20000 (1379)
2FH6	2MP9	SS-FMA-2FH6-2MP9	1.87 (47.6)	0.94 (23.8)	0.20 (5.2)	20000 (1379)
2FH6	2MP12	SS-FMA-2FH6-2MP12	1.94 (49.2)	1.19 (30.2)	0.20 (5.2)	20000 (1379)
2FH6	2MP16	SS-FMA-2FH6-2MP16	2.37 (60.3)	1.50 (38.1)	0.20 (5.2)	20000 (1379)
2FH9	2MP4	SS-FMA-2FH9-2MP4	1.94 (49.2)	1.00 (25.4)	0.11 (2.8)	20000 (1379)
2FH9	2MP6	SS-FMA-2FH9-2MP6	1.06 (52.4)	1.00 (25.4)	0.20 (5.2)	20000 (1379)
2FH9	2MP9	SS-FMA-2FH9-2MP9	2.13 (54.0)	1.00 (25.4)	0.31 (7.9)	20000 (1379)
2FH9	2MP12	SS-FMA-2FH9-2MP12	2.25 (57.2)	1.19 (30.2)	0.31 (7.9)	20000 (1379)
2FH9	2MP16	SS-FMA-2FH9-2MP16	2.50 (63.5)	1.50 (38.1)	0.31 (7.9)	20000 (1379)
2FH12	2MP4	SS-FMA-2FH12-2MP4	1.19 (55.6)	1.37 (34.9)	0.11 (2.8)	20000 (1379)
2FH16	2MP6	SS-FMA-2FH12-2MP6	2.31 (58.7)	1.37 (34.9)	0.20 (5.2)	20000 (1379)
2FH12	2MP9	SS-FMA-2FH12-2MP9	2.44 (61.9)	1.37 (34.9)	0.31 (7.9)	20000 (1379)
2FH12	2MP12	SS-FMA-2FH12-2MP12	2.56 (65.1)	1.37 (34.9)	0.44 (11.1)	20000 (1379)
2FH12	2MP16	SS-FMA-2FH12-2MP16	2.94 (74.6)	1.50 (38.1)	0.44 (11.1)	20000 (1379)
2FH16	2MP9	SS-FMA-2FH16-2MP9	3.06 (77.8)	1.75 (44.5)	0.31 (7.9)	20000 (1379)
2FH16	2MP12	SS-FMA-2FH16-2MP12	3.19 (81.0)	1.75 (44.5)	0.44 (11.1)	20000 (1379)
2FH16	2MP16	SS-FMA-2FH16-2MP16	3.50 (88.9)	1.75 (44.5)	0.56 (14.3)	20000 (1379)



20,000 / 60,000 PSI HIGH PRESSURE ADAPTORS & COUPLINGS

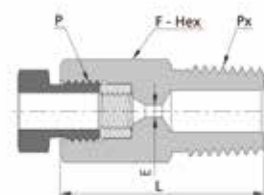
20,000 psi Medium pressure female to 60,000 psi high pressure male

		#	Dimensions - in. (mm)			 psig (bar)
P-Connection	Px-Connection		L	F	E	
2FH4	6MP4	SS-FMA-2FH4-6MP4	1.31 (33.3)	0.63 (15.9)	0.08 (2.1)	20000 (1379)
2FH4	6MP6	SS-FMA-2FH4-6MP6	1.50 (38.1)	0.81 (20.6)	0.11 (2.8)	20000 (1379)
2FH4	6MP9	SS-FMA-2FH4-6MP9	1.63 (41.3)	1.19 (30.2)	0.11 (2.8)	20000 (1379)
2FH6	6MP4	SS-FMA-2FH6-6MP4	1.50 (38.1)	0.75 (19.1)	0.08 (2.1)	20000 (1379)
2FH6	6MP6	SS-FMA-2FH6-6MP6	1.69 (42.9)	0.81 (20.6)	0.13 (3.2)	20000 (1379)
2FH6	6MP9	SS-FMA-2FH6-6MP9	1.75 (44.5)	1.19 (30.2)	0.19 (4.8)	20000 (1379)
2FH9	6MP4	SS-FMA-2FH9-6MP4	1.81 (46.0)	1.00 (25.4)	0.08 (2.1)	20000 (1379)
2FH9	6MP6	SS-FMA-2FH9-6MP6	2.13 (54.0)	1.00 (25.4)	0.13 (3.2)	20000 (1379)
2FH9	6MP9	SS-FMA-2FH9-6MP9	2.13 (54.0)	1.19 (30.2)	0.19 (4.8)	20000 (1379)
2FH12	6MP4	SS-FMA-2FH12-6MP4	2.25 (57.2)	1.37 (34.9)	0.08 (2.1)	20000 (1379)
2FH12	6MP6	SS-FMA-2FH12-6MP6	1.50 (63.5)	1.37 (34.9)	0.13 (3.2)	20000 (1379)
2FH12	6MP9	SS-FMA-2FH12-6MP9	2.50 (63.5)	1.37 (34.9)	0.19 (4.8)	20000 (1379)
2FH16	6MP4	SS-FMA-2FH16-6MP4	2.94 (74.6)	1.75 (44.5)	0.08 (2.1)	20000 (1379)
2FH16	6MP6	SS-FMA-2FH16-6MP6	3.13 (79.4)	1.75 (44.5)	0.13 (3.2)	20000 (1379)
2FH16	6MP9	SS-FMA-2FH16-6MP9	3.19 (81.0)	1.75 (44.5)	0.19 (4.8)	20000 (1379)



20,000 psi Medium pressure female to male NPT thread

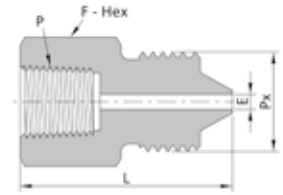
		#	Dimensions - in. (mm)			 psig (bar)
P-Connection	Px-Connection		L	F	E	
2FH4	1/8 NPT	SS-FMA-2FH4-NS2	1.19 (30.2)	0.63 (15.9)	0.11 (2.8)	15000 (1034)
2FH4	1/4 NPT	SS-FMA-2FH4-NS4	1.37 (34.9)	0.63 (15.9)	0.11 (2.8)	15000 (1034)
2FH4	3/8 NPT	SS-FMA-2FH4-NS6	1.37 (34.9)	0.69 (17.5)	0.11 (2.8)	15000 (1034)
2FH4	1/2 NPT	SS-FMA-2FH4-NS8	1.37 (34.9)	0.87 (22.2)	0.11 (2.8)	15000 (1034)
2FH4	3/4 NPT	SS-FMA-2FH4-NS12	1.75 (44.5)	1.06 (27.0)	0.11 (2.8)	10000 (690)
2FH6	1/8 NPT	SS-FMA-2FH6-NS2	1.37 (34.9)	0.75 (19.1)	0.19 (4.8)	15000 (1034)
2FH6	1/4 NPT	SS-FMA-2FH6-NS4	1.50 (38.1)	0.75 (19.1)	0.20 (5.2)	15000 (1034)
2FH6	3/8 NPT	SS-FMA-2FH6-NS6	1.50 (38.1)	0.75 (19.1)	0.20 (5.2)	15000 (1034)
2FH6	1/2 NPT	SS-FMA-2FH6-NS8	1.63 (41.3)	0.87 (22.2)	0.20 (5.2)	15000 (1034)
2FH6	3/4 NPT	SS-FMA-2FH6-NS12	1.75 (44.5)	1.06 (27.0)	0.20 (5.2)	10000 (690)
2FH6	1 NPT	SS-FMA-2FH6-NS16	2.00 (50.8)	1.37 (34.9)	0.20 (5.2)	10000 (690)
2FH9	1/8 NPT	SS-FMA-2FH9-NS2	1.75 (44.5)	1.00 (25.4)	0.19 (4.8)	15000 (1034)
2FH9	1/4 NPT	SS-FMA-2FH9-NS4	1.75 (44.5)	1.00 (25.4)	0.25 (6.4)	15000 (1034)
2FH9	3/8 NPT	SS-FMA-2FH9-NS6	1.75 (44.5)	1.00 (25.4)	0.31 (7.9)	15000 (1034)
2FH9	1/2 NPT	SS-FMA-2FH9-NS8	1.94 (49.2)	1.00 (25.4)	0.31 (7.9)	15000 (1034)
2FH9	3/4 NPT	SS-FMA-2FH9-NS12	2.00 (50.8)	1.06 (27.0)	0.31 (7.9)	10000 (690)
2FH9	1 NPT	SS-FMA-2FH9-NS16	2.25 (57.2)	1.37 (34.9)	0.31 (7.9)	10000 (690)
2FH12	1/4 NPT	SS-FMA-2FH12-NS4	2.00 (50.8)	1.37 (34.9)	0.25 (6.4)	15000 (1034)
2FH12	3/8 NPT	SS-FMA-2FH12-NS6	2.00 (50.8)	1.37 (34.9)	0.31 (7.9)	15000 (1034)
2FH12	1/2 NPT	SS-FMA-2FH12-NS8	2.19 (55.6)	1.37 (34.9)	0.38 (9.6)	15000 (1034)
2FH12	3/4 NPT	SS-FMA-2FH12-NS12	2.25 (57.2)	1.37 (34.9)	0.44 (11.1)	10000 (690)
2FH12	1 NPT	SS-FMA-2FH12-NS16	2.63 (66.7)	1.37 (34.9)	0.44 (11.1)	10000 (690)
2FH16	1/4 NPT	SS-FMA-2FH16-NS4	1.87 (73.0)	1.75 (44.5)	0.25 (6.4)	15000 (1034)
2FH16	3/8 NPT	SS-FMA-2FH16-NS6	2.87 (73.0)	1.75 (44.5)	0.31 (7.9)	15000 (1034)
2FH16	1/2 NPT	SS-FMA-2FH16-NS8	2.87 (73.0)	1.75 (44.5)	0.38 (9.6)	15000 (1034)
2FH16	3/4 NPT	SS-FMA-2FH16-NS12	2.87 (73.0)	1.75 (44.5)	0.56 (14.3)	10000 (690)
2FH16	1 NPT	SS-FMA-2FH16-NS16	3.06 (77.8)	1.75 (44.5)	0.56 (14.3)	10000 (690)



20,000 / 60,000 PSI HIGH PRESSURE ADAPTORS & COUPLINGS

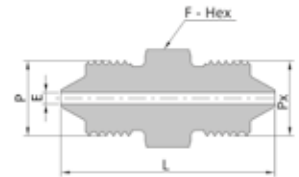
Female NPT threads to 60,000 psi high pressure male

		#	Dimensions - in. (mm)			 psig (bar)
P-Connection	Px-Connection		L	F	E	
1/8 NPT	6MP4	SS-FMA-NS2-6MP4	1.19 (30.2)	0.63 (15.9)	0.08 (2.1)	15000 (1034)
1/8 NPT	6MP6	SS-FMA-NS2-6MP6	1.37 (34.9)	0.81 (20.6)	0.13 (3.2)	15000 (1034)
1/8 NPT	6MP9	SS-FMA-NS2-6MP9	1.63 (41.3)	1.19 (30.2)	0.19 (4.8)	15000 (1034)
1/4 NPT	6MP4	SS-FMA-NS4-6MP4	1.37 (34.9)	0.94 (23.8)	0.08 (2.1)	15000 (1034)
1/4 NPT	6MP6	SS-FMA-NS4-6MP6	1.63 (41.3)	0.94 (23.8)	0.13 (3.2)	15000 (1034)
1/4 NPT	6MP9	SS-FMA-NS4-6MP9	1.75 (44.5)	1.19 (30.2)	0.19 (4.8)	15000 (1034)
3/8 NPT	6MP4	SS-FMA-NS6-6MP4	1.44 (36.5)	1.13 (28.6)	0.08 (2.1)	15000 (1034)
3/8 NPT	6MP6	SS-FMA-NS6-6MP6	1.69 (42.9)	1.13 (28.6)	0.13 (3.2)	15000 (1034)
3/8 NPT	6MP9	SS-FMA-NS6-6MP9	1.81 (46.0)	1.19 (30.2)	0.19 (4.8)	15000 (1034)
1/2 NPT	6MP4	SS-FMA-NS8-6MP4	1.69 (42.9)	1.37 (34.9)	0.08 (2.1)	15000 (1034)
1/2 NPT	6MP6	SS-FMA-NS8-6MP6	1.94 (49.2)	1.37 (34.9)	0.13 (3.2)	15000 (1034)
1/2 NPT	6MP9	SS-FMA-NS8-6MP9	2.13 (54.0)	1.37 (34.9)	0.19 (4.8)	15000 (1034)
3/4 NPT	6MP4	SS-FMA-NS12-6MP4	1.75 (44.5)	1.50 (38.1)	0.08 (2.1)	10000 (690)
3/4 NPT	6MP6	SS-FMA-NS12-6MP6	2.00 (50.8)	1.50 (38.1)	0.13 (3.2)	10000 (690)
3/4 NPT	6MP9	SS-FMA-NS12-6MP9	2.19 (55.6)	1.50 (38.1)	0.19 (4.8)	10000 (690)
1 NPT	6MP4	SS-FMA-NS16-6MP4	2.00 (50.8)	1.75 (44.5)	0.08 (2.1)	10000 (690)
1 NPT	6MP6	SS-FMA-NS16-6MP6	2.25 (57.2)	1.75 (44.5)	0.13 (3.2)	10000 (690)
1 NPT	6MP9	SS-FMA-NS16-6MP9	2.44 (61.9)	1.75 (44.5)	0.19 (4.8)	10000 (1034)



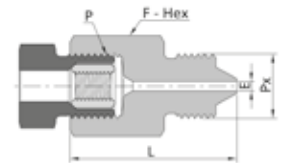
60,000 psi High pressure male to 60,000 psi high pressure male

		#	Dimensions - in. (mm)			 psig (bar)
P-Connection	Px-Connection		L	F	E	
6MP4	6MP4	SS-MMA-6MP4	1.63 (41.3)	0.63 (15.9)	0.08 (2.1)	60000 (4137)
6MP6	6MP4	SS-MMA-6MP6-6MP4	1.94 (49.2)	0.81 (20.6)	0.08 (2.1)	60000 (4137)
6MP6	6MP6	SS-MMA-6MP6	2.19 (55.6)	0.81 (20.6)	0.13 (3.2)	60000 (4137)
6MP9	6MP4	SS-MMA-6MP9-6MP4	2.19 (55.6)	1.19 (30.2)	0.08 (2.1)	60000 (4137)
6MP9	6MP6	SS-MMA-6MP9-6MP6	2.50 (63.5)	1.19 (30.2)	0.13 (3.2)	60000 (4137)
6MP9	6MP9	SS-MMA-6MP9	2.63 (66.7)	1.19 (30.2)	0.19 (4.8)	60000 (4137)



60,000 psi High pressure female to 60,000 psi high pressure male

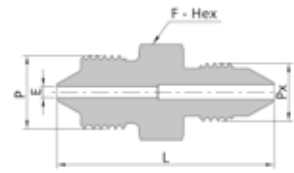
		#	Dimensions - in. (mm)			 psig (bar)
P-Connection	Px-Connection		L	F	E	
6FH4	6MP4	SS-FMA-6FH4-6MP4	1.44 (36.5)	0.75 (19.1)	0.08 (2.1)	60000 (4137)
6FH4	6MP6	SS-FMA-6FH4-6MP6	1.69 (42.9)	0.81 (20.6)	0.09 (2.4)	60000 (4137)
6FH4	6MP9	SS-FMA-6FH4-6MP9	1.75 (44.5)	1.19 (30.2)	0.09 (2.4)	60000 (4137)
6FH6	6MP4	SS-FMA-6FH6-6MP4	1.75 (44.5)	1.00 (25.4)	0.08 (2.1)	60000 (4137)
6FH6	6MP6	SS-FMA-6FH6-6MP6	2.00 (50.8)	1.00 (25.4)	0.13 (3.2)	60000 (4137)
6FH6	6MP9	SS-FMA-6FH6-6MP9	2.13 (54.0)	1.19 (30.2)	0.13 (3.2)	60000 (4137)
6FH9	6MP4	SS-FMA-6FH9-6MP4	2.06 (52.4)	1.37 (34.9)	0.08 (2.1)	60000 (4137)
6FH9	6MP6	SS-FMA-6FH9-6MP6	2.37 (60.3)	1.37 (34.9)	0.13 (3.2)	60000 (4137)
6FH9	6MP9	SS-FMA-6FH9-6MP9	2.50 (63.5)	1.37 (34.9)	0.19 (4.8)	60000 (4137)



20,000 / 60,000 PSI HIGH PRESSURE ADAPTORS & COUPLINGS

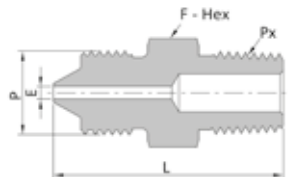
60,000 psi High pressure male to 20,000 psi medium pressure male

		#	Dimensions - in. (mm)			
P-Connection	Px-Connection		L	F	E	
6MP4	2MP4	SS-MMA-6MP4-2MP4	1.69 (42.9)	0.63 (15.9)	0.08 (2.1)	20000 (1379)
6MP4	2MP6	SS-MMA-6MP4-2MP6	1.81 (46.0)	0.63 (15.9)	0.08 (2.1)	20000 (1379)
6MP4	2MP9	SS-MMA-6MP4-2MP9	2.06 (52.4)	0.94 (23.8)	0.08 (2.1)	20000 (1379)
6MP4	2MP12	SS-MMA-6MP4-2MP12	2.37 (60.3)	1.19 (30.2)	0.08 (2.1)	20000 (1379)
6MP6	2MP16	SS-MMA-6MP4-2MP16	2.94 (74.6)	1.50 (38.1)	0.08 (2.1)	20000 (1379)
6MP6	2MP4	SS-MMA-6MP6-2MP4	2.00 (50.8)	0.81 (20.6)	0.11 (2.4)	20000 (1379)
6MP6	2MP6	SS-MMA-6MP6-2MP6	2.13 (54.0)	0.81 (20.6)	0.13 (3.2)	20000 (1379)
6MP6	2MP9	SS-MMA-6MP6-2MP9	2.37 (60.3)	0.94 (23.8)	0.13 (3.2)	20000 (1379)
6MP6	2MP12	SS-MMA-6MP6-2MP12	2.63 (66.7)	1.19 (30.2)	0.13 (3.2)	20000 (1379)
6MP9	2MP12	SS-MMA-6MP6-2MP16	3.13 (79.4)	1.50 (38.1)	0.13 (3.2)	20000 (1379)
6MP6	2MP4	SS-MMA-6MP9-2MP4	2.25 (57.2)	1.19 (30.2)	0.11 (2.4)	20000 (1379)
6MP9	2MP6	SS-MMA-6MP9-2MP6	2.44 (61.9)	1.19 (30.2)	0.19 (4.8)	20000 (1379)
6MP9	2MP9	SS-MMA-6MP9-2MP9	2.63 (66.7)	1.19 (30.2)	0.19 (4.8)	20000 (1379)
6MP9	2MP12	SS-MMA-6MP9-2MP12	3.15 (79.9)	1.19 (30.2)	0.19 (4.8)	20000 (1379)
6MP9	2MP16	SS-MMA-6MP9-2MP16	3.31 (84.2)	1.50 (38.1)	0.19 (4.8)	20000 (1379)



60,000 psi High pressure male to male NPT threads

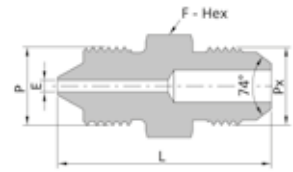
		#	Dimensions - in. (mm)			
P-Connection	Px-Connection		L	F	E	
6MP4	1/8 NPT	SS-MMA-6MP4-NS2	1.37 (34.9)	0.63 (15.9)	0.08 (2.1)	15000 (1034)
6MP4	1/4 NPT	SS-MMA-6MP4-NS4	1.56 (39.7)	0.63 (15.9)	0.08 (2.1)	15000 (1034)
6MP4	3/8 NPT	SS-MMA-6MP4-NS6	1.56 (39.7)	0.69 (17.5)	0.08 (2.1)	15000 (1034)
6MP4	1/2 NPT	SS-MMA-6MP4-NS8	1.81 (46.0)	0.87 (22.2)	0.08 (2.1)	15000 (1034)
6MP4	3/4 NPT	SS-MMA-6MP4-NS12	1.87 (47.6)	1.06 (27.0)	0.08 (2.1)	10000 (690)
6MP4	1 NPT	SS-MMA-6MP4-NS16	2.19 (55.6)	1.37 (34.9)	0.08 (2.1)	10000 (690)
6MP6	1/8 NPT	SS-MMA-6MP6-NS2	1.69 (42.9)	0.81 (20.6)	0.13 (3.2)	15000 (1034)
6MP6	1/4 NPT	SS-MMA-6MP6-NS4	1.87 (47.6)	0.81 (20.6)	0.13 (3.2)	15000 (1034)
6MP6	3/8 NPT	SS-MMA-6MP6-NS6	1.87 (47.6)	0.81 (20.6)	0.13 (3.2)	15000 (1034)
6MP6	1/2 NPT	SS-MMA-6MP6-NS8	2.06 (52.4)	0.87 (22.2)	0.13 (3.2)	15000 (1034)
6MP6	3/4 NPT	SS-MMA-6MP6-NS12	2.13 (54.0)	1.06 (27.0)	0.13 (3.2)	10000 (690)
6MP6	1 NPT	SS-MMA-6MP6-NS16	2.44 (61.9)	1.37 (34.9)	0.13 (3.2)	10000 (690)
6MP9	1/8 NPT	SS-MMA-6MP9-NS2	2.00 (50.8)	1.19 (30.2)	0.19 (4.8)	15000 (1034)
6MP9	1/4 NPT	SS-MMA-6MP9-NS4	2.13 (54.0)	1.19 (30.2)	0.19 (4.8)	15000 (1034)
6MP9	3/8 NPT	SS-MMA-6MP9-NS6	2.13 (54.0)	1.19 (30.2)	0.19 (4.8)	15000 (1034)
6MP9	1/2 NPT	SS-MMA-6MP9-NS8	2.37 (60.3)	1.19 (30.2)	0.19 (4.8)	15000 (1034)
6MP9	3/4 NPT	SS-MMA-6MP9-NS12	2.37 (60.3)	1.19 (30.2)	0.19 (4.8)	10000 (690)
6MP9	1 NPT	SS-MMA-6MP9-NS16	2.63 (66.7)	1.37 (34.9)	0.19 (4.8)	10000 (690)



20,000 / 60,000 PSI HIGH PRESSURE ADAPTORS & COUPLINGS

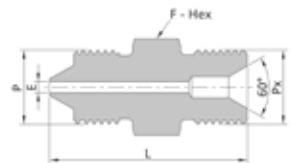
60,000 psi High pressure male to male JIC

P-Connection	Px-Connection	#	Dimensions - in. (mm)			psig (bar)
			L	F	E	
6MP4	1/4 JIC	SS-MMA-6MP4-AN4	1.56 (39.7)	0.63 (15.9)	0.08 (2.1)	20000 (1379)
6MP4	3/8 JIC	SS-MMA-6MP4-AN6	1.56 (39.7)	0.63 (15.9)	0.08 (2.1)	20000 (1379)
6MP4	1/2 JIC	SS-MMA-6MP4-AN8	1.69 (42.9)	0.81 (20.6)	0.08 (2.1)	20000 (1379)
6MP4	5/8 JIC	SS-MMA-6MP4-AN10	1.81 (46.0)	0.94 (23.8)	0.08 (2.1)	20000 (1379)
6MP4	3/4 JIC	SS-MMA-6MP4-AN12	2.00 (50.8)	1.13 (28.6)	0.08 (2.1)	15000 (1034)
6MP4	1 JIC	SS-MMA-6MP4-AN16	2.13 (54.0)	1.37 (34.9)	0.08 (2.1)	15000 (1034)
6MP6	1/4 JIC	SS-MMA-6MP6-AN4	1.81 (46.0)	0.81 (20.6)	0.13 (3.2)	20000 (1379)
6MP6	3/8 JIC	SS-MMA-6MP6-AN6	1.81 (46.0)	0.81 (20.6)	0.13 (3.2)	20000 (1379)
6MP6	1/2 JIC	SS-MMA-6MP6-AN8	1.94 (49.2)	0.81 (20.6)	0.13 (3.2)	20000 (1379)
6MP6	5/8 JIC	SS-MMA-6MP6-AN10	2.06 (52.4)	0.94 (23.8)	0.13 (3.2)	20000 (1379)
6MP6	3/4 JIC	SS-MMA-6MP6-AN12	2.25 (57.2)	1.13 (28.6)	0.13 (3.2)	15000 (1034)
6MP6	1 JIC	SS-MMA-6MP6-AN16	2.37 (60.3)	1.37 (34.9)	0.13 (3.2)	15000 (1034)
6MP9	1/4 JIC	SS-MMA-6MP9-AN4	2.13 (54.0)	1.19 (30.2)	0.17 (4.4)	20000 (1379)
6MP9	3/8 JIC	SS-MMA-6MP9-AN6	2.13 (54.0)	1.19 (30.2)	0.19 (4.8)	20000 (1379)
6MP9	1/2 JIC	SS-MMA-6MP9-AN8	2.25 (57.2)	1.19 (30.2)	0.19 (4.8)	20000 (1379)
6MP9	5/8 JIC	SS-MMA-6MP9-AN10	2.37 (60.3)	1.19 (30.2)	0.19 (4.8)	20000 (1379)
6MP9	3/4 JIC	SS-MMA-6MP9-AN12	2.44 (61.9)	1.19 (30.2)	0.19 (4.8)	15000 (1034)
6MP9	1 JIC	SS-MMA-6MP9-AN16	2.56 (65.0)	1.37 (34.9)	0.19 (4.8)	15000 (1034)



60,000 psi High pressure male to type "M" male

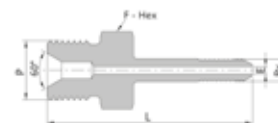
P-Connection	Px-Connection	#	Dimensions - in. (mm)			psig (bar)
			L	F	E	
6MP4	HM9	SS-MMA-6MP4-HM9	1.46 (37.1)	0.63 (15.9)	0.08 (2.1)	60000 (4137)
6MP4	HM12	SS-MMA-6MP4-HM12	1.63 (41.4)	0.75 (19.1)	0.08 (2.1)	30000 (2068)
6MP4	HM14	SS-MMA-6MP4-HM14	1.83 (46.6)	1.00 (25.4)	0.08 (2.1)	50000 (3447)
6MP4	HM16	SS-MMA-6MP4-HM16	1.72 (43.7)	1.00 (25.4)	0.08 (2.1)	30000 (2068)
6MP6	HM21	SS-MMA-6MP4-HM21	1.84 (46.7)	1.37 (34.9)	0.08 (2.1)	20000 (1379)
6MP6	HM9	SS-MMA-6MP6-HM9	1.77 (44.9)	0.81 (20.6)	0.09 (2.4)	60000 (4137)
6MP6	HM12	SS-MMA-6MP6-HM12	1.90 (48.2)	0.81 (20.6)	0.13 (3.2)	30000 (2068)
6MP6	HM14	SS-MMA-6MP6-HM14	2.09 (53.0)	1.00 (25.4)	0.13 (3.2)	50000 (3447)
6MP6	HM16	SS-MMA-6MP6-HM16	1.97 (50.2)	1.00 (25.4)	0.13 (3.2)	30000 (2068)
6MP6	HM21	SS-MMA-6MP6-HM21	2.09 (53.1)	1.37 (34.9)	0.13 (3.2)	20000 (1379)
6MP9	HM9	SS-MMA-6MP9-HM9	2.07 (52.6)	1.19 (30.2)	0.09 (2.4)	60000 (4137)
6MP9	HM12	SS-MMA-6MP9-HM12	2.20 (55.9)	1.19 (30.2)	0.19 (4.8)	30000 (2068)
6MP9	HM14	SS-MMA-6MP9-HM14	2.33 (59.1)	1.19 (30.2)	0.15 (3.8)	50000 (3447)
6MP9	HM16	SS-MMA-6MP9-HM16	2.21 (56.2)	1.19 (30.2)	0.19 (4.8)	30000 (2068)
6MP9	HM21	SS-MMA-6MP9-HM21	2.26 (57.4)	1.37 (34.9)	0.19 (4.8)	20000 (1379)



20,000 / 60,000 PSI HIGH PRESSURE ADAPTORS & COUPLINGS

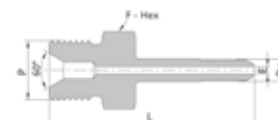
Type "M" male to 20,000 psi medium pressure coned and threaded nipples

		#	Dimensions - in. (mm)			 psig (bar)
P-Connection	Px-Connection		L	F	E	
HM9	2CT4	SS-MMA-HM9-2CT4	1.80 (45.7)	0.63 (15.9)	0.09 (2.4)	20000 (1379)
HM9	2CT6	SS-MMA-HM9-2CT6	2.05 (52.1)	0.63 (15.9)	0.09 (2.4)	20000 (1379)
HM9	2CT9	SS-MMA-HM9-2CT9	2.28 (58.0)	0.69 (17.5)	0.09 (2.4)	20000 (1379)
HM9	2CT12	SS-MMA-HM9-2CT12	2.58 (65.5)	0.87 (22.2)	0.09 (2.4)	20000 (1379)
HM9	2CT16	SS-MMA-HM9-2CT16	3.22 (81.7)	1.13 (28.6)	0.09 (2.4)	20000 (1379)
HM12	2CT4	SS-MMA-HM12-2CT6	1.97 (50.0)	0.75 (19.1)	0.11 (2.8)	20000 (1379)
HM12	2CT6	SS-MMA-HM12-2CT9	2.22 (56.4)	0.75 (19.1)	0.20 (5.2)	20000 (1379)
HM12	2CT9	SS-MMA-HM12-2CT12	2.43 (61.7)	0.75 (19.1)	0.29 (7.4)	20000 (1379)
HM12	2CT12	SS-MMA-HM12-2CT16	2.71 (68.8)	0.87 (22.2)	0.29 (7.4)	20000 (1379)
HM12	2CT16	SS-MMA-HM14-2CT6	3.35 (85.0)	1.13 (28.6)	0.29 (7.4)	20000 (1379)
HM14	2CT4	SS-MMA-HM14-2CT9	2.17 (55.2)	1.00 (25.4)	0.11 (2.8)	20000 (1379)
HM14	2CT6	SS-MMA-HM14-2CT12	2.43 (61.6)	1.00 (25.4)	0.15 (3.8)	20000 (1379)
HM14	2CT9	SS-MMA-HM14-2CT16	2.63 (66.9)	1.00 (25.4)	0.15 (3.8)	20000 (1379)
HM14	2CT12	SS-MMA-HM16-2CT6	2.88 (73.2)	1.00 (25.4)	0.15 (3.8)	20000 (1379)
HM14	2CT16	SS-MMA-HM16-2CT9	3.47 (88.2)	1.13 (28.6)	0.15 (3.8)	20000 (1379)
HM16	2CT4	SS-MMA-HM16-2CT12	2.06 (52.3)	1.00 (25.4)	0.11 (2.8)	20000 (1379)
HM16	2CT6	SS-MMA-HM16-2CT16	2.31 (58.7)	1.00 (25.4)	0.20 (5.2)	20000 (1379)
HM16	2CT9	SS-MMA-HM21-2CT6	2.52 (64.0)	1.00 (25.4)	0.31 (7.9)	20000 (1379)
HM16	2CT12	SS-MMA-HM21-2CT9	2.77 (70.3)	1.00 (25.4)	0.39 (10.0)	20000 (1379)
HM16	2CT16	SS-MMA-HM21-2CT12	3.36 (85.3)	1.13 (28.6)	0.39 (10.0)	20000 (1379)
HM21	2CT4	SS-MMA-HM21-2CT16	2.18 (55.3)	1.37 (34.9)	0.11 (2.8)	20000 (1379)
HM21	2CT6	SS-MMA-HM12-2CT4	2.43 (61.7)	1.37 (34.9)	0.20 (5.2)	20000 (1379)
HM21	2CT9	SS-MMA-HM14-2CT4	2.64 (67.0)	1.37 (34.9)	0.31 (7.9)	20000 (1379)
HM21	2CT12	SS-MMA-HM16-2CT4	2.89 (73.3)	1.37 (34.9)	0.44 (11.1)	20000 (1379)
HM21	2CT16	SS-MMA-HM21-2CT4	3.42 (86.9)	1.37 (34.9)	0.56 (14.3)	20000 (1379)



Type "M" male to 60,000 psi high pressure coned and threaded nipples

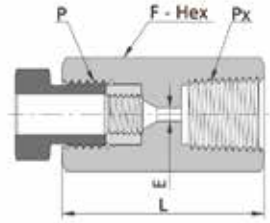
		#	Dimensions - in. (mm)			 psig (bar)
P-Connection	Px-Connection		L	F	E	
HM9	6CT4	SS-MMA-HM9-6CT4	2.15 (54.6)	0.63 (15.9)	0.08 (2.1)	60000 (4137)
HM9	6CT6	SS-MMA-HM9-6CT6	2.53 (64.3)	0.63 (15.9)	0.09 (2.4)	60000 (4137)
HM9	6CT9	SS-MMA-HM9-6CT9	3.12 (79.3)	0.63 (15.9)	0.09 (2.4)	60000 (4137)
HM12	6CT4	SS-MMA-HM12-6CT4	2.31 (58.6)	0.75 (19.1)	0.08 (2.1)	30000 (2068)
HM12	6CT6	SS-MMA-HM12-6CT6	2.70 (68.6)	0.75 (19.1)	0.13 (3.2)	30000 (2068)
HM12	6CT9	SS-MMA-HM12-6CT9	3.29 (83.6)	0.75 (19.1)	0.19 (4.8)	30000 (2068)
HM14	6CT4	SS-MMA-HM14-6CT4	2.51 (63.8)	1.00 (25.4)	0.08 (2.1)	50000 (3447)
HM14	6CT6	SS-MMA-HM14-6CT6	2.91 (73.8)	1.00 (25.4)	0.13 (3.2)	50000 (3447)
HM14	6CT9	SS-MMA-HM14-6CT9	3.50 (88.8)	1.00 (25.4)	0.15 (3.8)	50000 (3447)
HM16	6CT4	SS-MMA-HM16-6CT4	2.40 (60.9)	1.00 (25.4)	0.08 (2.1)	30000 (2068)
HM16	6CT6	SS-MMA-HM16-6CT6	2.79 (70.9)	1.00 (25.4)	0.13 (3.2)	30000 (2068)
HM16	6CT9	SS-MMA-HM16-6CT9	3.38 (85.9)	1.00 (25.4)	0.19 (4.8)	30000 (2068)
HM21	6CT4	SS-MMA-HM21-6CT4	2.51 (63.9)	1.37 (34.9)	0.08 (2.1)	20000 (1379)
HM21	6CT6	SS-MMA-HM21-6CT6	2.91 (73.9)	1.37 (34.9)	0.13 (3.2)	20000 (1379)
HM21	6CT9	SS-MMA-HM21-6CT9	3.50 (88.9)	1.37 (34.9)	0.19 (4.8)	20000 (1379)



20,000 / 60,000 PSI HIGH PRESSURE ADAPTORS & COUPLINGS

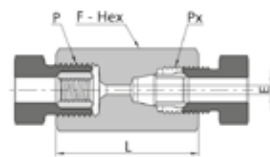
20,000 psi Medium pressure female to female NPT thread

		#	Dimensions - in. (mm)			 psig (bar)
P-Connection	Px-Connection		L	F	E	
2FH4	1/8 NPT	SS-FFC-2FH4-NS2	1.37 (34.9)	0.63 (15.9)	0.11 (2.8)	15000 (1034)
2FH4	1/4 NPT	SS-FFC-2FH4-NS4	1.63 (41.3)	0.94 (23.8)	0.11 (2.8)	15000 (1034)
2FH4	3/8 NPT	SS-FFC-2FH4-NS6	1.63 (41.3)	1.13 (28.6)	0.11 (2.8)	15000 (1034)
2FH4	1/2 NPT	SS-FFC-2FH4-NS8	2.00 (50.8)	1.37 (34.9)	0.11 (2.8)	15000 (1034)
2FH6	1/2 NPT	SS-FFC-2FH6-NS2	1.50 (38.1)	0.75 (19.1)	0.20 (5.1)	15000 (1034)
2FH6	1/4 NPT	SS-FFC-2FH6-NS4	1.75 (44.5)	0.94 (23.8)	0.20 (5.1)	15000 (1034)
2FH6	3/8 NPT	SS-FFC-2FH6-NS6	1.81 (46.0)	1.13 (28.6)	0.20 (5.1)	15000 (1034)
2FH6	1/2 NPT	SS-FFC-2FH6-NS8	2.13 (54.0)	1.37 (34.9)	0.20 (5.1)	15000 (1034)
2FH6	3/4 NPT	SS-FFC-2FH6-NS12	2.25 (57.2)	1.50 (38.1)	0.20 (5.1)	10000 (690)
2FH9	1/8 NPT	SS-FFC-2FH9-NS2	1.63 (41.3)	1.00 (25.4)	0.31 (7.9)	15000 (1034)
2FH9	1/4 NPT	SS-FFC-2FH9-NS4	2.00 (50.8)	1.00 (25.4)	0.31 (7.9)	15000 (1034)
2FH9	3/8 NPT	SS-FFC-2FH9-NS6	2.00 (50.8)	1.13 (28.6)	0.31 (7.9)	15000 (1034)
2FH9	1/2 NPT	SS-FFC-2FH9-NS8	2.25 (57.2)	1.37 (34.9)	0.31 (7.9)	15000 (1034)
2FH9	3/4 NPT	SS-FFC-2FH9-NS12	2.25 (57.2)	1.50 (38.1)	0.31 (7.9)	10000 (690)
2FH9	1 NPT	SS-FFC-2FH9-NS16	2.63 (66.7)	1.75 (44.5)	0.31 (7.9)	10000 (690)
2FH12	1/8 NPT	SS-FFC-2FH12-NS2	2.37 (60.3)	1.75 (44.5)	0.41 (10.4)	15000 (1034)
2FH12	1/4 NPT	SS-FFC-2FH12-NS4	2.50 (63.5)	1.75 (44.5)	0.55 (13.9)	15000 (1034)
2FH12	3/8 NPT	SS-FFC-2FH12-NS6	3.00 (76.2)	1.75 (44.5)	0.56 (14.3)	15000 (1034)
2FH12	1/2 NPT	SS-FFC-2FH12-NS8	3.00 (76.2)	1.75 (44.5)	0.56 (14.3)	10000 (690)
2FH12	3/4 NPT	SS-FFC-2FH12-NS12	3.00 (76.2)	1.75 (44.5)	0.56 (14.3)	10000 (690)
2FH12	1 NPT	SS-FFC-2FH12-NS16	1.75 (44.5)	1.37 (34.9)	0.32 (8.1)	15000 (1034)
2FH16	1/4 NPT	SS-FFC-2FH16-NS4	2.00 (50.8)	1.37 (34.9)	0.41 (10.4)	15000 (1034)
2FH16	3/8 NPT	SS-FFC-2FH16-NS6	2.37 (60.3)	1.37 (34.9)	0.44 (11.1)	15000 (1034)
2FH16	1/2 NPT	SS-FFC-2FH16-NS8	2.63 (66.7)	1.37 (34.9)	0.44 (11.1)	15000 (1034)
2FH16	3/4 NPT	SS-FFC-2FH16-NS12	2.63 (66.7)	1.50 (38.1)	0.44 (11.1)	10000 (690)
2FH16	1 NPT	SS-FFC-2FH16-NS16	2.63 (66.7)	1.75 (44.5)	0.44 (11.1)	10000 (690)



60,000 psi High pressure female to 15 series female

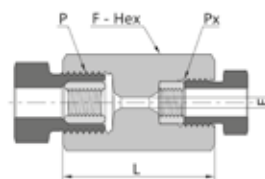
		#	Dimensions - in. (mm)			 psig (bar)
P-Connection	Px-Connection		L	F	E	
6FH4	FH2	SS-FFC-6FH4-FH2	1.19 (30.2)	0.75 (19.1)	0.09 (2.4)	15000 (1034)
6FH4	FH4	SS-FFC-6FH4-FH4	1.50 (38.1)	0.75 (19.1)	0.09 (2.4)	15000 (1034)
6FH4	FH6	SS-FFC-6FH4-FH6	1.63 (41.3)	0.75 (19.1)	0.09 (2.4)	15000 (1034)
6FH4	FH8	SS-FFC-6FH4-FH8	1.75 (44.5)	1.00 (25.4)	0.09 (2.4)	15000 (1034)
6FH6	FH2	SS-FFC-6FH6-FH2	1.50 (38.1)	1.00 (25.4)	0.09 (2.4)	15000 (1034)
6FH6	FH4	SS-FFC-6FH6-FH4	1.75 (44.5)	1.00 (25.4)	0.13 (3.2)	15000 (1034)
6FH6	FH6	SS-FFC-6FH6-FH6	1.81 (46.0)	1.00 (25.4)	0.13 (3.2)	15000 (1034)
6FH6	FH8	SS-FFC-6FH6-FH8	2.00 (50.8)	1.00 (25.4)	0.13 (3.2)	15000 (1034)
6FH9	FH2	SS-FFC-6FH9-FH2	1.69 (42.9)	1.37 (34.9)	0.09 (2.4)	15000 (1034)
6FH9	FH4	SS-FFC-6FH9-FH4	1.87 (47.6)	1.37 (34.9)	0.19 (4.8)	15000 (1034)
6FH9	FH6	SS-FFC-6FH9-FH6	2.00 (50.8)	1.37 (34.9)	0.19 (4.8)	15000 (1034)
6FH9	FH8	SS-FFC-6FH9-FH8	2.13 (54.0)	1.37 (34.9)	0.19 (4.8)	15000 (1034)



20,000 / 60,000 PSI HIGH PRESSURE ADAPTORS & COUPLINGS

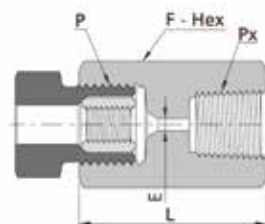
60,000 psi High pressure female to 20,000 psi medium pressure female

		#	Dimensions - in. (mm)			 psig (bar)
P-Connection	Px-Connection		L	F	E	
6FH4	2FH4	SS-FFC-6FH4-2FH4	1.37 (34.9)	0.75 (19.1)	0.09 (2.4)	20000 (1379)
6FH4	2FH6	SS-FFC-6FH4-2FH6	1.56 (39.7)	0.75 (19.1)	0.09 (2.4)	20000 (1379)
6FH4	2FH9	SS-FFC-6FH4-2FH9	1.81 (46.0)	1.00 (25.4)	0.09 (2.4)	20000 (1379)
6FH4	2FH12	SS-FFC-6FH4-2FH12	2.06 (52.4)	1.37 (34.9)	0.09 (2.4)	20000 (1379)
6FH4	2FH16	SS-FFC-6FH4-2FH16	2.56 (65.1)	1.75 (44.5)	0.09 (2.4)	20000 (1379)
6FH6	2FH4	SS-FFC-6FH6-2FH4	1.63 (41.3)	1.00 (25.4)	0.11 (2.8)	20000 (1379)
6FH6	2FH6	SS-FFC-6FH6-2FH6	1.81 (46.0)	1.00 (25.4)	0.13 (3.2)	20000 (1379)
6FH6	2FH9	SS-FFC-6FH6-2FH9	2.06 (52.4)	1.00 (25.4)	0.13 (3.2)	20000 (1379)
6FH6	2FH12	SS-FFC-6FH6-2FH12	2.31 (58.7)	1.37 (34.9)	0.13 (3.2)	20000 (1379)
6FH6	2FH16	SS-FFC-6FH6-2FH16	2.81 (71.4)	1.75 (44.5)	0.13 (3.2)	20000 (1379)
6FH9	2FH4	SS-FFC-6FH9-2FH4	1.81 (46.0)	1.37 (34.9)	0.11 (2.8)	20000 (1379)
6FH9	2FH6	SS-FFC-6FH9-2FH6	1.94 (49.2)	1.37 (34.9)	0.19 (4.8)	20000 (1379)
6FH9	2FH9	SS-FFC-6FH9-2FH9	2.25 (57.2)	1.37 (34.9)	0.19 (4.8)	20000 (1379)
6FH9	2FH12	SS-FFC-6FH9-2FH12	2.44 (61.9)	1.37 (34.9)	0.19 (4.8)	20000 (1379)
6FH9	2FH16	SS-FFC-6FH9-2FH16	3.00 (76.2)	1.75 (44.5)	0.19 (4.8)	20000 (1379)



60,000 psi High pressure female to female NPT thread

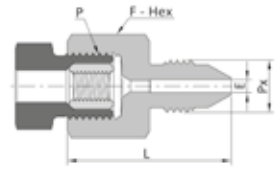
		#	Dimensions - in. (mm)			 psig (bar)
P-Connection	Px-Connection		L	F	E	
6FH4	1/8 NPT	SS-FFC-6FH4-NS2	1.37 (34.9)	0.75 (19.1)	0.09 (2.4)	15000 (1034)
6FH4	1/4 NPT	SS-FFC-6FH4-NS4	1.63 (41.3)	0.94 (23.8)	0.09 (2.4)	15000 (1034)
6FH4	3/8 NPT	SS-FFC-6FH4-NS6	1.63 (41.3)	1.13 (28.6)	0.09 (2.4)	15000 (1034)
6FH4	1/2 NPT	SS-FFC-6FH4-NS8	2.00 (50.8)	1.37 (34.9)	0.09 (2.4)	15000 (1034)
6FH4	3/4 NPT	SS-FFC-6FH4-NS12	2.00 (50.8)	1.50 (38.1)	0.09 (2.4)	10000 (690)
6FH4	1 NPT	SS-FFC-6FH4-NS16	2.37 (60.3)	1.75 (44.5)	0.09 (2.4)	10000 (690)
6FH6	1/8 NPT	SS-FFC-6FH6-NS2	1.63 (41.3)	1.00 (25.4)	0.13 (3.2)	15000 (1034)
6FH6	1/4 NPT	SS-FFC-6FH6-NS4	1.87 (47.6)	1.00 (25.4)	0.13 (3.2)	15000 (1034)
6FH6	3/8 NPT	SS-FFC-6FH6-NS6	1.87 (47.6)	1.13 (28.6)	0.13 (3.2)	15000 (1034)
6FH6	1/2 NPT	SS-FFC-6FH6-NS8	2.13 (54.0)	1.37 (34.9)	0.13 (3.2)	15000 (1034)
6FH6	3/4 NPT	SS-FFC-6FH6-NS12	2.00 (50.8)	1.50 (38.1)	0.13 (3.2)	10000 (690)
6FH6	1 NPT	SS-FFC-6FH6-NS16	2.25 (57.2)	1.75 (44.5)	0.13 (3.2)	10000 (690)
6FH9	1/8 NPT	SS-FFC-6FH9-NS2	1.81 (46.0)	1.37 (34.9)	0.19 (4.8)	15000 (1034)
6FH9	1/4 NPT	SS-FFC-6FH9-NS4	2.00 (50.8)	1.37 (34.9)	0.19 (4.8)	15000 (1034)
6FH9	3/8 NPT	SS-FFC-6FH9-NS6	2.00 (50.8)	1.37 (34.9)	0.19 (4.8)	15000 (1034)
6FH9	1/2 NPT	SS-FFC-6FH9-NS8	2.37 (60.3)	1.37 (34.9)	0.19 (4.8)	15000 (1034)
6FH9	3/4 NPT	SS-FFC-6FH9-NS12	2.37 (60.3)	1.50 (38.1)	0.19 (4.8)	10000 (690)
6FH9	1 NPT	SS-FFC-6FH9-NS16	2.50 (63.5)	1.75 (44.5)	0.19 (4.8)	10000 (690)



20,000 / 60,000 PSI HIGH PRESSURE ADAPTORS & COUPLINGS

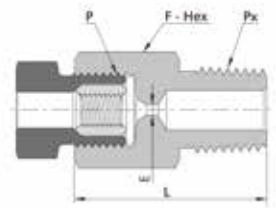
60,000 psi High pressure female to 20,000 psi medium pressure male

		#	Dimensions - in. (mm)			 psig (bar)
P-Connection	Px-Connection		L	F	E	
6FH4	2MP4	SS-FMA-6FH4-2MP4	1.37 (34.9)	0.75 (19.1)	0.09 (2.4)	20000 (1379)
6FH4	2MP6	SS-FMA-6FH4-2MP6	1.50 (38.1)	0.75 (19.1)	0.09 (2.4)	20000 (1379)
6FH4	2MP9	SS-FMA-6FH4-2MP9	1.69 (42.9)	0.94 (23.8)	0.09 (2.4)	20000 (1379)
6FH4	2MP12	SS-FMA-6FH4-2MP12	1.75 (44.5)	1.19 (30.2)	0.09 (2.4)	20000 (1379)
6FH4	2MP16	SS-FMA-6FH4-2MP16	2.37 (60.3)	1.50 (38.1)	0.09 (2.4)	20000 (1379)
6FH6	2MP4	SS-FMA-6FH6-2MP4	1.67 (42.3)	1.00 (25.4)	0.11 (2.8)	20000 (1379)
6FH6	2MP6	SS-FMA-6FH6-2MP6	1.81 (46.0)	1.00 (25.4)	0.13 (3.2)	20000 (1379)
6FH6	2MP9	SS-FMA-6FH6-2MP9	1.94 (49.2)	1.00 (25.4)	0.13 (3.2)	20000 (1379)
6FH9	2MP12	SS-FMA-6FH6-2MP12	2.13 (54.0)	1.19 (30.2)	0.13 (3.2)	20000 (1379)
6FH9	2MP16	SS-FMA-6FH6-2MP16	2.50 (63.5)	1.50 (38.1)	0.13 (3.2)	20000 (1379)
6FH9	2MP4	SS-FMA-6FH9-2MP4	1.87 (47.6)	1.37 (34.9)	0.11 (2.8)	20000 (1379)
6FH9	2MP6	SS-FMA-6FH9-2MP6	2.00 (50.8)	1.37 (34.9)	0.19 (4.8)	20000 (1379)
6FH9	2MP9	SS-FMA-6FH9-2MP9	2.19 (55.6)	1.37 (34.9)	0.19 (4.8)	20000 (1379)
6FH9	2MP12	SS-FMA-6FH9-2MP12	2.37 (60.3)	1.37 (34.9)	0.19 (4.8)	20000 (1379)
6FH9	2MP16	SS-FMA-6FH9-2MP16	2.81 (71.4)	1.50 (38.1)	0.19 (4.8)	20000 (1379)



60,000 psi High pressure female to male NPT thread

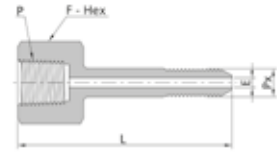
		#	Dimensions - in. (mm)			 psig (bar)
P-Connection	Px-Connection		L	F	E	
6FH4	1/8 NPT	SS-FMA-6FH4-NS2	1.25 (31.8)	0.75 (19.1)	0.09 (2.4)	15000 (1034)
6FH4	1/4 NPT	SS-FMA-6FH4-NS4	1.37 (34.9)	0.75 (19.1)	0.09 (2.4)	15000 (1034)
6FH4	3/8 NPT	SS-FMA-6FH4-NS6	1.37 (34.9)	0.75 (19.1)	0.09 (2.4)	15000 (1034)
6FH4	1/2 NPT	SS-FMA-6FH4-NS8	1.50 (38.1)	0.87 (22.2)	0.09 (2.4)	15000 (1034)
6FH4	3/4 NPT	SS-FMA-6FH4-NS12	1.75 (44.5)	1.06 (27.0)	0.09 (2.4)	10000 (690)
6FH6	1/8 NPT	SS-FMA-6FH6-NS2	1.50 (38.1)	1.00 (25.4)	0.13 (3.2)	15000 (1034)
6FH6	1/4 NPT	SS-FMA-6FH6-NS4	1.63 (41.3)	1.00 (25.4)	0.13 (3.2)	15000 (1034)
6FH6	3/8 NPT	SS-FMA-6FH6-NS6	1.63 (41.3)	1.00 (25.4)	0.13 (3.2)	15000 (1034)
6FH6	1/2 NPT	SS-FMA-6FH6-NS8	1.75 (44.5)	1.00 (25.4)	0.13 (3.2)	15000 (1034)
6FH6	3/4 NPT	SS-FMA-6FH6-NS12	2.00 (50.8)	1.06 (27.0)	0.13 (3.2)	10000 (690)
6FH6	1 NPT	SS-FMA-6FH6-NS16	2.00 (50.8)	1.37 (34.9)	0.13 (3.2)	10000 (690)
6FH9	1/8 NPT	SS-FMA-6FH9-NS2	1.63 (41.3)	1.37 (34.9)	0.19 (4.8)	15000 (1034)
6FH9	1/4 NPT	SS-FMA-6FH9-NS4	1.75 (44.5)	1.37 (34.9)	0.19 (4.8)	15000 (1034)
6FH9	3/8 NPT	SS-FMA-6FH9-NS6	1.75 (44.5)	1.37 (34.9)	0.19 (4.8)	15000 (1034)
6FH9	1/2 NPT	SS-FMA-6FH9-NS8	1.87 (47.6)	1.37 (34.9)	0.19 (4.8)	15000 (1034)
6FH9	3/4 NPT	SS-FMA-6FH9-NS12	2.13 (54.0)	1.37 (34.9)	0.19 (4.8)	10000 (690)
6FH9	1 NPT	SS-FMA-6FH9-NS16	2.25 (57.2)	1.37 (34.9)	0.19 (4.8)	10000 (690)



20,000 / 60,000 PSI HIGH PRESSURE ADAPTORS & COUPLINGS

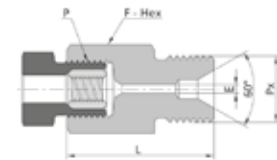
Female NPT threads to 60,000 psi high pressure coned and threaded nipples

		#	Dimensions - in. (mm)			 psig (bar)
P-Connection	Px-Connection		L	F	E	
1/8 NPT	6MP4	SS-FMA-NS2-6MP4	1.19 (30.2)	0.63 (15.9)	0.08 (2.1)	15000 (1034)
1/8 NPT	6MP6	SS-FMA-NS2-6MP6	1.37 (34.9)	0.81 (20.6)	0.13 (3.2)	15000 (1034)
1/8 NPT	6MP9	SS-FMA-NS2-6MP9	1.63 (41.3)	1.19 (30.2)	0.19 (4.8)	15000 (1034)
1/4 NPT	6MP4	SS-FMA-NS4-6MP4	1.37 (34.9)	0.94 (23.8)	0.08 (2.1)	15000 (1034)
1/4 NPT	6MP6	SS-FMA-NS4-6MP6	1.63 (41.3)	0.94 (23.8)	0.13 (3.2)	15000 (1034)
1/4 NPT	6MP9	SS-FMA-NS4-6MP9	1.75 (44.5)	1.19 (30.2)	0.19 (4.8)	15000 (1034)
3/8 NPT	6MP4	SS-FMA-NS6-6MP4	1.44 (36.5)	1.13 (28.6)	0.08 (2.1)	15000 (1034)
3/8 NPT	6MP6	SS-FMA-NS6-6MP6	1.69 (42.9)	1.13 (28.6)	0.13 (3.2)	15000 (1034)
3/8 NPT	6MP9	SS-FMA-NS6-6MP9	1.81 (46.0)	1.19 (30.2)	0.19 (4.8)	15000 (1034)
1/2 NPT	6MP4	SS-FMA-NS8-6MP4	1.69 (42.9)	1.37 (34.9)	0.08 (2.1)	15000 (1034)
1/2 NPT	6MP6	SS-FMA-NS8-6MP6	1.94 (49.2)	1.37 (34.9)	0.13 (3.2)	15000 (1034)
1/2 NPT	6MP9	SS-FMA-NS8-6MP9	2.13 (54.0)	1.37 (34.9)	0.19 (4.8)	15000 (1034)
3/4 NPT	6MP4	SS-FMA-NS12-6MP4	1.75 (44.5)	1.50 (38.1)	0.08 (2.1)	10000 (690)
3/4 NPT	6MP6	SS-FMA-NS12-6MP6	2.00 (50.8)	1.50 (38.1)	0.13 (3.2)	10000 (690)
3/4 NPT	6MP9	SS-FMA-NS12-6MP9	2.19 (55.6)	1.50 (38.1)	0.19 (4.8)	10000 (690)
1 NPT	6MP4	SS-FMA-NS16-6MP4	2.00 (50.8)	1.75 (44.5)	0.08 (2.1)	10000 (690)
1 NPT	6MP6	SS-FMA-NS16-6MP6	2.25 (57.2)	1.75 (44.5)	0.13 (3.2)	10000 (690)
1 NPT	6MP9	SS-FMA-NS16-6MP9	2.44 (61.9)	1.75 (44.5)	0.19 (4.8)	10000 (1034)



60 Series female to type "M" male

		#	Dimensions - in. (mm)			 psig (bar)
P-Connection	Px-Connection		L	F	E	
6FH4	HM9	SS-FMA-6FH4-HM9	1.25 (31.8)	0.75 (19.1)	0.09 (2.4)	60000 (4137)
6FH4	HM12	SS-FMA-6FH4-HM12	1.38 (35.0)	0.75 (19.1)	0.09 (2.4)	30000 (2068)
6FH4	HM14	SS-FMA-6FH4-HM14	1.56 (39.7)	1.00 (25.4)	0.09 (2.4)	50000 (3447)
6FH4	HM16	SS-FMA-6FH4-HM16	1.37 (34.9)	1.00 (25.4)	0.09 (2.4)	30000 (2068)
6FH6	HM9	SS-FMA-6FH6-HM9	1.50 (38.1)	1.00 (25.4)	0.09 (2.4)	60000 (4137)
6FH6	HM12	SS-FMA-6FH6-HM12	1.63 (41.3)	1.00 (25.4)	0.13 (3.2)	30000 (2068)
6FH6	HM14	SS-FMA-6FH6-HM14	1.81 (46.0)	1.00 (25.4)	0.13 (3.2)	50000 (3447)
6FH6	HM16	SS-FMA-6FH6-HM16	1.64 (41.6)	1.00 (25.4)	0.13 (3.2)	30000 (2068)
6FH6	HM21	SS-FMA-6FH6-HM21	1.56 (39.7)	1.37 (34.9)	0.13 (3.2)	20000 (1379)
6FH9	HM14	SS-FMA-6FH9-HM14	2.00 (50.8)	1.37 (34.9)	0.15 (3.8)	50000 (3447)
6FH9	HM16	SS-FMA-6FH9-HM16	1.81 (46.0)	1.37 (34.9)	0.19 (4.8)	30000 (2068)
6FH9	HM21	SS-FMA-6FH9-HM21	1.81 (46.0)	1.37 (34.9)	0.19 (4.8)	20000 (1379)





20,000 PSI MEDIUM PRESSURE TUBE FITTINGS & TUBING

FEATURES

- Pressure up to 20,000 psig (1379 bar)
- Coned-and-Threaded Connection
- Metal-to-metal seal provides perfect leak-tight service from critical vacuum to high pressure
- Anti-vibration connection components available
- Fittings are easy to disconnect and retighten
- Every fitting is stamped with size, material and heat code
- Available to NACE MR-01-75

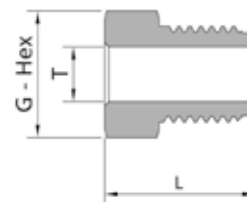


CONFIGURATION	FITTING TYPE	EXAMPLE
	Gland	SS-G-2FH4
	Collar	SS-CO-2FH6
	Plug	SS-TP-2FH9
	Union Coupling	SS-U-2FH12
	Reducing Union Coupling	SS-U-2FH6-2FH4
	Union Coupling (Slip Type)	SS-SU-2FH16
	Bulkhead Coupling	SS-BU-2FH6
	Cap	SS-TC-2FH6
	Elbow	SS-LU-2FH9
	Tee	SS-TT-2FH12
	Cross	SS-C-2FH4
	Anti-Vibration Gland Assembly	SS-AVGA-2FH9
	Coned and Threaded Nipple	SS-CTN-2FH6-8

20,000 PSI MEDIUM PRESSURE TUBE FITTINGS & TUBING

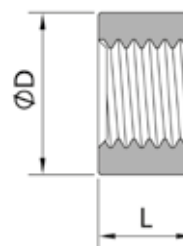
GLANDS

T-Tube O.D. (in)	#	Dimensions - in. (mm)	
		G	L
1/4	SS-G-2FH4	0.50 (12.7)	0.58 (14.7)
3/8	SS-G-2FH6	0.63 (15.9)	0.73 (18.5)
9/16	SS-G-2FH9	0.94 (23.8)	0.88 (22.4)
3/4	SS-G-2FH12	1.19 (30.2)	1.00 (25.4)
1	SS-G-2FH16	1.38 (34.9)	1.38 (35.1)



COLLARS

T-Tube O.D. (in)	#	Dimensions - in. (mm)	
		D	L
1/4	SS-CO-2FH4	0.34 (9.7)	0.22 (5.6)
3/8	SS-CO-2FH6	0.47 (11.9)	0.25 (6.4)
9/16	SS-CO-2FH9	0.72 (18.3)	0.31 (7.9)
3/4	SS-CO-2FH12	0.94 (23.8)	0.37 (9.4)
1	SS-CO-2FH16	1.25 (31.8)	0.50 (12.7)



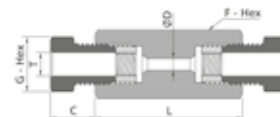
PLUGS

T-Tube O.D. (in)	#	Dimensions - in. (mm)	
		D	L
1/4	SS-TP-2FH4	0.38 (9.7)	0.94 (23.8)
3/8	SS-TP-2FH6	0.47 (11.9)	1.18 (30.0)
9/16	SS-TP-2FH9	0.72 (18.3)	1.40 (35.6)
3/4	SS-TP-2FH12	0.94 (23.8)	1.69 (42.9)
1	SS-TP-2FH16	1.25 (31.8)	2.20 (55.9)



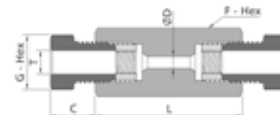
UNION COUPLINGS

T-Tube O.D. (in)	#	Dimensions - in. (mm)				
		L	C	D	G	F
1/4	SS-U-2FH4	1.62 (41.1)	0.38 (9.7)	0.11 (2.8)	0.50 (12.7)	0.63 (15.9)
3/8	SS-U-2FH6	1.75 (44.5)	0.44 (11.2)	0.20 (5.1)	0.63 (15.9)	0.75 (19.1)
9/16	SS-U-2FH9	2.12 (53.9)	0.53 (13.5)	0.31 (7.9)	0.94 (23.8)	1.00 (25.4)
3/4	SS-U-2FH12	2.50 (63.5)	0.62 (15.7)	0.44 (11.1)	1.19 (30.2)	1.38 (34.9)
1	SS-U-2FH16	3.50 (88.9)	0.72 (18.3)	0.56 (14.3)	1.38 (34.9)	1.75 (44.5)



UNION COUPLINGS (SLIP TYPE)

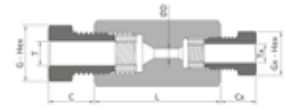
T-Tube O.D. (in)	#	Dimensions - in. (mm)				
		L	C	D	G	F
1/4	SS-SU-2FH4	1.62 (41.1)	0.38 (9.7)	0.11 (2.8)	0.50 (12.7)	0.63 (15.9)
3/8	SS-SU-2FH6	1.75 (44.5)	0.44 (11.2)	0.20 (5.1)	0.63 (15.9)	0.75 (19.1)
9/16	SS-SU-2FH9	2.12 (53.9)	0.53 (13.5)	0.31 (7.9)	0.94 (23.8)	1.00 (25.4)
3/4	SS-SU-2FH12	2.50 (63.5)	0.62 (15.7)	0.44 (11.1)	1.19 (30.2)	1.38 (34.9)
1	SS-SU-2FH16	3.50 (88.9)	0.72 (18.3)	0.56 (14.3)	1.38 (34.9)	1.75 (44.5)



20,000 PSI MEDIUM PRESSURE TUBE FITTINGS & TUBING

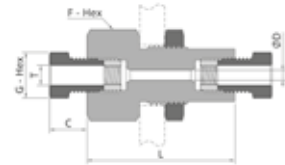
REDUCING UNION COUPLINGS

T-Tube O.D. (in)	Tx - Tube O.D. (in)	#	Dimensions - in. (mm)					
			L	C	Cx	D	G	Gx
3/8	1/4	SS-U-2FH6-2FH4	1.75 (44.5)	0.44 (11.2)	0.38 (9.7)	0.11 (2.8)	0.63 (15.9)	0.50 (12.7)
9/16	1/4	SS-U-2FH9-2FH4	2.00 (50.8)	0.53 (13.5)	0.38 (9.7)	0.11 (2.8)	0.94 (23.8)	0.50 (12.7)
9/16	3/8	SS-U-2FH9-2FH6	2.0 (50.8)	0.53 (13.5)	0.44 (11.2)	0.20 (5.1)	0.94 (23.8)	0.63 (15.9)
3/4	1/4	SS-U-2FH12-2FH4	2.25 (57.2)	0.62 (15.7)	0.38 (9.7)	0.11 (2.8)	1.19 (30.2)	0.50 (12.7)
3/4	3/8	SS-U-2FH12-2FH6	2.25 (57.2)	0.62 (15.7)	0.44 (11.2)	0.20 (5.1)	1.19 (30.2)	0.63 (15.9)
3/4	9/16	SS-U-2FH12-2FH9	2.50 (63.5)	0.62 (15.7)	0.53 (13.5)	0.31 (7.9)	1.19 (30.2)	0.94 (23.8)
1	1/4	SS-U-2FH16-2FH4	2.75 (69.9)	0.72 (18.3)	0.38 (9.7)	0.11 (2.8)	1.38 (34.9)	0.50 (12.7)
1	3/8	SS-U-2FH16-2FH6	2.88 (73.0)	0.72 (18.3)	0.44 (11.2)	0.20 (5.1)	1.38 (34.9)	0.63 (15.9)
1	9/16	SS-U-2FH16-2FH9	3.00 (76.2)	0.72 (18.3)	0.53 (13.5)	0.31 (7.9)	1.38 (34.9)	0.94 (23.8)
1	3/4	SS-U-2FH16-2FH12	3.00 (76.2)	0.72 (18.3)	0.62 (15.7)	0.44 (11.1)	1.38 (34.9)	1.19 (30.2)



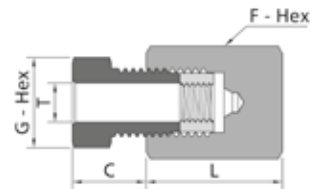
BULKHEAD COUPLINGS

T-Tube O.D. (in)	#	Dimensions - in. (mm)						
		L	C	D	G	F	Panel hole size	Max. panel thickness
1/4	SS-BU-2FH4	1.88 (47.8)	0.38 (9.7)	0.11 (2.8)	0.50 (12.7)	1.00 (25.4)	0.81 (20.6)	0.38 (9.7)
3/8	SS-BU-2FH6	2.00 (50.8)	0.44 (11.2)	0.20 (5.1)	0.63 (15.9)	1.06 (27.0)	0.94 (23.9)	0.38 (9.7)
9/16	SS-BU-2FH9	2.38 (60.5)	0.53 (13.5)	0.31 (7.9)	0.94 (23.8)	1.38 (34.9)	1.13 (28.6)	0.38 (9.7)
3/4	SS-BU-2FH12	2.62 (66.5)	0.62 (15.7)	0.44 (11.1)	1.19 (30.2)	1.88 (47.6)	1.69 (42.9)	0.38 (9.7)
1	SS-BU-2FH16	3.50 (88.9)	0.72 (18.3)	0.56 (14.3)	1.38 (34.9)	2.13 (54.0)	1.94 (49.3)	0.38 (9.7)



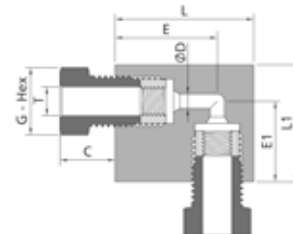
CAPS

T-Tube O.D. (in)	#	Dimensions - in. (mm)			
		L	C	G	F
1/4	SS-TC-2FH4	0.81 (20.6)	0.38 (9.7)	0.50 (12.7)	0.63 (15.9)
3/8	SS-TC-2FH6	1.13 (28.6)	0.44 (11.2)	0.63 (15.9)	0.75 (19.1)
9/16	SS-TC-2FH9	1.38 (34.9)	0.53 (13.5)	0.94 (23.8)	1.00 (25.4)
3/4	SS-TC-2FH12	1.75 (44.5)	0.62 (15.7)	1.19 (30.2)	1.38 (34.9)
1	SS-TC-2FH16	2.25 (57.2)	0.72 (18.3)	1.38 (34.9)	1.75 (44.5)



ELBOWS

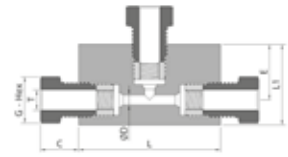
T-Tube O.D. (in)	#	Dimensions - in. (mm)						
		C	D	G	L	E	L1	E1
1/4	SS-LU-2FH4	0.38 (9.7)	0.11 (2.8)	0.50 (12.7)	1.12 (28.4)	0.75 (19.1)	1.12 (28.4)	0.75 (19.1)
3/8	SS-LU-2FH6	0.44 (11.2)	0.20 (5.1)	0.63 (15.9)	1.38 (34.9)	1.00 (25.4)	1.38 (34.9)	1.00 (25.4)
9/16	SS-LU-2FH9	0.53 (13.5)	0.31 (7.9)	0.94 (23.0)	1.75 (44.5)	1.25 (31.8)	1.75 (44.5)	1.25 (31.8)
3/4	SS-LU-2FH12	0.62 (15.7)	0.44 (11.1)	1.19 (30.2)	2.25 (57.2)	1.50 (38.1)	2.25 (57.2)	1.50 (38.1)
1	SS-LU-2FH16	0.72 (18.3)	0.56 (14.3)	1.38 (34.9)	3.00 (76.2)	2.06 (52.3)	3.00 (76.2)	2.06 (52.3)



20,000 PSI MEDIUM PRESSURE TUBE FITTINGS & TUBING

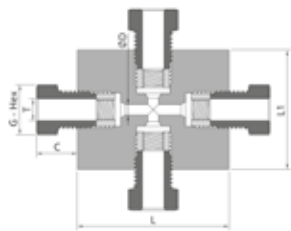
TEES

T-Tube O.D. (in)	#	Dimensions - in. (mm)						Thickness
		C	D	G	L	L1	E	
1/4	SS-TTT-2FH4	0.38 (9.7)	0.11 (2.8)	0.50 (12.7)	1.50 (38.1)	1.12 (28.4)	0.75 (19.1)	0.63 (15.9)
3/8	SS-TTT-2FH6	0.44 (11.2)	0.20 (5.1)	0.63 (15.9)	2.00 (50.8)	1.38 (34.9)	1.00 (25.4)	0.75 (19.1)
9/16	SS-TTT-2FH9	0.53 (13.5)	0.31 (7.9)	0.94 (23.8)	2.50 (63.5)	1.75 (44.5)	1.25 (31.8)	1.00 (25.4)
3/4	SS-TTT-2FH12	0.62 (15.7)	0.44 (11.1)	1.19 (30.2)	3.00 (76.2)	2.25 (57.2)	1.50 (38.1)	1.38 (34.9)
1	SS-TTT-2FH16	0.72 (18.3)	0.56 (14.3)	1.38 (34.9)	4.12 (104.6)	3.00 (76.2)	2.06 (52.3)	1.75 (44.5)



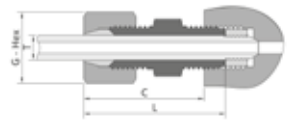
CROSSES

T-Tube O.D. (in)	#	Dimensions - in. (mm)						Thickness
		C	D	G	L	L1	E	
1/4	SS-C-2FH4	0.38 (9.7)	0.11 (2.8)	0.50 (12.7)	1.50 (38.1)	1.50 (38.1)	0.63 (15.9)	0.63 (15.9)
3/8	SS-C-2FH6	0.44 (11.2)	0.20 (5.1)	0.63 (15.9)	2.00 (50.8)	2.00 (50.8)	0.75 (19.1)	0.75 (19.1)
9/16	SS-C-2FH9	0.53 (13.5)	0.31 (7.9)	0.94 (23.8)	2.50 (63.5)	2.50 (63.5)	1.00 (25.4)	1.00 (25.4)
3/4	SS-C-2FH12	0.62 (15.7)	0.44 (11.1)	1.19 (30.2)	3.00 (76.2)	3.00 (76.2)	1.38 (34.9)	1.38 (34.9)
1	SS-C-2FH16	0.72 (18.3)	0.56 (14.3)	1.38 (34.9)	4.12 (104.6)	4.12 (104.6)	1.75 (44.5)	1.75 (44.5)



ANTI-VIBRATION GLAND ASSEMBLIES

T-Tube O.D. (in)	#	Dimensions - in. (mm)		
		L	C	G
1/4	SS-AVGA-2FH4	1.19 (30.2)	0.94 (23.8)	0.63 (15.9)
3/8	SS-AVGA-2FH6	1.50 (38.1)	1.19 (30.2)	0.81 (20.6)
9/16	SS-AVGA-2FH9	1.78 (45.2)	1.41 (35.8)	0.94 (23.8)
3/4	SS-AVGA-2FH12	2.00 (50.8)	1.59 (40.4)	1.25 (31.8)
1	SS-AVGA-2FH16	2.38 (60.5)	1.69 (42.9)	1.50 (38.1)



20 SERIES TUBING

- Working pressure: 20000 psig (1379 bar)
- 316 and 304 stainless steel are standard materials. Other materials are available upon request
- Material, size and heat code are indicated on the tubing surface.

T-Tube O.D. (in)	Tx - Tube O.D. (in)	Material	#	Tolerance O.D. in. (mm)
1/4	0.109	316 SS	SS-MT-2FH4	0.248/0.243 (6.30/6.17)
1/4	0.109	304 SS	S4-MT-2FH4	0.248/0.243 (6.30/6.17)
3/8	0.203	316 SS	SS-MT-2FH6	0.370/0.365 (9.40/9.27)
3/8	0.203	304 SS	S4-MT-2FH6	0.370/0.365 (9.40/9.27)
9/16	0.312	316 SS	SS-MT-2FH9	0.557/0.552 (14.15/14.02)
9/16	0.312	304 SS	S4-MT-2FH9	0.557/0.552 (14.15/14.02)
3/4	0.438	316 SS	SS-MT-2FH12	0.745/0.740 (18.92/18.80)
3/4	0.438	304 SS	S4-MT-2FH12	0.745/0.740 (18.92/18.80)
1	0.562	316 SS	SS-MT-2FH16	0.995/0.990 (25.27/25.14)
1	0.562	304 SS	S4-MT-2FH16	0.995/0.990 (25.27/25.14)



Add the actual foot (feet) / metre (metres) as a suffix to the basic Ordering number to get the complete Ordering number.

20,000 PSI MEDIUM PRESSURE TUBE FITTINGS & TUBING

CONED & THREADED NIPPLES

T-Tube O.D. (in)	Tx - Tube O.D. (in)	#	L in. (mm)
1/4	0.109	SS-CTN-2FH4-2.75	2.75 (69.9)
1/4	0.109	SS-CTN-2FH4-3	3 (76.2)
1/4	0.109	SS-CTN-2FH4-4	4 (101.6)
1/4	0.109	SS-CTN-2FH4-6	6 (152.4)
1/4	0.109	SS-CTN-2FH4-8	8 (203.2)
1/4	0.109	SS-CTN-2FH4-10	10 (254.0)
1/4	0.109	SS-CTN-2FH4-12	12 (304.8)
3/8	0.203	SS-CTN-2FH6-3	3 (76.2)
3/8	0.203	SS-CTN-2FH6-4	4 (101.6)
3/8	0.203	SS-CTN-2FH6-6	6 (152.4)
3/8	0.203	SS-CTN-2FH6-8	8 (203.2)
3/8	0.203	SS-CTN-2FH6-10	10 (254.0)
3/8	0.203	SS-CTN-2FH6-12	12 (304.8)
9/16	0.312	SS-CTN-2FH9-4	4 (101.6)
9/16	0.312	SS-CTN-2FH9-6	6 (152.4)
9/16	0.312	SS-CTN-2FH9-8	8 (203.2)
9/16	0.312	SS-CTN-2FH9-10	10 (254.0)
9/16	0.312	SS-CTN-2FH9-12	12 (304.8)
3/4	0.438	SS-CTN-2FH12-4	4 (101.6)
3/4	0.438	SS-CTN-2FH12-6	6 (152.4)
3/4	0.438	SS-CTN-2FH12-8	8 (203.2)
3/4	0.438	SS-CTN-2FH12-10	10 (254.0)
3/4	0.438	SS-CTN-2FH12-12	12 (304.8)
1	0.562	SS-CTN-2FH16-6	6 (152.4)
1	0.562	SS-CTN-2FH16-8	8 (203.2)
1	0.562	SS-CTN-2FH16-10	10 (254.0)
1	0.562	SS-CTN-2FH16-12	12 (304.8)



PART NUMBER DESCRIPTION

SS

SU

2FH 16

MATERIAL

FITTING TYPE

P1 CONNECTION TYPE

P1 SIZE

P3 & P4

SS	316 SS	G	Gland	2FH	20 Series Fractional Tube	4	1/4"	Specify in the way same way as the P1
		CO	Collar	6FH	60 Series Fractional Tube	6	3/8"	
		TP	Plug			9	9/16"	
		U	Union Coupling			12	3/4"	
		U	Reducing Union Coupling			16	1"	
		SU	Union Coupling (Slip Type)					
		BU	Bulkhead Coupling					
		TC	Cap					
		LU	Elbow					
		TTT	Tee					
		C	Cross					
		AVGA	Anti-Vibration Gland Assembly					
		CTN	Coned and Threaded Nipple					

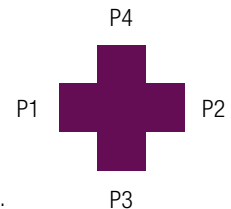
NB: "Part Number Description" is used for composition rules of FITOK product model, not suitable for specific product part number selection, not random combinations. If in doubt, please contact Abdex.

P1, P2, P3 and P4 shall be described in the following orders:

- Describe in descending order as per size if the end Connection types are the same
- Describe the end of P1 if all end connections are the same.

NB: "Part Number Description" is used for composition rules of FITOK product model, not suitable for specific product part number selection, not random combinations. If in doubt, please contact Abdex.

- P1, P2, P3 and P4 shall be described in the following orders:
- Describe in descending order as per size if the end Connection types are the same
 - Describe the end of P1 if all end connections are the same.



60,000 PSI HIGH PRESSURE TUBE FITTINGS & TUBING

FEATURES

- Pressures up to 60,000 psig (4138 bar)
- Coned and threaded connection
- Metal-to-metal seal provides perfect leak-tight service from critical vacuum to high pressure
- Anti-vibration connection components available
- Fittings are easy to disconnect and retighten
- Material is high tensile 316 stainless steel
- Every fittings is stamped with size, material and heat code

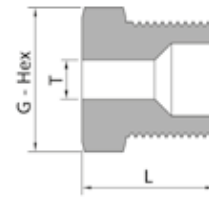


CONFIGURATION	FITTING TYPE	EXAMPLE
	Gland	SS-G-6FH4
	Collar	SS-CO-6FH6
	Plug	SS-TP-6FH9
	Union Coupling	SS-U-6FH12
	Reducing Union Coupling	SS-U-2FH6-6FH4
	Union Coupling (Slip Type)	SS-SU-6FH16
	Bulkhead Coupling	SS-BU-6FH6
	Cap	SS-TC-6FH6
	Elbow	SS-LU-6FH9
	Tee	SS-TT-6FH12
	Cross	SS-C-6FH4
	Anti-Vibration Gland Assembly	SS-AVGA-6FH9
	Coned and Threaded Nipple	SS-CTN-6FH6-10

60,000 PSI HIGH PRESSURE TUBE FITTINGS & TUBING

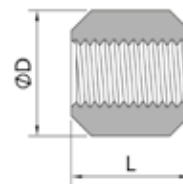
GLANDS

T-Tube O.D. (in)	#	Dimensions - in. (mm)	
		G	L
1/4	SS-G-6FH4	0.63 (15.9)	0.82 (20.8)
3/8	SS-G-6FH6	0.81 (20.6)	1.13 (28.7)
9/16	SS-G-6FH9	1.19 (30.2)	1.50 (38.1)



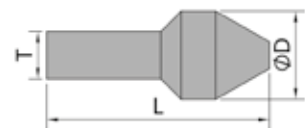
COLLARS

T-Tube O.D. (in)	#	Dimensions - in. (mm)	
		D	L
1/4	SS-CO-6FH4	0.38 (9.6)	0.38 (9.6)
3/8	SS-CO-6FH6	0.50 (12.7)	0.54 (13.7)
9/16	SS-CO-6FH9	0.81 (20.6)	0.62 (15.8)



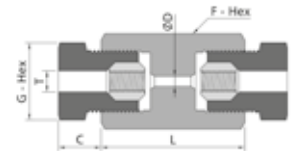
PLUGS

T-Tube O.D. (in)	#	Dimensions - in. (mm)	
		D	L
1/4	SS-TP-6FH4	0.38 (9.6)	1.04 (26.4)
3/8	SS-TP-6FH6	0.50 (12.7)	1.35 (34.3)
9/16	SS-TP-6FH9	0.81 (20.6)	1.89 (48.0)



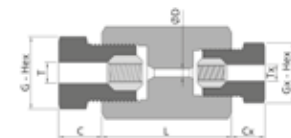
UNION COUPLINGS

T-Tube O.D. (in)	#	Dimensions - in. (mm)				
		L	C	D	G	F
1/4	SS-U-6FH4	1.38 (34.9)	0.50 (12.7)	0.09 (2.3)	0.63 (15.9)	0.75 (19.1)
3/8	SS-U-6FH6	1.75 (44.5)	0.53 (13.5)	0.13 (3.3)	0.81 (20.6)	1.00 (25.4)
9/16	SS-U-6FH9	2.19 (55.6)	0.81 (20.6)	0.19 (4.8)	1.19 (30.2)	1.38 (34.9)



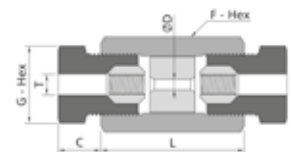
REDUCING UNION COUPLINGS

T-Tube O.D. (in)	Tx -Tube O.D. (in)	#	Dimensions - in. (mm)					
			L	C	Cx	D	G	Gx
3/8	1/4	SS-U-6FH6-6FH4	1.63 (41.3)	0.53 (13.5)	0.50 (12.7)	0.09 (2.3)	0.81 (20.6)	0.63 (15.9)
9/16	1/4	SS-U-6FH9-6FH4	1.75 (44.5)	0.81 (20.6)	0.50 (12.7)	0.09 (2.3)	1.19 (30.2)	0.63 (15.9)
9/16	3/8	SS-U-6FH9-6FH6	2.00 (50.8)	0.81 (20.6)	0.53 (13.5)	0.13 (3.3)	1.19 (30.2)	0.81 (20.6)



UNION COUPLINGS (SLIP TYPE)

T-Tube O.D. (in)	#	Dimensions - in. (mm)				
		L	C	D	G	F
1/4	SS-SU-6FH4	1.38 (34.9)	0.50 (12.7)	0.09 (2.3)	0.63 (15.9)	0.75 (19.1)
3/8	SS-SU-6FH6	1.75 (44.5)	0.53 (13.5)	0.13 (3.3)	0.81 (20.6)	1.00 (25.4)
9/16	SS-SU-6FH9	2.19 (55.6)	0.81 (20.6)	0.19 (4.8)	1.19 (30.2)	1.38 (34.9)

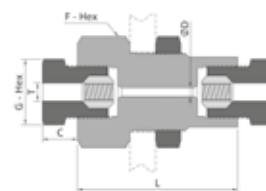


FITOK
Valves and Fittings

60,000 PSI HIGH PRESSURE TUBE FITTINGS & TUBING

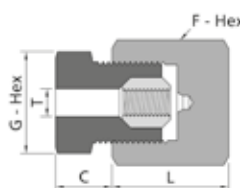
BULKHEAD COUPLINGS

T-Tube O.D. (in)	#	Dimensions - in. (mm)						
		L	C	D	G	F	Panel hole size	Max. panel thickness
1/4	SS-BU-6FH4	1.88 (47.8)	0.50 (12.7)	0.09 (2.3)	0.63 (15.9)	1.06 (27.0)	0.94 (23.9)	0.38 (9.7)
3/8	SS-BU-6FH6	2.38 (60.5)	0.53 (13.5)	0.13 (3.3)	0.81 (20.6)	1.38 (34.9)	1.13 (28.6)	0.38 (9.7)
9/16	SS-BU-6FH9	2.75 (69.9)	0.81 (20.6)	0.19 (4.8)	1.19 (30.2)	1.88 (47.6)	1.69 (42.9)	0.38 (9.7)



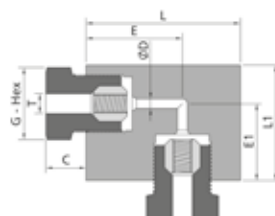
CAPS

T-Tube O.D. (in)	#	Dimensions - in. (mm)			
		L	C	G	F
1/4	SS-TC-6FH4	0.75 (19.1)	0.50 (12.7)	0.63 (15.9)	0.75 (19.1)
3/8	SS-TC-6FH6	1.13 (28.6)	0.53 (13.5)	0.81 (20.6)	1.00 (25.4)
9/16	SS-TC-6FH9	1.38 (34.9)	0.81 (20.6)	1.19 (30.2)	1.38 (34.9)



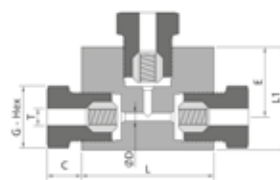
ELBOWS

T-Tube O.D. (in)	#	Dimensions - in. (mm)						
		C	D	G	L	E	L1	E1
1/4	SS-LU-6FH4	0.50 (12.7)	0.09 (2.3)	0.63 (15.9)	1.50 (38.1)	0.88 (22.4)	1.00 (25.4)	0.62 (15.7)
3/8	SS-LU-6FH6	0.53 (13.5)	0.13 (3.3)	0.81 (29.6)	2.00 (50.8)	1.25 (31.8)	1.50 (38.1)	1.00 (25.4)
9/16	SS-LU-6FH9	0.81 (20.6)	0.19 (4.8)	1.19 (30.2)	2.62 (66.5)	1.88 (47.8)	1.88 (47.8)	1.12 (28.4)



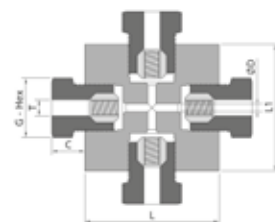
TEES

T-Tube O.D. (in)	#	Dimensions - in. (mm)						
		C	D	G	L	L1	E	Thickness
1/4	SS-TTT-6FH4	0.50 (12.7)	0.09 (2.3)	0.63 (15.9)	2.00 (50.8)	1.25 (31.8)	0.88 (22.4)	0.75 (19.1)
3/8	SS-TTT-6FH6	0.53 (13.5)	0.13 (3.3)	0.81 (20.6)	2.00 (50.8)	1.56 (38.6)	1.06 (26.9)	1.00 (25.4)
9/16	SS-TTT-6FH9	0.81 (20.6)	0.19 (4.8)	1.19 (30.2)	2.62 (66.5)	2.12 (53.8)	1.38 (35.0)	1.50 (38.1)



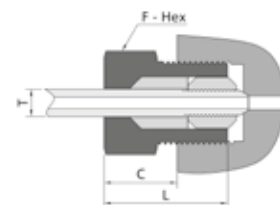
CROSSES

T-Tube O.D. (in)	#	Dimensions - in. (mm)					
		C	D	G	L	L1	Thickness
1/4	SS-C-6FH4	0.50 (12.7)	0.09 (2.3)	0.63 (15.9)	2.00 (50.8)	1.25 (31.8)	0.75 (19.1)
3/8	SS-C-6FH6	0.53 (13.5)	0.13 (3.3)	0.81 (20.6)	2.00 (50.8)	2.12 (53.8)	1.00 (25.4)
9/16	SS-C-6FH9	0.81 (20.6)	0.19 (4.8)	1.19 (30.2)	2.62 (66.5)	2.75 (69.9)	1.50 (38.1)



ANTI-VIBRATION GLAND ASSEMBLIES

T-Tube O.D. (in)	#	Dimensions - in. (mm)		
		L	C	G
1/4	SS-AVGA-6FH4	0.81 (20.6)	0.50 (12.7)	0.63 (15.9)
3/8	SS-AVGA-6FH6	1.12 (28.4)	0.62 (15.7)	0.81 (20.6)
9/16	SS-AVGA-6FH9	1.50 (38.1)	1.00 (25.4)	1.19 (30.2)



60,000 PSI HIGH PRESSURE TUBE FITTINGS & TUBING

CONED & THREADED NIPPLES

T-Tube O.D. (in)	Tx - Tube O.D. (in)	#	L in. (mm)
1/4	0.083	SS-CTN-6FH4-2.75	2.75 (69.9)
1/4	0.083	SS-CTN-6FH4-3	3 (76.2)
1/4	0.083	SS-CTN-6FH4-4	4 (101.6)
1/4	0.083	SS-CTN-6FH4-6	6 (152.4)
1/4	0.083	SS-CTN-6FH4-8	8 (203.2)
1/4	0.083	SS-CTN-6FH4-10	10 (254.0)
1/4	0.083	SS-CTN-6FH4-12	12 (304.8)
3/8	0.125	SS-CTN-6FH6-3	3 (76.2)
3/8	0.125	SS-CTN-6FH6-4	4 (101.6)
3/8	0.125	SS-CTN-6FH6-6	6 (152.4)
3/8	0.125	SS-CTN-6FH6-8	8 (203.2)
3/8	0.125	SS-CTN-6FH6-10	10 (254.0)
3/8	0.125	SS-CTN-6FH6-12	12 (304.8)
9/16	0.188	SS-CTN-6FH9-4	4 (101.6)
9/16	0.188	SS-CTN-6FH9-6	6 (152.4)
9/16	0.188	SS-CTN-6FH9-8	8 (203.2)
9/16	0.188	SS-CTN-6FH9-10	10 (254.0)
9/16	0.188	SS-CTN-6FH9-12	12 (304.8)



60 SERIES TUBING

- Working pressure: 60000 psig (4137 bar).
- 316 and 304 stainless steel are standard materials. Other materials are available upon request.
- Material, size and heat code are indicated on the tubing surface.

T-Tube O.D. (in)	Tx - Tube O.D. (in)	Material	#	Tolerance O.D. in. (mm)
1/4	0.083	316 SS	SS-HT-6FH4	0.248/0.243 (6.30/6.17)
1/4	0.083	304 SS	S4-HT-6FH4	0.248/0.243 (6.30/6.17)
3/8	0.125	316 SS	SS-HT-6FH6	0.370/0.365 (9.40/9.27)
3/8	0.125	304 SS	S4-HT-6FH4	0.370/0.365 (9.40/9.27)
9/16	0.188	316 SS	SS-HT-6FH9	0.557/0.552 (14.15/14.02)
9/16	0.188	304 SS	S4-HT-6FH4	0.557/0.552 (14.15/14.02)



Add the actual foot (feet) / metre (metres) as a suffix to the basic Ordering number to get the complete Ordering number.

60,000 PSI HIGH PRESSURE PART NUMBER DESCRIPTION

SS - SU - FH8 16 - - -

MATERIAL		FITTING TYPE		P1 CONNECTION TYPE		P1 SIZE		P3 & P4
SS	316 SS	G	Gland	2FH	20 Series Fractional Tube	4	1/4"	Specify in the way same way as the P1
		CO	Collar	6FH	60 Series Fractional Tube	6	3/8"	
		TP	Plug			9	9/16"	
		U	Union Coupling			12	3/4"	
		U	Reducing Union Coupling			16	1"	
		SU	Union Coupling (Slip Type)					
		BU	Bulkhead Coupling					
		TC	Cap					
		LU	Elbow					
		TTT	Tee					
		C	Cross					
		AVGA	Anti-Vibration Gland Assembly					
		CTN	Coned and Threaded Nipple					

NB: "Part Number Description" is used for composition rules of Abdex product model, not suitable for specific product part number selection, not random combinations. If in doubt, please contact Abdex.

P1, P2, P3 and P4 shall be described in the following orders:

- Describe in descending order as per size if the end Connection types are the same
- Describe the end of P1 if all end connections are the same

HIGH PRESSURE TOOLS

TOOLING

CONING TOOLS

- For preparing a "cone" on the 20 and 60 series tubing ends.

Tube O.D x I.D (in.)	Ordering number
1/4 x 0.109	HCT-M4
3/8 x 0.203	HCT-M6
9/16 x 0.312	HCT-M9
1/4 x 0.083	HCT-H4
3/8 x 0.125	HCT-H6
9/16 x 0.188	HCT-H9



THREADING TOOLS

- For preparing a left hand thread on the 20 and 60 series tubing ends.

Tube O.D x I.D (in.)	Ordering number	Thread size (Left Hand)
1/4	HTT-4	1/4-28 UNF
3/8	HTT-6	3/8-24 UNF
9/16	HTT-9	9/16-18 UNF



RESEATING TOOLS

- For repairing the damaged tube connector seats in 20 and 60 series tube fittings and valves.

Connection size (in.)	Connection type	Ordering number
1/4	2FH4	HRT-M4
3/8	2FH6	HRT-M6
9/16	2FH9	HRT-M9
3/4	2FH12	HRT-M12
1	2FH16	HRT-M16
1/4	6FH4	HRT-H4
3/8	6FH6	HRT-H6
9/16	6FH9	HRT-H9



MANUAL PRESETTING TOOLS

Tube O.D (in.)	Ordering number
1/8	PST-2
1/4	PST-4
3/8	PST-6
1/2	PST-8



HIGH PRESSURE HYDRAULIC PRESETTING TOOLS

Tube O.D (in.)	Ordering number
1/2, 9/16, 3/4	HPT-HF
Choose your needs from Die Heads e.g. HPT-H+HPT-H-FH8	HPT-H+U

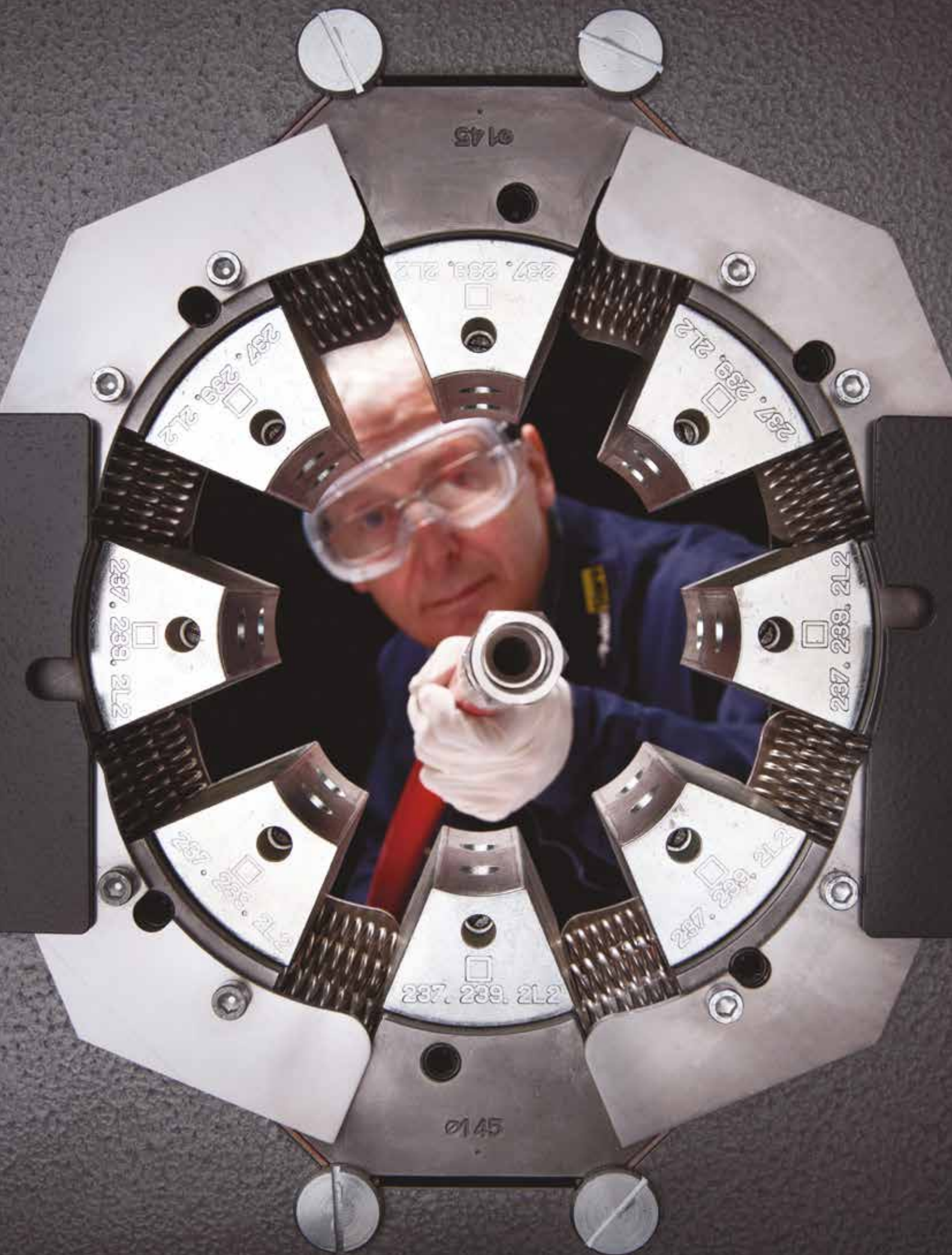


DIE HEADS

Tube O.D (in.)	Ordering number
1/2	HPT-H-FH8
9/16	HPT-H-FH9
3/4	HPT-H-FH12

FITOK
Valves and Fittings





ABOUT UNIFLEX

Abdex understands hose production and hose production equipment. We only work with the best and most reliable products. There are plenty of reasons why Uniflex machines are considered to be the best in the world.

Uniflex has been developing, manufacturing and selling innovative systems for hose assembly production and processing for 40 years. With up-to-date and robust technology, Uniflex satisfies the most exacting demands of customers for hydraulic crimpers and peripheral equipment.

WHY UNIFLEX?

Uniflex knows the importance of keeping machines working year after year. That's why they place the highest value on excellent service, and guaranteeing users peace of mind and longevity. Uniflex machines and service plans have proven track records with the largest hose manufacturers. Uniflex also offers the most comprehensive and transparent service and calibration programme available.

We know that once you've used Uniflex, you'll stay with Uniflex. Our sole purpose to supply the best machines and best quality service to the hose production market.

Simply, Uniflex offers the Best Return on Investment!

THE UNIFLEX 7 STAR PROMISE

Unrivalled and unique technology

No grease, no pressure loss

Investment return

Fixed 6 o'clock die

Longevity and reliability

Extended warranty, old for new

Xceptional service

If Uniflex can't solve your problem, you'll get another machine until they can!



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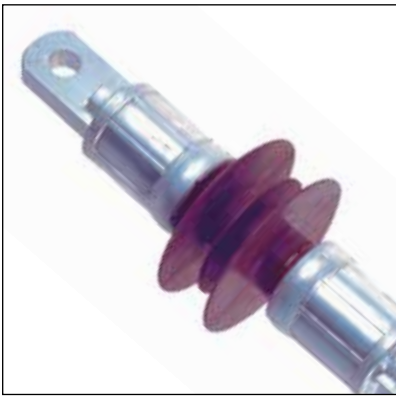
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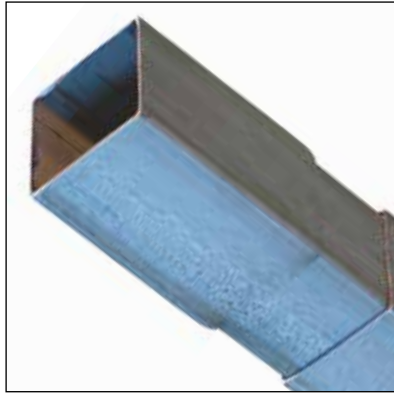
MORE THAN JUST HOSE CRIMPING

CRIMPING EXAMPLES

MORE THAN JUST HOSE CRIMPING - CRIMPING EXAMPLES



**FOR MORE THAN
JUST HOSES!**



The best return on Investment since 1972.

HOSE CRIMPING MACHINES

INTRODUCTION

HOSE CRIMPING MACHINES

Owing to their unique construction, user friendliness, versatility and proven lifespan, Uniflex crimpers are a global benchmark for quality and economic efficiency.

Due to revolutionary slide bearing technology, there are no friction losses, the crimp process is quicker, with a maximum efficiency, cleanliness and almost maintenance-free.

Other advantages include fixed 6 o'clock die (production machines only) for safe and power-saving positioning of the fittings, and the flat tools which can rapidly be exchanged. From the birth of our crimping machines, great importance was attached to largest possible tool openings and forming distances.

Cost and time savings due to short set-up times and energy-saving drive systems have especially positive effects for the fastest possible lean production. All Uniflex production crimpers are fitted with the latest Unimatic Control B or C touch for user-friendly, easy and safe handling and control. Numerous functions already available in the basic version may be upgraded such as the process, increased storage, PFM (Pressure Force Monitoring), UTS (Uniflex Transfer System) or even full paperless production.

IN SUMMARY



Fixed 6 o'clock die

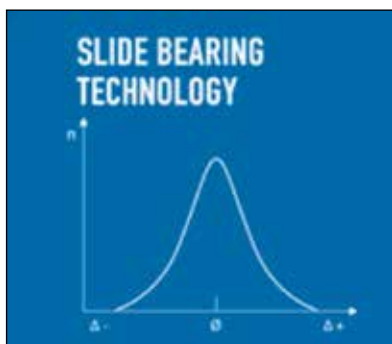


Fully maintained slide plates in 12.44 seconds



Greaseless / clean slide bearing technology

TECHNOLOGY PROVEN "HEAD TO HEAD" BEYOND DOUBT



Slide bearing technology vs greasing



The best return on Investment since 1972.

BRANDED MACHINES

TRUSTED TO PROMOTE YOUR BRAND



TRIED, TESTED AND TRUSTED!

Not everyone who works with Uniflex machines is aware of it. Many global companies trust Uniflex to brand and manufacture their machines under license. This ensures those companies can promote their brand, rely on the world renowned Uniflex quality and capture the aftermarket. As well as machines special die systems can be manufactured to minimise operational error and to "brand lock" customers into your chosen brand of hoses and fittings.

With reasonable quantities Uniflex can produce your perfect machine. Make sure you are backed by Uniflex with the know-how and expertise of the market leader!



The best return on Investment since 1972.

CRIMP MACHINE ICON KEY

ACCESSORIES / OPTIONAL EXTRAS

Features and benefits

	No grease		Fixed 6 o'clock die		100% Consistency Fixed 6 o'clock die
	100% Consistency		Lean production Fixed 6 o'clock die		Lean production
	Energy efficient -30%		Quiet motor		Universal hose Manufacturers
	Small footprint		Economy model		Service package available
	Special applications		True force No load loss		

Data capture and transfer

	Data capture and transfer		Pressure force monitoring (PFM)		Bespoke software
	Paperless				

Accessories / Ancillary equipment

	Accessories		Ancillary		Scan worksheet "Pokayoke"
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Laptop



Printer



The best return on Investment since 1972.

OPTIONAL EXTRAS

COMPREHENSIVE HOSE PRODUCTION

Accessories



Foot pedal



Work mirror



Die storage



Automatic backstop



Die marking



Camera system



Extractor / Spark arrester



B or C + Touch screen

Ancillary equipment



Workbench



Cutting counter



Hose coiling reel



Hose measuring guide



Hose measuring tool



Hose storage



Hose coiler



Work light



The best return on Investment since 1972.

MODULAR DIE STORAGE BUILT TO YOUR SPECIFICATION

MODULAR DIE STORAGE - BUILT TO YOUR SPECIFICATION



Uniflex modular die storage allows you to build a user friendly work stations and die racks. Minimising the number of dies at the workstation, storing in the correct order and at the optimum work heights makes it easier for the operator and in turn speed is up the production.



The best return on Investment since 1972.

HM 325, HM 375, HM 380

FEATURES & BENEFITS



Globally Renowned



Non grease technology



- Easy, cost effective maintenance
- Guaranteed crimp consistency
- 100% crimp force
- No contamination

Fixed 6 O'clock die



- Easy to operate
- Safe for heavy assemblies
- Faster operation
- True force production technology

Uniflex engineered



- Silent for the operator
- Motor uses 30% less power
- Continuous lean production
- Unique Uniflex technology

Siemens touch screen



- Easy to operate
- Fast feature selection
- Unlimited data storage
- Open source data capture



Ask the Sales Team about Uniflex Paperless Production.



The best return on Investment since 1972.

HM 325, HM 375, HM 380

LEAN PRODUCTION CRIMPERS & UHP



HM 325 / HM 375 / HM 380



Technical data

	HM 325	HM 375	HM 380
Crimp force (kN/Ton)	2800 / 280	3150 / 315	3400 / 340
Crimp range***	165mm	165mm	165mm
SAE R15 / 4SH* 1 Piece	2"	3"	3"
SAE R15 / 4SH* 2 Piece	2"	2 1/2"	3"
Industrial	4" (6")**	4" (6")**	4" (6")**
90° Elbows	3"	3"	3"
Speed (seconds) - Close	23	23	23
Speed (seconds) - Crimp	1,4	1,4	1,3
Speed (seconds) - Open	33	33	33
No grease: 20% less friction	✓	✓	✓
Control	Control C + Touch	Control C + Touch	Control C + Touch
Opening	+ 70mm	+ 70mm	+ 70mm
Opening without dies	215mm	215mm	215mm
Type of dies	239 / 237 L	239 / 237 L	239 / 237 L
Noise Level	69 dBA	62 dBA	62 dBA
Drive	4 kW	4 kW	4 kW
Oil	100 L	100 L	100 L
Weight	750 kg	750 kg	750 kg
L x W x H (mm)	1200 x 600 x 1700	1200 x 600 x 1700	1200 x 600 x 1700
CGS (Conicity Guard System)	✓	✓	✓
HIDS (High Pressure Pump Dynamic Suction)	✓	✓	✓

Ø Types of die	PB239-XX-D Length (mm)	PB237-XX-D Length (mm)
6.8	50	-
9	50	-
12	50	-
14	50	-
16	65	-
17	65	-
19	65	-
20	65	-
22	65	-
24	65	-
26	65	-
28	80	-
32	80	-
36	80	-
40	80	-
44	80	-
47	100	-
50	100	-
54	100	118
57	100	118
62	100	118
67	-	118
71	-	118
74	-	118
78	-	118
84	-	118
90	-	118
96	-	118
103	-	118
106	-	126
111	-	126
116	-	126
121	-	126
126	-	126
131	-	126
126	-	126
131	-	126

* Fittings may vary. ** Without flange. *** Without intermediate dies.

Package

QDS 239 B

QDC 239.5



Standard

CONTROL C + Touch

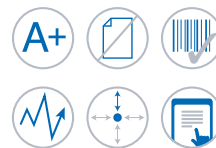
TA (A)

Automatic backstop



Optional Extras

(See page 463)



Package dies. Supplied with adaptor die 237.239.2L2



The best return on Investment since 1972.

HM 220, HM 225

LEAN PRODUCTION CRIMPERS



HM 220



HM 225



Technical data

	HM 220	HM 225
Crimp force (kN/Ton)	1400 / 140	1600 / 160
Crimp range	70mm	70mm
SAE R15 / 4SH* 1 Piece	1 1/4"	1 1/4"
SAE R15 / 4SH* 2 Piece	1"	1 1/4"
Industrial	2"	2"
90° Elbows	1 1/2"	1 1/2"
Speed (seconds) - Close	9,5	19
Speed (seconds) - Crimp	6	1.5
Speed (seconds) - Open	9.5	19
No grease: 20% less friction	✓	✓
Control	Control C + Touch	Control C + Touch
Opening	+ 35mm	+ 40mm
Opening without dies	105mm	110mm
Type of dies	239	239-xx-Ø-yy
Noise Level	53 dBA	53 dBA
Drive	5,5 kW	5,5 kW
Oil	50 L	80 L
Weight	285 kg	370 kg
L x W x H (mm)	730 x 480 x 1480	645 x 560 x 1470

* Fittings may vary.

HM 220

D Types of die	PB239 Length mm
6.8	50
9	50
10	50
12	50
14	50
16	60
17	60
19	60
20	60
22	60
24	60
26	75
28	75
32	75
36	75
40	75
44	75
47	75
50	75
54	75
57	75
62	75

Package dies.

HM 225

D Types of die	PB239-XX-D Length mm
6.8	50
9	50
10	50
12	50
14	50
16	65
17	65
19	65
20	65
22	65
24	65
26	65
28	80
32	80
36	80
40	80
44	80
47	100
50	100
54	100
57	100
62	100

Package dies.

Package

QDS 239 B

QDC 239.5



Standard

CONTROL C + Touch



Optional Extras

(See page 463)



The best return on Investment since 1972.



**ERGONOMIC
PRODUCTION
PROFILE**

OPEN HEAD CRIMPER

LEAN PRODUCTION AUTOMOTIVE



HM 245

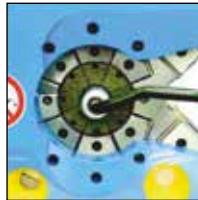


Technical data

	HM 245
Crimp force (kN/Ton)	750 / 75
Crimp range	70mm
SAE R12* 1 Piece	1"
SAE R12* 2 Piece	3/4"
Speed (seconds) - Close	27
Speed (seconds) - Crimp	5
Speed (seconds) - Open	30
No grease: 20% less friction	✓
Control	Control C + Touch
Axial opening	75mm
Opening without dies	105mm
Type of dies	239
Drive	5,5 kW
Oil	100 L
Weight	610 kg
L x W x H (mm)	1020 x 950 x 1450
Noise level	53 dBA

* Fittings may vary.

Radial insertion for all angles



Slide protection with handle



Constant axial centre when crimping jaws are closed



D Types of die	PB239 Length mm
6.8	50
9	50
10	50
12	50
14	50
16	60
17	60
19	60
20	60
22	60
24	60
26	75
28	75
32	75
36	75
40	75
44	75
47	75
50	75
54	75
57	75
62	75

Package dies.

Package

QDS 239 B

QDC 239.5



Standard

CONTROL C + Touch



Optional Extras

(See page 463)



The best return on Investment since 1972.

LARGE DIAMETER CRIMPERS

HIGH FORCE, LARGE DIAMETER

HOSE CRIMPING MACHINES - HIGH FORCE, LARGE DIAMETER



HM 450 / HM 480 / HM 495



HM 485



Technical data

	HM 450	HM 480	HM 485	HM 495
Crimp force (kN/Ton)	4000 / 400	4500 / 450	4500 / 450	6000 / 600
Crimp range	310mm	310mm	250mm	310mm
SAE R15 / 4SH* 1 Piece	3"	3"	3"	3"
SAE R15 / 4SH* 2 Piece	3"	3"	3"	3"
Industrial**	8" (10")	8" (10")	10"	8" (10")
90° Elbows	3"	3"	3"	3"
Speed (seconds) - Close	20	20	20	20
Speed (seconds) - Crimp	1,5	1,5	1,5	1,5
Speed (seconds) - Open	23	23	23	23
No grease: 20% less friction	✓	✓	✓	✓
Control	Control C + Touch	Control C + Touch	Control C + Touch	Control C + Touch
Opening	+ 150mm	+ 150mm	+ 310mm	+ 150mm
Opening without dies	380mm	380mm	360mm	380mm
Type of dies	237 L / 239 L / 245	237 L / 239 L / 245	237 L / 239 L / 245	237 L / 239 L / 245
Noise Level	62 dBA	62 dBA	62 dBA	62 dBA
Drive	5,5 kW	5,5 kW	5,5 kW	5,5 kW
Oil	300 L	300 L	300 L	300 L
Weight	2600 kg	2600 kg	2900 kg	2600 kg
L x W x H (mm)	730 x 1590 x 2015	730 x 1590 x 2015	730 x 1590 x 2480	730 x 1590 x 2015
HiDS (High Pressure Pump Dynamic Suction)	✓	✓	✓	✓

D Types of die	PB239-XX-D Length mm	PB237-XX-D Length mm
6.8	50	-
9	50	-
12	50	-
14	50	-
16	65	-
17	65	-
19	65	-
20	65	-
22	65	-
24	65	-
26	26	-
28	80	-
32	80	-
36	80	-
40	80	-
44	80	-
47	100	-
50	100	-
54	100	118
57	100	118
62	100	118
67	-	118
71	-	118

* Fittings may vary. ** Without flange.

Package dies. Supplied complete with adaptor dies 237.239.2L2 and 245.237L. For die sizes 74 - 305mm please contact our Sales Team.

Package

QDS 239 B QDC 239.5



Standard

CONTROL C + Touch TA (A) Automatic backstop



Optional Extras

(See page 463)



ERGONOMIC PRODUCTION PROFILE



The best return on Investment since 1972.

HIGH PRESSURE CRIMPERS

UHP APPROVED TRUE FORCE



HM 660 / HM 665 / HM 1200



Technical data

	HM 660	HM 665	HM 1200
Crimp force (kN/Ton)	8000 / 800	6000 / 600	12000 / 1200
Crimp range	325mm	380mm	325mm
SAE R15 / 4SH* 1 Piece	3"	3"	3"
SAE R15 / 4SH* 2 Piece	3"	3"	3"
Industrial**	10"	12"	10"
90° Elbows	3"	3"	3"
Speed (seconds) - Close	15	15	11
Speed (seconds) - Crimp	2	2	1,5
Speed (seconds) - Open	15	15	11
No grease: 20% less friction	✓	✓	✓
Control	Control C + Touch	Control C + Touch	Control C + Touch
Opening	+ 120mm	+ 120mm	+ 120mm
Opening without dies	395mm	450mm	395mm
Type of dies	237 L / 239 L / 246	237 L / 239 L / 247 L	237 L / 239 L / 246
Noise Level	69 dBA	69 dBA	69 dBA
Drive	18,5 kW	18,5 kW	18,5 kW
Oil	300 L	300 L	300 L
Weight	4200 kg + 450 kg	4200 kg + 450 kg	4480 kg + 450 kg
L x W x H (mm) Machine	1400 x 1050 x 2470	1400 x 1050 x 2470	1400 x 1130 x 2660
L x W x H (mm) Power unit	700 x 1160 x 1360	700 x 1160 x 1360	1100 x 1300 x 1500
HiDS (High Pressure Pump Dynamic Suction)	✓	✓	✓

Ø Types of die	239-xx-Ø-yy	Ø Types of die	237 L 247 L
6,8	50	54	118
9	50	57	118
12	50	62	118
14	50	67	118
16	65	71	118
17	65	74	118
19	65	78	118
20	65	84	118
22	65	86	118
24	65	90	118
26	65	96	118 / 130
28	80	103	118
32	80	106	126 / 130
36	80	111	126
40	80	116	126 / 130
44	80	121	126
47	100	126	126 / 130
50	100	131	126 / 130
54	100	136	150 / 130
57	100	146	150 / 150
62	100	156	150 / 150
-	-	156	150 / 130
-	-	170	170 / 170
-	-	185	200 / 200
-	-	200	200 / 200
-	-	215	200 / 200
-	-	230	200 / 200
-	-	245	200 / 200
-	-	260	200 / 200
-	-	275	200
-	-	290	200
-	-	305	200

* Fittings may vary. ** Without flange.

Standard CONTROL C + Touch



Optional Extras (See page 463)



The best return on Investment since 1972.

Dies to be ordered separately.

ULTRA 2000 TONNE CRIMPER

INSULATORS & LARGE BORE



Ultra 2000 Tonne Crimper



Technical data

	HMC 12 2000
Crimp force (kN/Ton)	2000
Crimp range (mm)	380
SAE R15 / 4SH 1 piece	3"
SAE R15 / 4SH 2 piece	3"
Industrial	12"
90° Elbows	3"
No grease	20% Less friction
Control	Control C + Touch
Opening without dies	435mm
Die type	247, 245, 237
Speed - close, crimp, open	On request, depends on power unit
L x W x H (mm)	2000 x 750 x 2400
Weight (Ton)	15
Voltages	On request

All sizes available on request from PB247 / 245 / 237.

Ø Types of die	239-xx-Ø-yy	Ø Types of die	237 L 247 L
6,8	50	54	118
9	50	57	118
12	50	62	118
14	50	67	118
16	65	71	118
17	65	74	118
19	65	78	118
20	65	84	118
22	65	86	118
24	65	90	118
26	65	96	118 / 130
28	80	103	118
32	80	106	126 / 130
36	80	111	126
40	80	116	126 / 130
44	80	121	126
47	100	126	126 / 130
50	100	131	126 / 130
54	100	136	150 / 130
57	100	146	150 / 150
62	100	156	150 / 150
-	-	156	150 / 130
-	-	170	170 / 170
-	-	185	200 / 200
-	-	200	200 / 200
-	-	215	200 / 200
-	-	230	200 / 200
-	-	245	200 / 200
-	-	260	200 / 200
-	-	275	200
-	-	290	200
-	-	305	200

Dies to be ordered separately.

Standard

CONTROL C
+ Touch



TA (A)

Automatic backstop



Optional Extras (See page 463)



The best return on Investment since 1972.

HORIZONTAL PRODUCTION CRIMPER

NUT / SWIVEL FITTINGS



KS 6 / KS 8 / KS 10



Technical data

	KS 6	KS 8	KS 10
Crimp range	55mm	139mm	139mm
Speed (seconds) - Close	13.1	7	3.5
Speed (seconds) - Crimp	13.1	7	3.5
Speed (seconds) - Open	30	12	6
Noise level	58 dBA	58 dBA	58 dBA
Control	Control C.2	Control C.2	Control C.2
Pressforce (kN/Ton)	1100 / 10	800 / 80	1800 / 180
Jaw type	PBK 237	PBK 237	PBK 237
Opening	+25mm	+45mm	+45mm
Opening without dies	95mm	190mm	190mm
Drive	5.5 kW	5.5 kW	5.5 kW
Oil	40 L	40 L	40 L
Weight	470 kg	570 kg	570 kg
L x W x H (mm)	1000 x 1000 x 1700	1000 x 1000 x 1700	1000 x 1000 x 1700

Jaw type	PBK 239	PBK 237
12	3	3
14	3	3
16	4	4
19	4	4
22	4.5	4.5
24	4.5	4.5
26	4.5	4.5
28	4.5	4.5
32	5	5
36	5	5
40	5	5
47	5	5
50	-	5
54	-	5
57	-	5
62	-	5
67	-	5
71	-	5
74	-	5
78	-	5
84	-	5
86	-	5
90	-	5
96	-	5
103	-	5
106	-	5

Standard

CONTROL B
+ Touch



TA (A)
Automatic backstop



Optional Extras (See page 463)



The best return on Investment since 1972.

NEW C-TOUCH CONTROL

FEATURES & BENEFITS



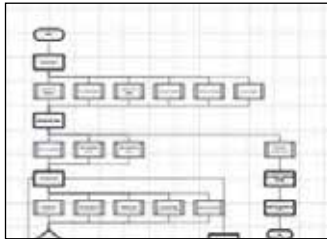
Fastest step operation



- Quick production menu and fastest set up
- FIFO product memory
- Unlimited product crimp memory



Customised programming



- Full step production
- Bespoke to companies internal processes
- Remote maintenance from network / online connection

Production quality tools



- Digital calliper ferrule conicity step checks
- Pressure force monitoring - PFM
- Pressure force control - PFC

Branded interface and dies



- Company specific part numbers
- Company specific graphics and terminology
- Proof check and control the distributor after market



The best return on Investment since 1972.

NEW C-TOUCH CONTROL FEATURES & BENEFITS



Link to external databases and machines



- XML / CSV Open interface
- Easy connection and maintenance
- Connectivity to any other brand of machine (if you have another manufacturers cutter for example)



Full paperless production



- No worksheets - Crimp data sent directly to the machine
- On screen process and operator signatures
- Complete removal of all paperwork

Firewall security checks



- Unique user login
- Full user traceability
- Layered stop checks and supervisor override

Optional extras



- Self calibration software and mandrel
- Barcode scanner
- UTS Software and notebook



The best return on Investment since 1972.

UTS, PFM & PFC

FEATURES & BENEFITS

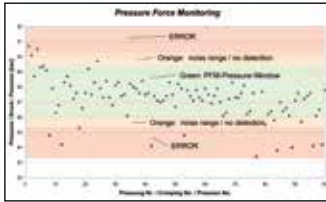


UTS Uniflex transfer system



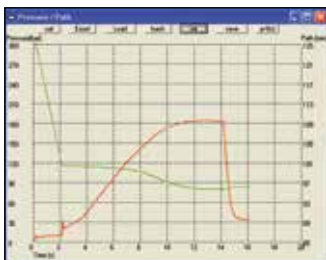
- Full data capture and transfer software
- Unique and fully optimised production traceability
- 100% correct transfer of crimp / job data to a networked online machine
- Continuous production documentation and data

PFM Pressure force monitoring



- Sustainable quality checks and continuous improvement
- Optimum target crimp pressure with upper and lower limit is determined
- Any non conforming crimp pressure out of the set limits will stop the production process
- Less manual quality checks which has proven to improve production from 97% or 99.7%

PFC Pressure force control



- Pressure force control gives the possibility to crimp pressure sensitive work pieces such as insulators and fibre glass
- Prior analysis and testing of material characteristics allows Uniflex to create a stable crimp connection that can handle extreme forces
- Pressure force control then measures and creates a table within an acceptable fine quality margin
- Uniflex can offer proven repeatable production quality with PFU references from Blue Chip market leaders



The best return on Investment since 1972.

KARRY KRIMP®

PORTABLE FIXED DIE CRIMPERS

Karry Krimp



Technical data

	Karry Krimp®
1SN	hoses up to size -20 (DN 32)
2SN	hoses up to size -20 (DN 32)
1 and 2 layer	Compact hoses up to size -20 (DN 32)

OPTIONS

Electric Pump 83CE-OEP



Hydraulic Air Pump 82C-2HP



Hand Pump 82C-2HP



COLOUR CODED FIXED DIES



Karry Krimp 2 also available.
Technical details on request.



The best return on Investment since 1972.

PORTABLE CRIMPERS

FLEXIBLE CRIMP DIAMETER



S1 M



Technical data

	S1 M	S1 P
Crimp force (kN/Ton)	750 / 75	750 / 75
Crimp range	52mm	52mm
SAE R15 / 4SH* 1 Piece	1"	1"
SAE R15 / 4SH* 2 Piece	1"	1"
Industrial	1 1/4"	1 1/4"
90° Elbows	1/2"	1/2"
Speed (seconds) - Close	-	1,0
Speed (seconds) - Crimp	-	1,0
No grease: 20% less friction	✓	✓
Opening	+ 10mm	+ 10mm
Opening without dies	52mm	52mm
Type of dies	261	261
Drive	Manual	Pressure
Oil	0,32 L	1,4 L
Weight	15 kg	16 kg
L x W x H (mm)	230 x 180 x 160	230 x 180 x 160

D Types of die	PB261-XX-D Length (mm)
6.8	65
9	65
12	65
14	65
17	65
20	65
24	65
28	65
32	65
36	65
40	65
44	65
47	65

Package dies.

* Fittings may vary.

Package

QPS 261 B



The best return on Investment since 1972.

PORTABLE CRIMPERS - ECOLINE

FLEXIBLE CRIMP DIAMETER



S2 M Ecoline



Technical data

	S2 M Ecoline
Crimp force (kN/Ton)	90
Crimp range	63mm
SAE R12 / 4SH* 1 Piece	1 1/4"
SAE R15 / 4SH* 2 Piece	1"
Industrial**	1 1/4"
90° Elbows	1"
Speed (seconds) - Close	-
Speed (seconds) - Crimp	-
No grease: 20% less friction	-
Opening	+ 22mm
Opening without dies	77mm
Oil	0,75 L
Weight	30 kg
L x W x H (mm)	170 x 220 x 330

D Types of die	PB263-XX-D Length (mm)
6.8	40
9	75
12	75
14	75
17	75
20	75
24	75
28	75
32	75
36	75
40	75
44	75
47	75

Package dies.

* Fittings may vary. ** Without flange.

FEATURES & BENEFITS

- Adjustable micrometer
- Compact and lightweight portable head
- Fast for the operator - 2 speed pump.

Package

QPS 261 B



The best return on Investment since 1972.

PORTABLE HEAVY DUTY CRIMPERS

FLEXIBLE CRIMP DIAMETER

PORTABLE CRIMPERS - FLEXIBLE CRIMP DIAMETER



S2 M



S2 P



Technical data

	S2 M	S2 P
Crimp force (kN/Ton)	900 / 90	900 / 90
Crimp range	63mm	63mm
SAE R12 / 4SH* 1 Piece	1 1/4"	1 1/4"
SAE R15 / 4SH* 2 Piece	1"	1"
Industrial**	1 1/4"	1 1/4"
90° Elbows	1"	1"
Speed (seconds) - Close	-	-
Speed (seconds) - Crimp	-	0,9
No grease: 20% less friction	✓	✓
Opening	+ 22mm	+ 22mm
Opening without dies	77mm	77mm
Type of dies	263	263
Drive***	Manual	Air pressure
Oil	0,75 L	2 L
Weight	32 kg	33 kg
L x W x H (mm)	500 x 420 x 440	380 x 400 x 310

D Types of die	PB263-XX-D Length (mm)
6.8	40
9	75
12	75
14	75
17	75
20	75
24	75
28	75
32	75
36	75
40	75
44	75
47	75

Package dies.

* Fittings may vary. ** Without flange. ***S2M pump delivery 11.26cm³.
Also available 3 times faster 39.33cm³.

FEATURES & BENEFITS

- Adjustable micrometer
- Fast for the operator - Various pump options
- Easy for the operator - Telescopic pump handle option to reduce force / effort required

Package

QPS 261 B



The best return on Investment since 1972.



PORTABLE HEAVY DUTY CRIMPERS

FLEXIBLE CRIMP DIAMETER



S2 A / S2 DC



Technical data

	S2 A	S2 DC
Crimp force (kN/Ton)	900 / 90	900 / 90
Crimp range	63mm	63mm
SAE R12 / 4SH* 1 Piece	1 1/4"	1 1/4"
SAE R15 / 4SH* 2 Piece	1"	1"
Industrial**	1 1/4"	1 1/4"
90° Elbows	1"	1"
Speed (seconds) - Close	5,8	2,4
Speed (seconds) - Crimp	0,6	0,2
No grease: 20% less friction	✓	✓
Opening	+ 22mm	+ 22mm
Opening without dies	77mm	77mm
Type of dies	263	263
Drive	1 Phase electric	12 Volt / 24 Volt
Oil	1,5 L	1,5 L
Weight	41 kg	41 kg
L x W x H (mm)	500 x 420 x 440	170 x 220 x 330

D Types of die	PB263-XX-D Length (mm)
6.8	40
9	75
12	75
14	75
17	75
20	75
24	75
28	75
32	75
36	75
40	75
44	75
47	75

Package dies.

* Fittings may vary. ** Without flange.

FEATURES & BENEFITS

- Adjustable micrometer
- Fast for the operator
- 12V DC for mobile operation

Package

QPS 261 B



The best return on Investment since 1972.

PORTABLE CRIMPERS - SEMI AUTOMATIC

FAST CRIMP



S7 / S7 DC



Technical data

	S7 / S7 DC
Crimp force (kN/Ton)	2400 / 240
Crimp range	82mm
SAE R15 / 4SH* 1 Piece	2"
4SH* 2 Piece	2"
SAE R15* 2 Piece	1 1/2"
Industrial	2"
90° Elbows	1 1/2"
Speed (seconds) - Close	Manual + 0.42
Speed (seconds) - Crimp	Manual + 0.42
Speed (seconds) - Open	Manual + 0.42
No grease: 20% less friction	✓
Control	Open / Close
Opening	+ 24mm
Opening without dies	110mm
Type of dies	239 / 265 L
Noise Level	70 dBA
Drive	0,75 kW
Oil	2,3 L
Weight	77 kg
L x W x H (mm)	430 x 367 x 682

Options	S7 / S7 DC
12 / 24 Volt	✓
1 Phase	✓
3 Phase	✓

D Types of die	PB239-XX-D Length (mm)	PB265-XX-D Length (mm)
6.8	50	-
9	50	-
12	50	-
14	50	-
16	65	-
17	65	-
19	65	-
20	65	-
22	65	-
24	65	-
26	65	-
28	80	-
32	80	-
36	80	-
40	80	-
44	80	-
47	100	-
50	100	-
54	100	90
57	100	90
62	100	90
67	-	90
71	-	100
74	-	100

Package dies. Supplied complete with adaptor die 265.239L

* Fittings may vary.

Package

QPS 261 B



FEATURES & BENEFITS

- Combined manual and electric crimp
- Fastest possible crimping time
- Vertical crimping
- Best possible access without obstruction.



The best return on Investment since 1972.

WORKSHOP CRIMPERS

MEDIUM DUTY PRODUCTION



HM 200



HM 200 Ecoline



Technical data

	HM 200	HM 200 Ecoline
Crimp force (kN/Ton)	1300 / 130	1300 / 130
Crimp range	70mm	70mm
SAE R12 / 4SH* 1 Piece	1 1/2"	1 1/2"
SAE R15 / 4SH* 2 Piece	1"	1"
SAE R12 / 4SH* 2 Piece	1 1/4"	1 1/4"
Industrial**	2"	2"
90° Elbows	1 1/2"	1 1/2"
Speed (seconds) - Close	3,5	3,5
Speed (seconds) - Crimp	3,5	3,5
Speed (seconds) - Open	5,9	5,9
No grease: 20% less friction	✓	✓
Control	Control A	Ecoline
Opening	+ 30mm	+ 30mm
Opening without dies	100mm	100mm
Type of dies	239	239
Drive	3 kW	3 kW
Oil	40 L	40 L (DC 4 L)
Weight	140 kg	88 kg
L x W x H (mm)	800 x 530 x 630	420 x 535 x 520
Power unit L x W x H (DC)	-	420 x 535 x 520
Noise Level	69 dBA	69 dBA

Options	HM 200	HM 200 Ecoline
12 / 24 Volt	-	✓
1 Phase	✓	2,2 kW

D Types of die	PB239-XX-D Length (mm)
6.8	50
9	50
10	50
12	50
14	60
16	60
17	60
19	60
20	60
22	60
24	60
26	75
28	75
32	75
36	75
40	75
44	75
47	75
50	75
54	75
57	75
62	75

Package dies.

* Fittings may vary. ** Without flange.

Package

QDS 239 B QDC 239.5



Optional Extras (See page 463)



HM 200 Ecoline 12V package comes with 12 x dies, die rack and quick die changing tool. See page 540.



The best return on Investment since 1972.

MOBILE WORKSHOP CRIMPERS

QUICK CHANGE FIXED DIES



UA4



Technical data

	UA4
Crimp force (kN/Ton)	1350 / 135
Crimp range	57mm + 8mm (65mm)
SAE R15 / 4SH* 1 Piece	1 1/4"
SAE R15 / 4SH* 2 Piece	1"
SAE R12 / 4SH* 2 Piece	1 1/4"
Industrial	1 1/2"
90° Elbows	1 1/4"
No grease: 20% less friction	✓
Opening	15mm
Opening without dies	73mm
Type of dies	PB 280
Drive	0,75 kW
Oil	5 L
Weight	65 kg
L x W x H (mm)	380 x 390 x 500
Weight power unit	25 kg

* Fittings may vary.

Also available in 12V DC.

Types of Die	PB280-XX-D Length (mm)
6.8	70
9	70
12	70
14	70
17	70
19	70
20	70
22	70
24	70
25	70
28	70
32	70
36	70
38	70
40	70
44	70
47	70
50	70
54	70
57	70

Package dies.

Package

QPS 261 B



- Grease free
- Fast change
- Colour coded.



The best return on Investment since 1972.

WORKSHOP CRIMPERS

MEDIUM DUTY PRODUCTION



S3 Ecoline
S4 Ecoline



S4 B



Technical data

	S3 Ecoline	S4 Ecoline	S4
Crimp force (kN/Ton)	1200 / 120	1800 / 180	1800 / 180
Crimp range	70mm	70mm	70mm
SAE R12 / 4SH* 1 Piece	1 1/4"	2"	2"
SAE R15 / 4SH* 2 Piece	1"	1 1/4"	1 1/4"
SAE R12 / 4SH* 2 Piece	1 1/4"	2"	2"
Industrial	2"	2"	2"
90° Elbows	1 1/2"	1 1/2"	1 1/2"
Speed (seconds) - Close	4	2,7	2,7
Speed (seconds) - Crimp	4	2,7	2,7
Speed (seconds) - Open	6,5	4,7	4,7
No grease: 20% less friction	✓	✓	✓
Control	Control A	Control A	Control B + Touch
Opening	+ 35mm	+ 35mm	+ 35mm
Opening without dies	105mm	105mm	105mm
Type of dies	239	239	239
Drive	3 kW	3 kW	3 kW
Oil	35 L	35 L	35 L
Weight	150 kg	160 kg	203 kg
L x W x H (mm)	592 x 545 x 672	592 x 545 x 672	720 x 600 x 672
Noise level	69 dBA	69 dBA	69 dBA
Options	S3 Ecoline	S4 Ecoline	S4
12 / 24 Volt	✓	✓	-
1 Phase	✓	✓	-

* Fittings may vary.

Package

QDS 239 B QDC 239.5



Optional Extras (See page 463)



S3 Ecoline

D Types of die	PB239-XX-D Length (mm)
6.8	50
9	50
10	50
12	50
14	50
16	65
17	65
19	65
20	65
22	65
24	65
26	65
28	80
32	80
36	80
40	80
44	80
47	100
50	100
54	100
57	100
62	100

S4 Ecoline / S4

D Types of die	PB239-XX-D Length (mm)
6.8	50
9	50
10	50
12	50
14	50
16	65
17	65
19	65
20	65
22	65
24	65
26	65
28	80
32	80
36	80
40	80
44	80
47	100
50	100
54	100
57	100
62	100

Package dies (both machines up to includes 40mm).



The best return on Investment since 1972.

WORKSHOP CRIMPERS

MEDIUM DUTY PRODUCTION



S6



S6 Ecoline



S6 Ecoline DC



Technical data

	S6	S6 Ecoline / DC	
Crimp force (kN/Ton)	2000 / 200	2000 / 200	
Crimp range	100mm	100mm	
SAE R15 / 4SH* 1 Piece	2"	2"	
4SH* 2 Piece	2"	2"	
SAE R15 / 4SH* 2 Piece	1 1/2"	1 1/2"	
Industrial	3"	3"	
90° Elbows	2"	2"	
Speed	-	Phase 3	Phase 1
Speed (seconds) - Close	9,7	4,9	3,6
Speed (seconds) - Crimp	2,2	2,3	1,3
Speed (seconds) - Open	16	8,2	6,1
No grease: 20% less friction	✓	✓	
Control	Control B + Touch	Control A	
Opening	+ 45mm	+ 45mm	
Opening without dies	147mm	147mm	
Type of dies	239 L / 266 L	239 L / 266 L	
Drive	4 kW	4 kW	
Noise Level	69 dBA	69 dBA	
Oil	55 L	50 L	
Weight	374 kg	248 kg	
L x W x H (mm)	690 x 600 x 1350	700 x 600 x 735	

* Fittings may vary.

Options	S6	S6 Ecoline / DC
12 / 24 Volt	-	✓
1 Phase	-	✓
3 Phase	-	✓

Ø Types of die	239-xx-Ø-yy	266-xx-Ø-yy
6,8	50	40
9	50	-
12	50	-
14	50	-
16	65	-
17	65	-
19	65	-
20	65	-
22	65	-
24	65	-
26	65	-
28	80	-
32	80	-
36	80	-
40	80	-
44	80	-
47	100	-
50	100	-
54	100	-
57	100	110
62	100	110
67	-	110
71	-	110
74	-	110
78	-	110
84	-	110
86	-	110
92	-	110

Package dies include adaptor die set.

Package

QDS 239 B QDC 239.5



Optional Extras (See page 463)



The best return on Investment since 1972.

WORKSHOP CRIMPERS - LARGE DIAMETER

MEDIUM / HEAVY DUTY PRODUCTION



S8



S10



S8 Ecoline
S10 Ecoline



Technical data

	S8	S8 Ecoline	S10	S10 Ecoline
Crimp force (kN/Ton)	2200 / 220	2200 / 220	2800 / 280	2800 / 280
Crimp range	139mm	139mm	139mm	139mm
SAE R15 / 4SH* 1 Piece	2"	2"	2"	2"
4SH* 2 Piece	2"	2"	2"	2"
SAE R15 / 4SH* 2 Piece	1 1/2"	1 1/2"	2"	2"
Industrial	4"	4"	4"	4"
No grease: 20% less friction	✓	✓	✓	✓
Control	Control A	Micrometre	Control A	Micrometre
90° Elbows	2"	2"	2"	2"
Opening	+ 45mm	+ 45mm	+ 45mm	+ 45mm
Opening without dies	190mm	190mm	190mm	190mm
Type of dies	239 L / 237 L	239 L / 237 L	239 L / 237 L	239 L / 237 L
Noise Level	63 dBA	63 dBA	63 dBA	63 dBA
Drive	4 kW	4 kW	5,5 kW	4 kW
Oil	55 L	50 L	55 L	50 L
Weight	390 kg	372 kg	390 kg	372 kg
L x W x H (mm)	690 x 600 x 1400	700 x 600 x 1400	690 x 600 x 1400	700 x 600 x 845
Speed (seconds) - Close	6,1	4,8	6,1	4,8
Speed (seconds) - Crimp	1,7	2,3	1,7	2,3
Speed (seconds) - Open	10,3	7,9	10,3	7,9

* Fittings may vary.

Package

QDS 239 B QDC 239.5



Optional Extras (See page 463)



D Types of die	PB239-XX-D Length mm	PB237-XX-D Length mm
6.8	50	-
9	50	-
12	50	-
14	50	-
16	65	-
17	65	-
19	65	-
20	65	-
22	65	-
24	65	-
26	65	-
28	80	-
32	80	-
36	80	-
40	80	-
44	80	-
47	100	-
50	100	-
54	100	118
57	100	118
62	100	118
67	-	118
71	-	118
74	-	118
78	-	118
84	-	118
90	-	118
96	-	118
103	-	118
106	-	126
111	-	126
116	-	126
121	-	126
126	-	126
131	-	126
126	-	126
131	-	126

Package dies include adaptor die set.



The best return on Investment since 1972.

WORKSHOP PRODUCTION CRIMPER

HEAVY DUTY PRODUCTION



HM 3 H



Technical data

	HM 3 H
Crimp force (kN/Ton)	700 / 70
Crimp range	70mm
SAE R12 / 4SP* 2 Piece	1 1/4"
4SH* 2 Piece	1"
SAE R15* / 2 Piece	3/4"
Industrial	2"
90° Elbows	1 1/2"
Speed (seconds) - Close	8,6
Speed (seconds) - Crimp	8,6
Speed (seconds) - Open	10,5
No grease: 20% less friction	✓
Control	Control C + Touch
Opening	+ 35mm
Opening without dies	105mm
Type of dies	239
Drive	5,5 kW
Oil	50 L
Weight	193 kg
L x W x H (mm)	720 x 600 x 672
Noise level	53 dBA

D Types of die	PB239-XX-D Length mm
6.8	50
9	50
10	50
12	50
14	50
16	65
17	65
19	65
20	65
22	65
24	65
26	65
28	80
32	80
36	80
40	80
44	80
47	100
50	100
54	100
57	100
62	100

Package dies

* Fittings may vary.

Package

QDS 239 B

QDC 239.5



Standard

CONTROL C
+ Touch



Optional Extras (See page 463)



The best return on Investment since 1972.

MACHINE RENTAL - FLEXIBLE OR FIXED UNLIMITED OR PAY PER CRIMP

HM 200 Ecoline



HM 220 C



HM 325 C



Uniflex UK have a wide selection of machines in our rental fleet.
Workshop quality or full production - we are happy to tailor a rental plan to meet your exact requirements.

PAY PER CRIMP - FEATURES & BENEFITS

- No investment - No need for a loan
- Pay for exactly what you use - transparency on your costs
- Various machines - Flexible pricing to fit your budget
- Crimp data monitoring - Failsafe production
- Data collection - Further revenue for you to easily contact your customer when a hose re-test is required
- Latest technology - Allows focus on production and earning money
- Flexible rental periods - Cost savings for longer rental periods with quick flexible termination
- Full warranty - Same or next day response for service

What you need

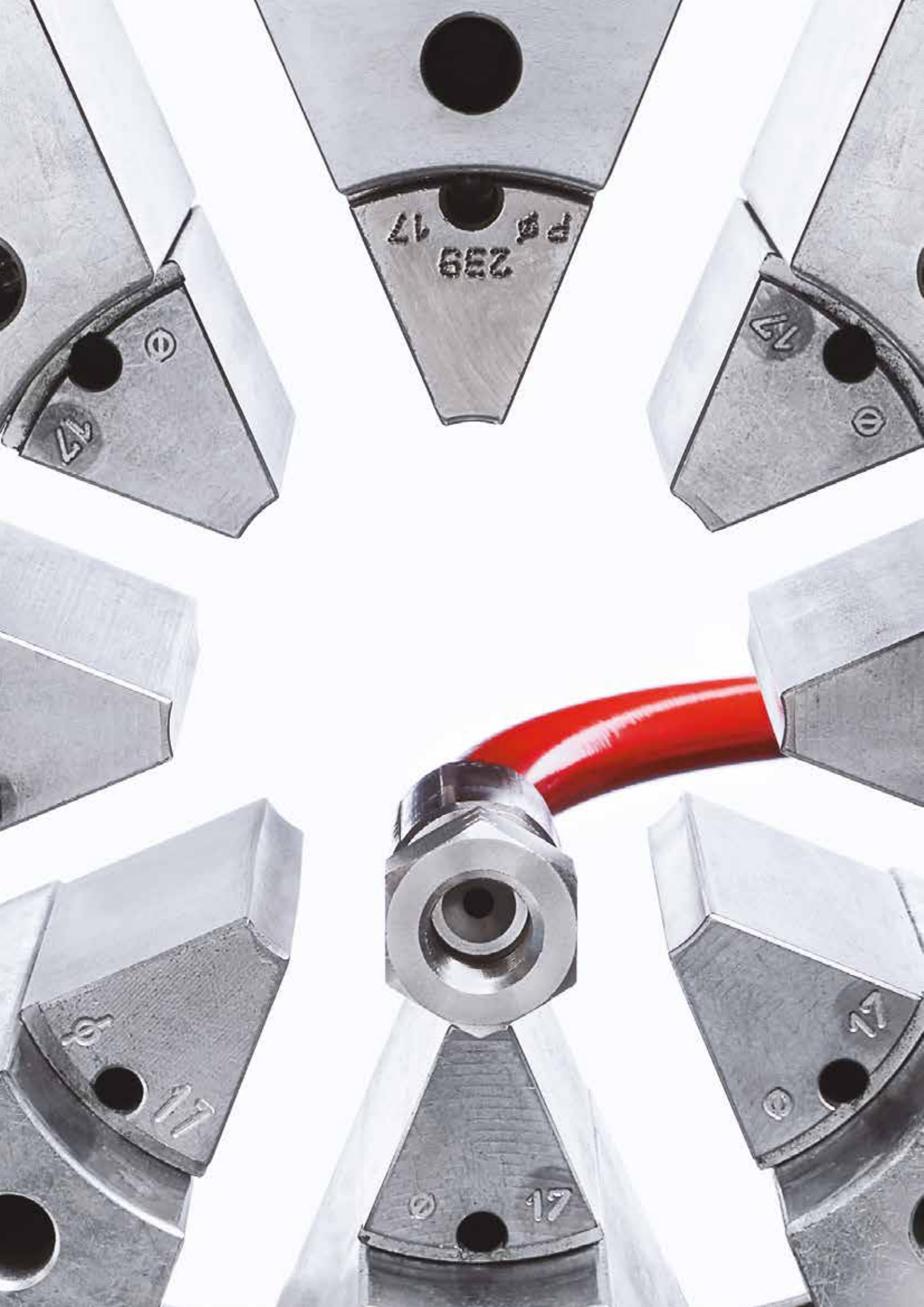
- Internet connection
- Insurance
- Deposit
- Estimated crimp usage

UNLIMITED CRIMP MACHINE RENTAL - FEATURES & BENEFITS

- No investment - No need for a loan
- Unlimited usage - Fixed costs
- Various machines (old and new) - Flexible pricing to fit your budget
- Flexible rental periods - Cost savings for longer rental periods with quick flexible termination
- Full warranty - Same or next day response for service



The best return on Investment since 1972.



UNIFLEX SERVICE & CALIBRATION

RECOMMENDED BY THE BFPA

Uniflex UK understands service and the need to keep machines working year after year. Our service team will not only co-ordinate the work but take all the stress out of your quality record keeping!

Our machines and service plans have proven track records with the largest hose manufacturers around the world. Uniflex offers complete peace of mind with the most comprehensive and transparent service/calibration program on the market.

Annual machine calibration helps ensure that our customers can produce quality first time, every time. Quality means more customers which results in healthy business.

Our online service tool allows our service team to keep all your records up to the minute, up to date. Easy to navigate with every action recorded, and all documents in one place.



The screenshot shows a web dashboard for Uniflex. At the top, it says 'Services queries call (+44) 1525 377770'. Below that is a 'Dashboard' section with 'Company: Test Company' and 'Last Updated: 12:03pm 18/07/2013'. The main part of the dashboard is a table with columns: Manufacturer, Part No., Serial No., Calibration/Service Due, Status, and Cost. The table contains several rows of data, each representing a machine record.

SERVICE QUESTIONS UNIFLEX ARE HAPPY TO ANSWER!

Are Uniflex Service Engineers fully trained to carry our service and calibration work?

Uniflex engineers are trained extensively to ensure they are fully qualified to carry out the work on all Uniflex machines.

Do Uniflex always use original parts?

Uniflex always use original parts as we will not compromise your hose production.

How often do you recommend a service and calibration?

Once a year as per the ISO and BFPA recommendation. For heavy production and critical users the calibration can be every 6 months.

How do Uniflex log all the work carried out during servicing and calibration?

Uniflex have traditional service paperwork which is then uploaded to our online paperless service system. Everything is to do with service is logged, even telephone calls.

How long does a service and calibration usually take?

How long the job takes depends on the type of machine. For a thorough service and calibration, typically between 3 and 4 hours.

What is the price for servicing?

The price of the service depends on the type of machine, frequency of the service, how many machines and the location. Most importantly it will be transparent without any hidden costs.

Can the price for servicing be reduced with a contract?

The price of servicing is always reduced with a contract. Contracts allow both Uniflex and our customers to further plan and control our work, and in turn our costs.

How quickly can you respond?

Response time depends on the customer requirements and of course logistics. We can often be on site same day / next day.

What happens if you are unable to repair a machine?

If it is included in your service contract we will give you a like for like machine until it is repaired. If it is not in your contract we will still go that extra mile to try and help you.

Why should we choose Uniflex?

Uniflex service with original parts will never compromise your production. Simply you can trust Uniflex to deliver value for money and cost savings to your production through quality, service and transparency!



The best return on Investment since 1972.

HOSE CRIMPING MACHINES

AT A GLANCE

	Crimp Force	Control	SAE R12 / 4SP	Industrial	Elbows	Crimp range	Crimp path	Opening	Page
S 1 M	750 / 75	Micrometer	1"	1 1/4"	1/2"	52mm	5mm	+10mm	478
S 1 P	750 / 75	Micrometer	1"	1 1/4"	1/2"	52mm	5mm	+10mm	478
S 2 E	900 / 90	Micrometer	1"	1 1/4"	1"	63mm	8mm	+22mm	479
S 2 M	900 / 90	Micrometer	1"	1 1/4"	1"	63mm	8mm	+22mm	480
S 2 P	900 / 90	Micrometer	1"	1 1/4"	1"	63mm	8mm	+22mm	480
S 2 A	900 / 90	Micrometer	1"	1 1/4"	1"	63mm	8mm	+22mm	480
S 3 E	1200 / 120	Control A	1 1/4"	2"	1 1/2"	70mm	8mm	+35mm	485
S 4	1800 / 180	B + Touch	1 1/2"	2"	1 1/2"	70mm	8mm	+35mm	485
S 6	2000 / 200	B + Touch	2"	3"	2"	100mm	8mm	+45mm	486
S 7	2400 / 240	Open / Close	2"	2"	1 1/2"	82mm	8mm	+24mm	482
S 8	2200 / 220	Control A	2"	4"	2"	139mm	8mm	+45mm	487
S 10	2800 / 280	Control A	2"	4"	2"	139mm	8mm	+45mm	487
UA4	1350 / 135	Micrometer	1 1/4"	1 1/2"	2"	57mm	8mm	+15mm	484
HM 200	1300 / 130	Control A	1 1/4"	2"	1 1/2"	70mm	8mm	+30mm	483
HM 220	1400 / 140	C + Touch	1 1/4"	2"	1 1/2"	70mm	8mm	+35mm	468
HM 225	1600 / 160	C + Touch	1 1/4"	2"	1 1/2"	70mm	8mm	+40mm	468
HM 245	750 / 75	C + Touch	3"	1"	1 1/4"	70mm	8mm	+35mm	469
HM 3 H	700 / 70	C + Touch	1"	2"	1 1/2"	70mm	8mm	+35mm	488
HM 325	2800 / 280	C + Touch	2"	4" (6")	3"	165mm	20mm	+70mm	467
HM 375	3150 / 315	C + Touch	3"	4" (6")	3"	165mm	20mm	+70mm	467
HM 380	3400 / 340	C + Touch	3"	4" (6")	3"	165mm	20mm	+70mm	467
HM 450	4000 / 400	C + Touch	3"	10"	3"	310mm	80mm	+150mm	470
HM 480	4500 / 450	C + Touch	3"	10"	3"	310mm	80mm	+150mm	470
HM 485	4500 / 450	C + Touch	3"	10"	3"	250mm	20mm	+310mm	470
HM 495	6000 / 600	C + Touch	3"	10"	3"	310mm	80mm	+150mm	470
HM 660	8000 / 800	C + Touch	3"	10"	3"	325mm	50mm	+120mm	471
HM 665	4500 / 450	C + Touch	3"	10"	3"	380mm	50mm	+120mm	471
HM 1200	12000 / 1200	C + Touch	3"	10"	3"	325mm	50mm	+120mm	471
HMC12 - 2000	20,000 / 2000	Control C.2	3"	12"	3"	380mm	50mm	-	472



The best return on Investment since 1972.

HOSE CRIMPING MACHINES

AT A GLANCE

	Opening without dies	Type of dies	Speed - Close	Speed - Crimp	Speed - Open	Drive	Noise level	Ecoline	Page
S 1 M	52mm	261	-	-	-	Manual	-	-	478
S 1 P	52mm	261	1,0	1,0	-	Pressure	-	-	478
S 2 E	77mm	263	-	-	-	Manual	-	✓	479
S 2 M	77mm	263	-	-	-	Manual	-	-	480
S 2 P	77mm	263	0,9	0,9	-	Pressure	-	-	480
S 2 A	77mm	263	5,8	0,6	-	Electric	-	-	480
S 3 E	105mm	239	4	4	6,5	3 kW	69 dBA	✓	485
S 4	105mm	239	2,7	2,7	4,7	4 kW	69 dBA	✓	485
S 6	147mm	239 / 266L	9,7	2,2	16	5,5 kW	69 dBA	✓	486
S 7	110mm	239 / 265	-	1,42	-	0,55 kW	70 dBA	-	482
S 8	190mm	239 / 237L	6,1	1,7	10,3	4 kW	69 dBA	✓	487
S 10	190mm	239 / 237L	6,1	1,7	10,3	5,5 kW	69 dBA	✓	487
UA4	73mm	280	-	-	-	0,75 kW	-	-	484
HM 200	100mm	239	3,5	3,5	5,9	3 kW	69 dBA	✓	483
HM 220	105mm	239	9,5	6	9,5	5,5 kW	53 dBA	-	468
HM 225	110mm	239	19	1,5	19	5,5 kW	53 dBA	-	468
HM 245	105mm	239	27	5	30	5,5 kW	53 dBA	-	469
HM 3 H	105mm	239	8,6	8,6	10,5	5,5 kW	53 dBA	-	488
HM 325	215mm	239 / 237L	23	1,4	33	4 kW	62 dBA	-	467
HM 375	215mm	239 / 237L	23	1,4	33	4 kW	62 dBA	-	467
HM 380	215mm	239 / 237L	23	1,3	33	4 kW	62 dBA	-	467
HM 450	380mm	239 / 237L / 245	20	1,5	23	5,5 kW	62 dBA	-	470
HM 480	380mm	239 / 237L / 245	20	1,5	23	5,5 kW	62 dBA	-	470
HM 485	360mm	239 / 237L / 245	20	1,5	23	5,5 kW	62 dBA	-	470
HM 495	380mm	239 / 237L / 245	20	1,5	23	5,5 kW	62 dBA	-	470
HM 660	395mm	239 / 237L / 246L	15	2	15	18,5 kW	69 dBA	-	471
HM 665	450mm	239 / 237L / 247L	15	2	15	18,5 kW	69 dBA	-	471
HM 1200	395mm	239 / 237L / 246L	11	1,5	11	18,5 kW	69 dBA	-	471
HMC12 - 2000	435mm	247L / 245L / 237L	-	-	-	-	-	-	472



The best return on Investment since 1972.

HOSE TEST RIGS ICON KEY

ACCESSORIES / OPTIONAL EXTRAS

Features and benefits



Fast fill



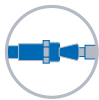
Lean production testing



Energy efficient -30%



Economy model



Rapid clamp system

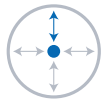


CSV / XML



Test certificate

Data capture and transfer



Data capture and transfer



Bespoke software



Paperless

Accessories



Accessories



Control B Touch



Filter



Printer



Test bed extension



VA Stainless Steel

*Contact our Sales team to find out which accessories come with your machine.



The best return on Investment since 1972.

HOSE TEST RIGS / TEST PANELS

FEATURES & BENEFITS

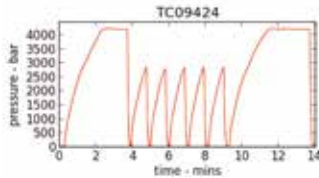


Entry level machines



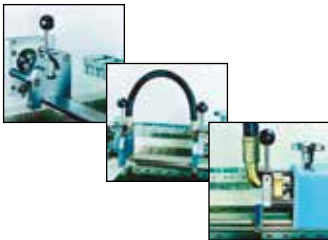
- Cost effective / price sensitive entry level machines
- Simplicity using minimum high quality components
- Easy manual controls

Competitive data logging



- Cost effective datalogging at surprisingly affordable prices
- Simple step process to produce PDF test certificates
- XML / CSV Open interface

Quick connect technology®



- Quick clamp technology offering the fastest production
- Improve test time and save on labour costs
- Reduce costly adaptor inventories

Fast bespoke design from concept to completion



- Any test rig for any application
- Designed and specified to exact customer requirements using specified components as necessary
- Branded machines and software interface



Concept, design and complete! See page 561.

HOSE TEST RIGS

WORKSHOP PRODUCTION



P 160



P 160 Ecoline



Technical data

	P 160	P 160 Ecoline
Test pressure	150 - 1300 bar	150 - 1300 bar
Drive	Intensifier	Intensifier
Flow	1,1 l / min	1,1 l / min
Capacity	7 bar, 20 l / min	7 bar, 20 l / min
Tank dimension	1590 x 795 x 370 mm	1200 x 600 x 250 mm
Test bench dimension	2210 x 950 x 1325 mm	1400 x 600 x 1200 mm
Reservoir capacity	100 l	33 l
Alternative drive filling pump 405.904 / 405.914	0,38 kW 400 V 50 Hz 3 Ph	0,5 kW 220-240 V 50/60 Hz 1 Ph
Paint	RAL 5012 Blue RAL 7021 Grey	RAL 5012 Blue
Weight - when empty	210 kg	120 kg
Noise level	72 dBA	72 dBA
Accessories	P 160	P 160 Ecoline
Suction filter / 100 µm	✓	✓
Air preparation unit	✓	✓
Steck-O-Adaptor (s-series only)	DN 4/6/8/10/12/ G 1/2" 405.901	DN 4/6/8/10/12/ G 1/2" 405.901
Anti-corrosive additive	EM 10 l	EM 10 l

* Only one of the two options possible.

Options	P 160	P 160 Ecoline
High pressure pump*	150 - 3000 bar	-
Low pressure pump*	20 - 150 bar	-
Test tank extension	2000 - 2400 mm	-



Retro fit data logging box and software.
Refer to page 568.

Standard
Speck-O-System



Optional Extras
(See page 494)



The best return on Investment since 1972.



Test bed extension

HOSE TEST RIGS

ECOLINE TEST RIG WITH DATA LOGGING



AB-TR-1300-DL



Technical data

	AB-TR-1300-DL
Test pressure	150 - 1300 bar
Drive	Intensifier
Air supply (psi)	100
Flow (at zero pressure)	0.33 L / M
Tank dimensions	TBC
Tank capacity	33 litres
Test bench dimensions (mm)	230 x 46 x 98
Reservoir capacity (litres)	33
Side panel	Removable for longer hoses
Test outlet	9/16" UNF suitable for 1/4" MP fitting - Adaptors are available
Data logging and software	Full traceability and production of certificates
Paint	Grey Pantone 429C
Weight	150 kg
Noise Level	72 dBA

FEATURES & BENEFITS

- Usable data logging software
- Easy to install and navigate
- Clear certificates - Gives customer confidence and full traceability
- Easy access panels to the front and rear - Fast and easy maintenance



OPTIONAL EXTRAS

- External water supply
- High pressure pump increased flow to 1.15 L/M
- Pre-fill pump to 16 L / M
- Isolation valve to manually isolate the pump from test hose
- 100 Litre tank
- Increased test cabinet to 3800mm long
- Full test compartment Interlock
- Laptop and software set up
- Printer connected and set up with laptop
- Test adapters



Concept, design and complete! See page 561.

LEAN PRODUCTION TEST RIG

QUICK CONNECT TECHNOLOGY



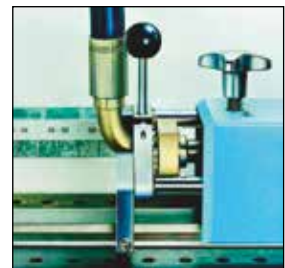
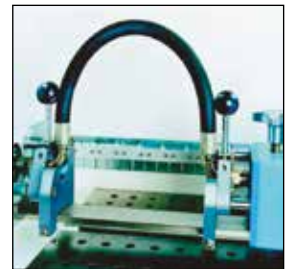
P200



Technical data

	P200
Test pressure	150 - 1300 bar
Control	Control B + Touch
Drive	Intensifier
Capacity	7 bar, 20 NI / min
Flow (effectively)	5 L / min
Tank dimension	1590 x 795 x 370 mm
Test bench dimension	2210 x 950 x 1325 mm
Reservoir capacity	100 l
Floor Pump	0,38 kW 400 V 50 Hz 3 Ph
Paint	RAL 5012 Blue RAL 7021 Grey
Weight - when empty	210 kg
Noise level	72 dBA
Accessories	P200
Suction filter	✓
Air preparation unit	✓
Holding disc	HS 400 Ø 8-10 / 10-12 / 12-15 / 15-18 / 18-21 / 21-24 / 24-27 / 27-30 / 30-33 / 33-36 / 36-39 / 39-42
Sealing cones	DSP 400-2 (30°- Ø 2,2), DSP 400-3 (30°- Ø 3,8), DSP 400-4 (80°- Ø 2,2), DSP 400-5 (80°- Ø 3,8), DSP 400-7 (30°- Ø 11), DSP 400-8 (80°- Ø 6,5)
Blind sealing cones	BDSP 400-1 (30°- Ø 2,2), BDSP 400-6 (80°- Ø 2,2), BDSP 400-9 (30°- Ø 11)
Sealing disc	DS 400-1 (120°)
Anticorrosive additive	EM 10 I

Options	P200
High pressure	150 - 3000 bar
Low pressure	20 - 150 bar
Stainless steel tank	✓
Extended version on request	✓



A handful of sealing cones replaces hundred of threaded adaptors!

Standard

Lean fast change system



Optional Extras (See page 494)



The best return on Investment since 1972.

MULTIPLE LEAN PRODUCTION TEST RIG

QUICK CONNECT & DUAL CHAMBER



P 300



Technical data

	P 300
Test pressure	100 - 1000 bar
Drive	Control B + Touch
Located with control unit	Air / Hydraulic 3kW with pressure intensity
Flow	13 l / min
Capacity	400-50-3 (VAC)
Tank dimension	3750 x 2400 x 870 mm
Closed control unit	3750 x 1450 x 870 mm
Aggregate dimension	830 x 740 x 1340 mm
Reservoir capacity	140 l
Colour	RAL 5012 Blue RAL 7021 Grey
Weight tank	1000 kg
Weight power unit	200 kg
Noise level	70 dBA
Max hose length	up to 2500 mm
Test medium	Test oil
Accessories	P 300
Press filter / 12 µm	✓
Air preparation unit	✓
Sealing cones set	✓

Options	P 300
Second chambers	✓
Hose size	Clamping up to 22 mm / 3/4" larger adaptors as required

A handful of sealing cones replaces hundred of threaded adaptors!

Up to 120 hoses per hour!



Fast-change-system

Package

Laser printer Control C + Touch



Optional Extras (See page 494)



The best return on Investment since 1972.

INSULATOR TEST RIG

TRIPLE TEST SCHEDULE



ITM 300



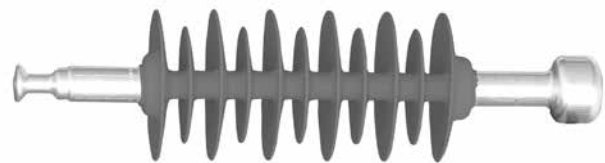
Technical data

	ITM 300
Hydraulic power unit	4 kW 400VAC-50Hz-3ph*
Stroke of piston	500mm
Power transmission	Computer controlled servo hydraulic
Control	Siemens
Touch panel	Siemens
Tension force step less variable	20 - 300KN (30T)
Noise level	53 dBA
Max. testing length base element	540mm
Additional testing length extension (optional)	3000mm
L x W x H Testing element (mm)	3000 x 780 x 1670
L x W x H Aggregate (mm)	1000 x 1200 x 1700

* Other voltage possible.

TENSILE TEST BENCH FOR COMPOSITE INSULATOR TESTING

- 3 different test schedules:
 - Routine proof testing
 - Failure load test
 - 96 hours test
- Silent hydraulic screw pump
- Clamping heads with roller device
- Clamping heads with functional clevis to adapt several insulator connectors
- Buckling resistant base frame; optimized for minimal elasticity
- Modular base frame
- Base element with 2 windows for visual control extension with 3 windows for visual control (optional)
- Cover opening 90° (crane loading possible)
- Height adjustable insulator shelf



For Insulator cutting. Refer to page 511.

Package

Laser printer Control C + Touch



Optional Extras (See page 494)



The best return on Investment since 1972.

HOSE CUTTERS ICON KEY

ACCESSORIES / OPTIONAL EXTRAS

Features and benefits



Energy efficient -30%



Economy model



Approved cutting blades



Hand operated control



Stop brake - 10 seconds



Safe for operator



Foot operated

Accessories



Extractor / Spark arrester



Hose guide



Counter



Hose measuring roller



Hose dispenser / coiler



Hose storage



Hose coiler



The best return on Investment since 1972.

HOSE CUTTING MACHINES

FEATURES & BENEFITS



Stop break - 10 seconds



- CE Standards with 10 seconds shut off
- Operator safety to reduce risk of accidents
- Controlled production

Hand operated control



- Controlled cutting to ensure a clean and straight cut
- Safety cutting position for the operator
- Extended blade life - reducing costs

Design and manufacture



- Quality materials and components
- Running costs reduced up to 30%
- Minimal spares required and extended blade life



The best return on Investment since 1972.

WORKSHOP CUTTERS

HAND OPERATED



EM 1



EM 2



Technical data

	EM 1	EM 2
Production SAE R13 and SAE R15	-	3/4"
Workshop SAE R13 and SAE R15	-	1 1/4"
SAE R12	5/8"	1 1/4"
Industrial	1 1/4"	2"
Max outside diameter	Ø 45 mm	Ø 80 mm
Noise level	80 dBA	80 dBA
Brake motor	-	✓
Suction connection	Ø 30 mm	Ø 80 mm
Drive	1,2 kW 1-	3 kW
Cutting blade	TM 160 x 2,5 x 20	TM 275 x 3 x 30
Brushing DN 5-6-8-10-12-16-19-25-31-38-51	-	✓
L x W x H (mm)	360 x 340 x 310	630 x 440 x 300
Weight	8 kg	65 kg
UVA Adaptor	-	777.056



TMC - NEW!

Single blade - Cuts all hose types.
Easier and faster cuts.
Lasts a minimum of 5 x longer than
conventional blades.



TMG

Slitted - Blade to aid with cooling and
cleaner cutting.



The best return on Investment since 1972.

WORKSHOP CUTTERS

HAND OPERATED



EM 3



EM 3 Ecoline



Technical data

	EM 3	EM 3 Ecoline
Production SAE R13 and SAE R15	3/4"	-
Workshop SAE R13 and SAE R15	1 1/4"	1"
SAE R12	1 1/4"	1 1/4"
Industrial	2"	1 1/4"
Max outside diameter	Ø 80 mm	Ø 52 mm
Noise level	80 dBA	90 dBA
Brake motor	✓	-
Suction connection	Ø 80 mm	Ø 40 mm
Drive	3 kW	1,8 kW
Cutting blade	TM 275 x 3 x 30	TM G 200 x 1,6 x 25,4
Brushing DN 5-6-8-10-12-16-19-25-31-38-51	✓	-
L x W x H (mm)	540 x 440 x 300	400 x 510 x 540
Weight	50 kg	20 kg
UVA Adaptor	777.056	777.054



TMC - NEW!

Single blade - Cuts all hose types.
Easier and faster cuts.
Lasts a minimum of 5 x longer than
conventional blades.



TMG

Slitted - Blade to aid with cooling and
cleaner cutting.



The best return on Investment since 1972.

MOBILE WORKSHOP CUTTER HAND OPERATED



EM 3 12V DC



Technical data

	EM 3 DC
Production SAE R13 and SAE R15	-
Workshop SAE R13 and SAE R15	1 1/4"
SAE R12	1 1/4"
Industrial	2"
Max outside diameter	Ø 60mm
Noise level	93 dBA
Brake motor	-
Suction connection	Ø 40mm
Drive	12 V / 24 V 2,0 V / 3,2 kW
Cutting blade	TW 250 x 2 x 40Z
Brushing DN 5-6-8-10-12-16-19-25-31-38-51	-
L x W x H (mm)	470 x 567 x 365
Weight	29 kg
UVA Adaptor	777.054

For Uniflex Mobile workshop service, please refer to page 537.



The best return on Investment since 1972.

WORKSHOP “BOX” CUTTER

MANUAL & PNEUMATIC



AB-C325 / AB-C425



AB-C535P



Technical data

	AB-C325	AB-C425	AB-C535P
Production SAE R13 and SAE R15	1"	1"	1"
Workshop SAE R13 and SAE R15	1 1/2"	1 1/2"	1 1/2"
SAE R12	2"	2"	2"
Industrial	2"	2"	2"
Max outside diameter	80mm	80mm	80mm
Noise level	80 dBA	80 dBA	80 dBA
Brake motor	-	-	-
Suction connection	TBC	TBC	TBC
Drive	3 kW	4 kW	5.5 kW
Cutting blade	250mm	250mm	250mm
L x W x H (mm)	1013 x 550 x 1135	1013 x 550 x 1135	1013 x 550 x 1135
Weight	150 kg	150 kg	150 kg

AB-C535P - Pneumatic service air pressure = Max 8 bar. Included with, air filter and pressure regulator.

FEATURES & BENEFITS

- Protected cutting blade
- Hands free foot pedal operation
- Cutting angle guides
- Blade



AB-AHP35



Technical data

	AB-AHP35
Thermoplastic hose	1 1/4" (34mm)
Pneumatic hose	1 1/4" (34mm)
Rubber fuel hose	1 1/4" (34mm)
Hydraulic hose (without textile)	1 1/4" (34mm)
Max outside diameter	35mm
Noise level	63 dBA
Brake motor	-
Suction connection	-
Drive	Pneumatic air supply 7 bar
Cutting blade	110 x 1.75 x 40
L x W x H (mm)	410 x 200 x 120
Weight	10 kg
UVC Adaptor	-

FEATURES & BENEFITS

- No heat distortion from cutting
- Hose cutting counter
- Fast, safe and economical operation

WORKSHOP PRODUCTION CUTTERS

HAND OPERATED & PNEUMATIC

EM 6 M
EM 8 M



EM 6 P



EM 8 P



Technical data

	EM 6 M	EM 6 P	EM 8 M	EM 8 P
Production SAE R13 and SAE R15	1 1/4"	1 1/4"	1 1/4"	1 1/4"
Workshop SAE R13 and SAE R15	2"	2"	2"	2"
SAE R12	2"	2"	2 1/2"	2 1/2"
Industrial	3"	3"	4"	4"
Max outside diameter	Ø 85mm	Ø 85mm	Ø 120mm	Ø 120mm
Noise level	90 dBA	90 dBA	90 dBA	90 dBA
Brake motor	✓	✓	✓	✓
Suction connection	Ø 60mm	Ø 60mm	Ø 60mm	Ø 60mm
Drive	4,6 kW	4,6 kW	4,6 kW	4,6 kW
Cutting blade	TM G 350 x 3 x 30	TM G 350 x 3 x 30	TM G 400 x 4 x 30	TM G 400 x 4 x 30
Brushing DN 5-6-8-10-12-16-19-25-31-38-51	-	-	-	-
L x W x H (mm)	700 x 745 x 430	785 x 760 x 710	983 x 760 x 875	983 x 760 x 540
Weight	75 kg	95 kg	122 kg	140 kg
UVA Adaptor	777.055	777.055	777.055	777.055



TMC - NEW!

Single blade - Cuts all hose types.
Easier and faster cuts.
Lasts a minimum of 5 x longer than
conventional blades.



TMG

Slitted - Blade to aid with cooling and
cleaner cutting.



The best return on Investment since 1972.

LARGE DIAMETER CUTTERS

PNEUMATIC FOOT PEDAL



EM 115



EM 110



Technical data

	EM 115	EM 110
Production SAE R13 and SAE R15	2"	3"
Workshop SAE R13 and SAE R15	3"	3"
SAE R12	3"	3"
Industrial	3"	4"
Max outside diameter	Ø 125mm	Ø 125mm
Noise level	80 dBA	80 dBA
Brake motor	✓	✓
Suction connection	Ø 108mm	Ø 100mm
Drive	7,5 kW	7,5 kW
Cutting blade	TM G 520 x 4 x 40	TM G 520 x 4 x 120
Brushing DN 5-6-8-10-12-16-19-25-31-38-51	-	-
L x W x H (mm)	1210 x 650 x 2650	800 x 780 x 1700
Weight	245 kg	280 kg
UVA Adaptor	-	-



TMC - NEW!

Single blade - Cuts all hose types.
Easier and faster cuts.
Lasts a minimum of 5 x longer than
conventional blades.



TMG

Slitted - Blade to aid with cooling and
cleaner cutting.



The best return on Investment since 1972.

PTFE & METAL CUTTER

CLAMPING & ANNEALING



USC 10



Technical data

	USC 10	USC 20
Cutting blade (mm)	TM PC x 200 x 2 x 25,4	TM PC 250 x 2 x 25,4
Wire braid	2"	4"
Hose diameter	Ø 3/8" - 2" (DN 10-51)	Ø 2" - 4" (DN 50-100)
Max rotation wire forming blade	7200 rpm	7200 rpm
Max rotation trimming	60 rpm	60 rpm
Drive	4,6 kW	4,6 kW
Air pressure	6 bar	6 bar
Noise level	85 dB(A)	85 dB(A)
Working height	1020	1100
L x W x H (mm)	730 x 670 x 1400	730 x 770 x 1500
Weight	245 kg	340 kg
Siemens control S7	✓	✓
Memory	✓	✓



Cut with USC10 cutter.



Cut with standard cutter.

Planetary cutting machine for corrugated metal hoses and PTFE hoses. The unique annealing procedure enables the quick and neat cutting of corrugated metal and PTFE hoses without flaring the other stainless steel braid.

- No more trimming
- Eliminates flaring
- Improves production efficiency
- Reduces assembly injuries
- Touch panel with memory - Quick and easy set up



The best return on Investment since 1972.

INSULATOR CUTTING MACHINE

HAND OPERATED



ICM 300



Technical data

	ITM 300
Insulation rods	Ø 16 to 88mm
Cutting blade	TM DG 300 x 2.5 x 30
Drive	2 kW
Noise level	93 dBA

Quality and flexibility

- Diamond cutting blade
- Roller conveyors at both ends (3000 / 2000mm)
- Extraction system with dust filter
- Adjustable cutting length 150-2000mm (Adjustable by means of integrated length measuring and clamping tool)

The ICM 300 has been specifically developed for the cutting of insulators and glass fibre rods.

For Insulator testing, refer to page 500.

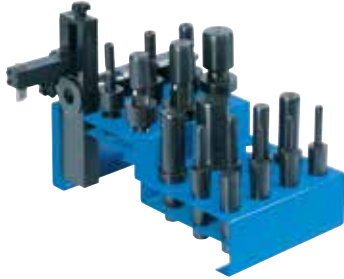


The best return on Investment since 1972.

WORKSHOP SKIVING MACHINES

MANUAL & AUTOMATIC

USM 2



USM 10 Ecoline
USM 10



USM 10 S - TU Bench & Storage PJRKSTLS



Technical data

	USM 2	USM 10 Ecoline	USM 10	USM 10 S
Internal skiving	5/8" - 2"	5/8" - 2"	5/8" - 2"	5/8" - 2"
External skiving	3/16" - 2"	3/16" - 2"	3/16" - 2"	3/16" - 2"
Noise level	-	60 dBA	60 dBA	60 dBA
Drive	Manual	0,37 kW (1~)	0,37 kW (3~)	0,37 kW (3~)
L x W x H	338 x 465 x 445	440 x 440 x 545	440 x 440 x 545	440 x 440 x 545
Weight	16 kg	35 kg	35 kg	35 kg
Tool revolution	-	110 rpm	110 rpm	110 rpm
Options	USM 2	USM 10 Ecoline	USM 10	USM 10 S
TU Bench	✓	✓	✓	✓
SSG - Skive slitting tool	✓	✓	✓	✓

USM 10 S - Fast lock tool change.

FEATURES & BENEFITS

- Easy exchange of skiving tool using a locking pin on USM 10.
- Skiving mandrels manually adjustable.
- Blade adjustments for skiving depth need only to be made once for each hose dimension on the USM 10 S.



ACCESSORIES



SSG Slitting Tool



TU Bench



USM 10 S
PJKSTLS



Set with 6 mandrels

* Please contact our Sales Team for internal and external skiving tools sizes.



The best return on Investment since 1972.

PRODUCTION SKIVING MACHINES

SIMULTANEOUS INTERNAL & EXTERNAL

USM 100



USM 125



Technical data

	USM 100	USM 125
Internal skiving	3/4" - 2 1/2"	5/8" - 4"
External skiving	1/4" - 2"	5/8" - 4"
Noise level	60 dBA	60 dBA
Drive	1,2 / 1,8 kW (~3)	1,1 / 2,2 kW (~3)
L x W x H	780 x 620 x 550	2330 x 885 x 1350
Weight	70 kg	150 kg
Tool revolution	392 rpm / 592 rpm	94 rpm
Options	USM 100	USM 125
Bench	✓	-
SSG	✓	-

USM 10 S - Fast lock tool change.

FEATURES & BENEFITS

- The SSG slitting tool shortens skiving chips
- Double skiving tool with hose
- Clamping unit with wheels for up to 4" hoses



Standard

Double blades



* Please contact our Sales Team for internal and external skiving tools sizes.



The best return on Investment since 1972.

HOSE SKIVING MACHINES

PRODUCTION INTERNAL / EXTERNAL

AB-SM-IEVS-180



Technical data

	AB-SM-IEVS-180
Internal skiving	On request*
External skiving	1/4" - 2"
Simultaneous skiving	1/2" - 2" or 5/16" - 3/8" on request
Noise level	60 dBA
L x W x H (mm)	910 x 400 x 1095 (including table)
Weight	48 kg
Tool revolution	192 rpm / 0-450 rpm (variable speed)

* Not required due to simultaneous skiving.

FEATURES & BENEFITS

- Lean production with simultaneous skiving
- Safety fit easy adjustable knives (skiving length and depth)
- Perfect and clean skiving results for all hose sizes every time

HOSE PIN PRICKING MACHINE

CRIMPER DIE PIN PRICKING TOOLS

PR PB



PR 10



Technical data

	PR PB	Hose Ø (0 - max outside)	Intermediate die set
S6	PR PB 266 P	0 - 45 mm	. / .
S6 Ecoline	PR PB 266 P	0 - 45 mm	. / .
HM290	PR PB 232 F	0 - 68 mm	. / .
HM502	PR PB 232 F	0 - 70 mm	554.323 L
S8	PR PB 237 L	0 - 45 mm	. / .
S8 Ecoline	PR PB 237 G	0 - 45 mm	. / .
S10	PR PB 237 G	0 - 45 mm	. / .
S10 Ecoline	PR PB 237 G	0 - 45 mm	. / .
HM325	PR PB 237 G	0 - 70 mm	. / .
HM375	PR PB 237 G	0 - 70 mm	. / .
HM380	PR PB 237 G	0 - 70 mm	. / .
HM420	PR PB 237 G	0 - 50 mm	245.237 L
HM480	PR PB 237 G	0 - 150 mm	245.237 L
HM485	PR PB 237 G	0 - 130 mm	245.237 L
HM660	PR PB 237 G	0 - 120 mm	245.237 L
HM1200	PR PB 237 G	0 - 120 mm	245.237 L
HM665	PR PB 237 G	0 - 120 mm	245.237 L

	PR 10
Working range	Ø 8 - 45 mm
L x W x H (mm)	290 x 150 x 330
Weight	ca. 8 kg

FEATURES & BENEFITS

Twin pin prick wheels

- Straight line perforation
- Guides to avoid twisting



Adjustable

- Excellent hose guide
- Adaptable to various hose diameters



Compact construction

- Space saving
- Can be used for mobile application

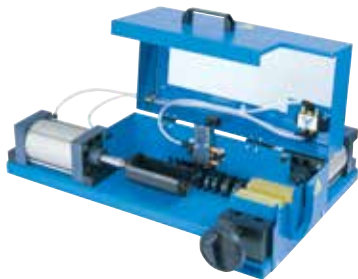


The best return on Investment since 1972.

HOSE NIPPLE INSERTING MACHINE

MANUAL & PNEUMATIC

UNE 10



UNE 115



Technical data

	UNE 10	UNE 115
Max. nipple insertion (OD fitting, straight or elbow)	0 - 2"	0 - 3"
Insertion force	4,7 kN (6 bar)	8 kW (7 bar)
Piston stroke	100mm	100mm
L x W x H	600 x 810 x 310	625 x 1185 x 320
Weight	35 kg	100 kg
Connection	6 bar	8 bar
Hose max. OD	-	Ø 120 mm
Clamping force	-	8 kN (8 bar)

FEATURES & BENEFITS

- Save controls and a foot pedal that can be positioned freely
- Security clamping unit
- Axially adjustable clamping unit - prevents bending of small hose dimensions



The best return on Investment since 1972.

NIPPLE INSERTING MACHINE

MANUAL CLAMP

AB-MNI-50



Technical data

	AB-MNI-50
Max nipple insertion (OD fitting, straight or elbow)	1-4" - 2"
Force	1:20 power transmission ratio
Stroke	150mm
L x W x H (mm)	650 x 250 x 140
Weight	25 kg
Connection	NA

FEATURES & BENEFITS

- Simultaneous centering clamp hose positioning
- Minimal effort to operate due to torque design
- Supplied with 9 x pushing adaptor



MARKING MACHINES

WORKSHOP & PRODUCTION MARKING

UP 10 Ecoline



UP 115



UIM 4



Technical data

	UP 10 Ecoline	UP 115	UIM 4
Marking area	Ø 8 - 80mm	Ø 11,5 - 100mm	-
Marking depth	~ 0,5mm	~ 0,5mm	10 - 60mm
L x W x H (mm)	285 x 265 x 410	625 x 465 x 325	210 x 240 x 310
Insertable steel characters	25 Pieces	22 Pieces	-
Weight	10 kg	48 kg	4,5 kg
Single characters	A - Z / 0 - 9 / blank	A - Z / 0 - 9 / blank	-
Character blocks	5 - fold / 10 - fold	5 - fold / 10 - fold	-
Quick character change	Single or double	Two times	-
Hose sizes	-	-	1 1/4"
Production capacity	-	-	700 /h
Air pressure	-	5 bar (21 PSI)	5 bar (21 PSI)

Marking depth depends on the adjustment of the marking rollers.
Various packages with steel characters with storage box and change tools.

PRODUCTION MARKING



The best return on Investment since 1972.

AB-COIL100/101



Technical data

	AB-COIL100	AB-COIL101
Max load capacity	200 kg	200 kg
Max coil diameter	850mm	850mm
Max hose size	3/4"	1"
Speed	0 - 30 rpm - fully adjustable	0 - 30 rpm
Standard voltage	230V - 50Hz. Others on request.	-
Motor Speed (seconds)	0.37 kW	-
Force	62 N	-
Weight	60 kg	40 kg
L x W x H (mm)	900 x 900 x 965	900 x 900 x 965

FEATURES & BENEFITS

- Adjustable center guides
- Adjustable motor speed
- Hands free foot pedal operation

HOSE COILING, MEASURING & CUTTING

SEMI AUTOMATIC PRODUCTION

AB-MCCV-1000



Technical data

Cutter

	AB-MCCV-1000
Production SAE R13 and SAE R15	3/4"
Workshop SAE R13 and SAE R15	3/4"
4SP	3/4"
Industrial	3/4"
Max outside diameter	40mm
Noise level	80 dBA
Brake motor	3 seconds
Suction connection	50mm
Drive	2 kW
Cutting blade	210 x 2.5 x 30 mm
UVC Adaptor	FL-50-AS18-AD

Overall weight and dimensions

	AB-MCCV-1000
L x W x H (mm)	410 x 200 x 120
Weight	115 kg

FEATURES & BENEFITS

- Fast clamping system for hose coiler
- Foot switch with speed control for precise coiling
- High quality coiling motor with electronic brake wheel cut out for safe working

Coiler

	AB-MCCV-1000
Max load capacity	120 kg
Max coil diameter	1000mm
Max hose size	3/4"
Speed	0 - 36 rpm

Measuring device

	AB-MCCV-1000
Max hose size	3/4"
Measuring counter	Manual reset
Length tolerance	(+ - 2%)

PORTABLE PARTICLE COUNTER

A 2-minute contamination test procedure:

A portable particle counter designed to be used in the field.

icountLCM20 is a proven answer to fluid system contamination monitoring offering a 2 minute test procedure. Multi-standard ISO and NAS cleanliness reporting, data entry, data graphing and integral printing are all standard on this world proven contamination monitor.



PRODUCT FEATURES:

- icountLCM20 is a proven answer to fluid system contamination monitoring
- 2-minute test procedure
- Multi-standard ISO, NAS and AS4059 cleanliness reporting
- Data entry, data graphing and integral printer
- 420 bar rated maximum pressure
- Supported by the offline UBS and online SPS accessories

FEATURES & BENEFITS

Test time	2 minutes
Particle counts	MTD 4+, 6+, 14+, 21+, 38+ and 70+ microns(c) ACFTD 2+, 5+, 15+, 25+, 50+ and 100+ microns
International codes	ISO 7-22, NAS 0-12
Data retrieval	Memory access gives test search facility.
Max. working pressure	420 bar
Max. flow rate	400 l/min when used with system 20 Sensors. Higher with single point sampler.
Working conditions	LaserCM will operate with the system working normally
Computer compatibility	Interface via RS232 connection at 9600 baud rate.

- Special 'diagnostics' are incorporated into the icountLaserCM microprocessor control to ensure effective testing
- Routine contamination monitoring of oil systems with icountLaserCM saves time and saves money
- Contamination monitoring is now possible during application operation - icountLaserCM saves on production downtime
- Data entry allows individual equipment test log details to be recorded
- Data retrieval of test results from memory via hand set display
- Automatic test cycle logging of up to 300 tests can be selected via hand set display
- Totally portable, can be used as easily in the field as in the laboratory
- Automatic calibration reminder
- Instant, accurate results achieved with a 2 minute test cycle
- Data entry allows individual equipment footprint record. Data graphing selectable via the integral printer
- Auto 300-test cycle logging via LCD handset input. RS232 to USB computer interface
- Limit level output to control peripheral equipment such as off-line filtration via internal relay limit switches
- Auto-testing allows for the conducting of automatic sequencing tests on flushing systems for example
- Optional bar code swipe wand to allow handset data loading
- Worldwide service and technical support
- Re-calibration - Annual certification

TYPICAL APPLICATIONS

- Construction machinery Industrial plant
- Hydraulic equipment and system manufacturers
- Research and testing institutes, offshore, power generation and marine
- Military equipment applications

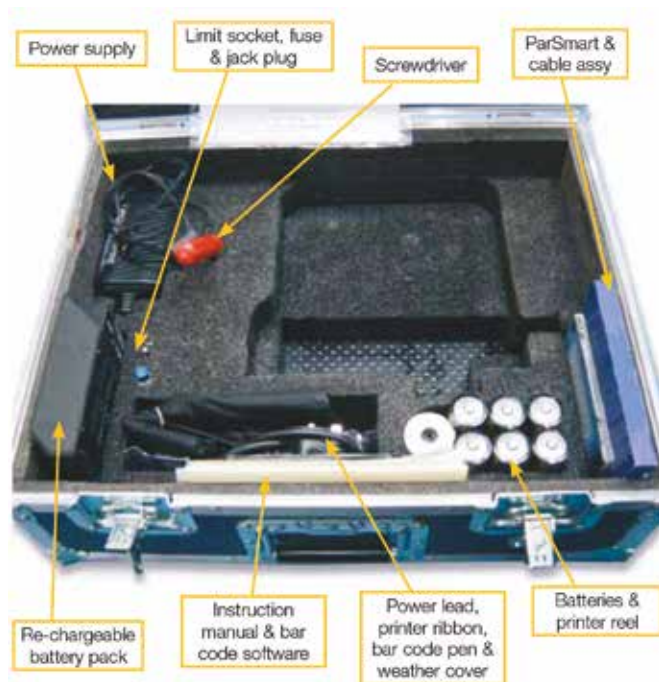


FLUID CONDITION MONITORING

ICOUNT LASER

Data download management

Dedicated software, provides the link between an icountLaserCM20 and the H2Oil - Water in Oil monitor and your computer management system.



icountLaserCM Test	
ON LINE TEST	
TEST NUMBER 022	
D M Y	
Date	04-03-10
Time	15-52
ISO:	20/15/09
Count / 100ml	
>4µ (c)	820721
>6µ (c)	31564
>14µ (c)	314
>21µ (c)	64
>38µ (c)	14
>70µ (c)	0
NOTES	

ISO 4406 - 1999

icountLaserCM Test	
ON LINE TEST	
TEST NUMBER 022	
D M Y	
Date	04-03-10
Time	15-52
NAS CLASS:	7
Count / 100ml	
4/6µ (c)	789157
6/14µ (c)	31250
NAS CLASS	7
14/21µ (c)	250
NAS CLASS	3
21/38µ (c)	50
NAS CLASS	3
38/70µ (c)	14
NAS CLASS	4
>70µ (c)	0
NAS CLASS	0
NOTES	

Correlation to NAS 1638



RG 10



RG 2



Technical data

	RG 10	RG 2
Drive	Diaphragm pump, 7 bar Air	Diaphragm pump, 7 bar Air
Flow	180 l / min	25 l / min
Max air consumption	250 l / min	100 l / min
Working range	up to 2" ID	up to 1 1/4" ID
Max length depending on bore size	20 m / 65 feet	2,5 m / 8 feet
Pressure filter*	10 µm	5 µm
Tank capacity	215 l	38 l
Working area	800 x 1600	350 x 750
Cleaning agent	Non toxic and anti corrosion	Non toxic and anti corrosion
L x W x H (mm)	2000 x 840 x 1050	960 x 435 x 940
Weight	160 kg	55 kg

* RG 10 also available with 5 µm filter.

For high specification water glycol and mineral oil flushing rigs, please refer to page 577.



The best return on Investment since 1972.



HOSE & TUBE JET CLEANERS

FEATURES & BENEFITS



Original jet cleaner



- Durable and lightweight guns for all applications
- Fewer wearing parts, easy and cost effective maintenance
- Aluminium with ergonomic and easy pistol grip

Jet cleaner mini - "007"



- Quality turned aluminium barrel
- Fastest "Bond" barrel loading sequence, for the leanest production
- Indestructible gun, for the toughest environments

EC manufactured Projectiles



- EC flexible projectiles. Controlled manufacture, storage and packaging to provide reliable quality
- Different sizes of projectiles up to 6.1/2" (170mm)
- 5 x projectiles to remove contamination - Absorb, Clean, Wipe, Grind or Scrape to ISO4406, 4407 or US015 / 13 / 10

Launching stations and accessories



- Jet cleaner Cobra projectile control systems for lean PLC process monitoring
- Confirmation systems to confirm projectile pass, complete with stop / go approval for POKAYOKE production
- Industrial kits, nozzles and accessories to offer a complete clean solution

HOSE & TUBE CLEANERS

JETCLEANER CLASSIC & "007"

AB-CL-8010 - Classic



AB-CL-8010 - Classic

The original since 1986. Made of cast aluminium. For hoses with ID 3/16" - 2" and tubes with OD 6mm - 60mm.

AB-SK-8030 - Starter kit

Jetcleaner Classic gun, nozzles, cleaning projectiles and a projectile collector. For hoses with ID 1/4" up to 1 1/4". Comes in a protective carrying case.

AB-CL-8030 - Hose set (Thermoplastic)

Jetcleaner Classic gun, a bench stand and 11 standard thermoplastic nozzles for hoses with ID 3/16" - 2". Comes in a protective carrying case.

AB-CL-8030-S - Hose set (Steel)

JETCLEANER Classic gun, a bench stand and 11 standard steel nozzles for hoses with ID 3/16" - 2". Comes in a protective carrying case.

AB-SK-8030 - Classic



AB-CL-8030 - Classic



AB-MI-8010 - 007



AB-MI-8010 - 007

A robust and easy to handle gun for hoses with ID 3/16" - 1" and tubes with OD 6mm - 30mm. Weight 0,5kg.

AB-MI-8030 (Hose set) - 007

Jetcleaner Mini gun with 8 standard thermoplastic nozzles in sizes 3/16" - 1". Comes in a protective carrying case.

AB-MI-8030-S (Mix set) steel - 007

Jetcleaner Mini gun with 8 standard steel nozzles in sizes 3/16" - 1". Comes in a protective carrying case.

AB-MI-8055 (Mix set) - 007

Jetcleaner Mini gun with 9 optional thermoplastic standard nozzles in sizes 3/16" - 1" for hoses and 6mm - 30mm for tubes. Comes in a protective carrying case.

AB-MI-8030 - 007



AB-CO-8055 - 007



HOSE & TUBE CLEANERS

JET CLEANER COBRA

AB-CO-8010



AB-CO-8030



AB-CO-8055



AB-CO-8010

Semi-automatic, fast loading gun in durable thermoplastic. Ergonomic design and weighs only 0.3kg. For hoses with ID 3/16" - 2" and tubes with OD 6mm - 60mm.

AB-CO-8030 (Cobra - Hose set)

Jetcleaner Cobra with 11 thermoplastic standard nozzles in sizes ID 3/16" - 2".

Comes in a protective carrying case.

AB-CO-8055 (Mix set)

Jetcleaner Cobra with 11 optional thermoplastic nozzles for hoses ID 3/16" - 2" and tubes OD 6mm - 60mm.

Comes in a protective carrying case.

AB-CO-8060 (Tube set)

Jetcleaner Cobra with 11 optional standard nozzles for tubes OD 6mm - 60mm.

Comes in a protective carrying case.

HOSE & TUBE CLEANERS

JET CLEANER AUTOPILOT / X15 AUTOMATIC

AB-2500-APC



AB-JC-2010-PCU



AB-2000-SA



Technical data

	AB-2500-APC	AB-JC-2010-PCU	AB-2500-APC	AB-JC-2010-PCU
Diameter projectiles (mm)	4 – 65	65 – 135 (outer)	10 – 38	4 – 60
Firing Speed (load-fire)	3 seconds	5-15 sekunder	2 seconds	3 seconds
Working pressure (minimum 6 bar)	Max 8 bar	Max 8 bar	Max 8 bar	Max 7 bar
Air pressure (via PLC)	0.1 – 99 seconds	-	0.1 – 99 seconds	-
Pneumatic grippers dimension	-	50–150 mm (outer pipe)	-	-
Hose coupling (inches)	Internal R1/2	Internal R1	Internal R1/2	Internal R1/4
Voltage (1-phase)	110V or 230V	110V or 230V	110V or 230V	110V or 230V
Weight	50 kg	75 kg	150 kg	50 kg (complete set)
Nozzles	All Classic nozzles fits the 2000SA	Customized nozzles by customers specification	Classic nozzles 1/4" - 1" and 10'2,5 - 38'6,0	All Jetcleaner Cobra nozzles fits the Jetcleaner Cobra + JPCU
Projectile feed	-	-	50-500 projectiles depending on size	-

AB-2000-SA

Suitable as a permanent cleaning station. Projectiles are loaded through the top tube and fired using a foot pedal or front firing. Can be used for extremely long hoses and tubes.

AB-5000-SA

PLC controlled machine with pneumatic grippers for really large pipes. Used with a handset. Can be used for extremely long hoses and tubes. Projectiles are loaded through the top tube.

AB-2500-APC

PLC controlled automatic station for companies with mass production of tubes and hoses. We build and equip the Jetcleaner 2500APC according to your specifications. Comes with a projectile feed, front firing system or a pistol.

AB-JC-2010-PCU

Our fast-charged Jetcleaner Cobra rebuilt with confirmation system to verify the fired projectile. Automatic stop and control light indicates whether the projectile passed through the pipe or hose.

AB-5000-SA



HOSE & TUBE CLEANERS - SYSTEM ACCESSORIES

AB-JCPCU-20-01



AB-JC-32-001



AB-MI-8040, AB-CL-8040, AB-CO-8040



AB-JCPCU-20-01

PLC controlled construction confirming that the projectile passed the hose or pipe. With automatic stop / go-approval for the next projectile. Handles projectiles between 4-65 mm. Works with 2000-SA, JC-2010-PCU and 2500 APC.

AB-JC-32-001

Made of white plastic. Equipped with a 90° bend where you insert the output end. Built-in venting system for best performance. Holds 30 litres of used and dirty projectiles.

AB-CL-8050 (Bench stand)

Bench stand for Jetcleaner Classic. Made of nickel-plated aluminium. Screwed into the table at the workstation.

AB-MI-8040, AB-CL-8040, AB-CO-8040 (Guns and nozzles)

Carrying case for Jetcleaner Mini, Classic and Cobra.

HOSE & TUBE CLEANERS

PROJECTILES

EC Flexible 060



Technical data

#	Rec. for inner diameter (mm)	Rec. for inner diameter (inch)	Number per package (stone)
AB-04-060 / XL	2 - 3	-	100 / 2,000
AB-05-060 / XL	2.5 - 4	1/8	100 / 2,000
AB-07-060 / XL	3.5 - 5	3/16	100 / 2,000
AB-08-060 / XL	4 - 6	-	100 / 2,000
AB-09-060 / XL	4.5 - 7	1/4	100 / 2,000
AB-10-060 / XL	5 - 8	-	100 / 2,000
AB-12-060 / XL	6 - 9	5/16	100 / 2,000
AB-14-060 / XL	7 - 11	3/8	100 / 2,000
AB-16-060 / XL	8 - 12	-	100 / 2,000
AB-18-060 / XL	9 - 14	1/2	100 / 2,000
AB-20-060 / XL	10 - 15	-	100 / 2,000
AB-22-060 / XL	11 - 17	5/8	50 / 1,000
AB-24-060 / XL	12 - 18	-	50 / 1,000
AB-26-060 / XL	13 - 19	3/4	50 / 1,000
AB-28-060 / XL	14 - 21	-	50 / 1,000
AB-30-060 / XL	15 - 23	-	50 / 1,000
AB-33-060 / XL	16.5 - 25	1	50 / 1,000
AB-35-060 / XL	17.5 - 27	-	20 / 250
AB-38-060 / XL	19 - 28	-	20 / 250
AB-40-060 / XL	20 - 31	1 1/4	20 / 250
AB-45-060 / XL	22 - 35	-	20 / 250
AB-48-060 / XL	24 - 37	-	20 / 250
AB-50-060 / XL	25 - 40	1 1/2	20 / 200
AB-55-060 / XL	27 - 45	-	20 / 200
AB-60-060 / XL	30 - 50	Cobra 2	20 / 200
AB-65-060 / XL	32 - 55	2	20 / 100
AB-70-060	42 - 60	2 1/4	10
AB-75-060	45 - 65	2 1/2	10

#	Rec. for inner diameter (mm)	Rec. for inner diameter (inch)	Number per package (stone)
AB-80-060 / XL	48 - 70	2 3/4	10
AB-85-060 / XL	51 - 75	3	10
AB-90-060 / XL	54 - 80	3	10
AB-95-060 / XL	57 - 85	3 1/4	10
AB-100-060 / XL	70 - 90	3 1/4	5
AB-105 - 060 / XL	73 - 95	3 1/2	5
AB-110-060 / XL	77 - 100	3 3/4	5
AB-115-060 / XL	80 - 105	4	5
AB-120-060 / XL	84 - 110	4	5
AB-125-060 / XL	87 - 115	4 1/4	5
AB-130-060 / XL	91 - 120	4 1/2	5
AB-140-060 / XL	98 - 130	4 3/4	5
AB-150-050 / XL	105 - 140	5	5
AB-160-060 / XL	112 - 150	5 1/2	5
AB-170-060 / XL	119 - 160	6	5
AB-180-060 / XL	126 - 170	6 1/2	5

EC FLEXIBLE 060

- Made of soft, flexible polyurethane in quality 060. The material is homogeneous and does not release fibres
- Meets cleanliness code of particulate contamination ISO 4406 and ISO 4407 down to ISO 15/13/10 with a projectile shot from each direction
- Withstands 50% compression
- Free from PVC, PTFE and Silicone
- Handles any bends, spirals and greater reductions. Also used as coupling projectile
- When selecting the size of the projectile, it is our recommendation to use a projectile that is 20% larger than the inner diameter of the hose or tube. Alternatively, make your own evaluation of the best possible results
- Sizes from 2mm to 170mm

Standard 400



Abrasive



Grinding



STANDARD 400

- Made of medium-hard, flexible polyurethane. The material is homogeneous and does not release fibres
- Withstands 50% compression
- Free from PVC, PTFE and Silicone
- Handles any bends, spirals and smaller reductions. Also used as coupling projectile
- When selecting the size of the projectile, it is our recommendation to use a projectile that is 20% larger than the inner diameter of the hose or tube. Alternatively, make your own evaluation of the best possible results
- Sizes from 2mm to 160mm

SUPER STANDARD

- Made of medium-hard, super flexible polyurethane with high density. The material is homogeneous and does not release fibres
- Used for pipes and tubes without reductions. For cleaning substances with high viscosity
- Handles 90-degree bends and loops. Withstands 20% compression
- Free from PVC, PTFE and Silicone
- When selecting the size of the projectile, it is our recommendation to use a projectile that is 20% larger than the inner diameter of the hose or tube. Alternatively, make your own evaluation of the best possible results
- Sizes 4mm to 130mm

ABRASIVE

- An abrasive projectile for tubes
- Made of medium-hard, high density polyurethane with a grinding surface at the top
- The projectile is suitable for removing rust and oxide scale from metal tubes. Often used to clean steam pipes, cooling pipes and to remove soot in pipelines
- Withstands 5% compression
- Free from PVC, PTFE and silicone
- When selecting the size of the projectile, it is our recommendation to use a projectile that is 5% larger than the inner diameter of the hose or tube. Alternatively, make your own evaluation of the best possible results
- Sizes from 4mm to 130mm

GRINDING

- Made of medium-hard, flexible polyurethane with a rugged surface
- Used for heavy duty cleaning of metal tubing to remove pitting, scale and more. Not suitable for sharp bends, best suited for straight pipes and smooth bends
- Withstands 5% compression
- Free from PVC, PTFE and silicone
- When selecting the size of the projectile, it is our recommendation to use a projectile that is 5% larger than the inner diameter of the hose or tube. Alternatively, make your own evaluation of the best possible results
- Sizes from 5mm to 150mm

MACHINE TRAINING

TAILORED INSTALLATION SERVICE

Uniflex offers a full training and installation service. Our customer service team will ensure you are 100% confident with Uniflex.

Training can be simply an hour to familiarise customers with controls, or a full day to cover the installation, basic usage of the machines, software training, production programming, service / data transfer and maintenance.

Our sole mission is to provide the best service with the best machines.

In addition through Abdex we can offer a full range of BFPA courses for best practice with hose and fittings assembly.

We have many endorsements however we never rest on our laurels. Uniflex promise you will never be disappointed!

[See page 555 for BFPA training.](#)



The best return on Investment since 1972.

THE PERFECT HOSE WORKSHOP

LEAN & SAFE HOSE PRODUCTION

Hose assemblies are safety critical components and an essential part of power transmission systems. They affect the overall performance and the safety of hydraulic systems, and contribute to the fundamental functionality and performance of the machine.

WORKSHOP EQUIPMENT

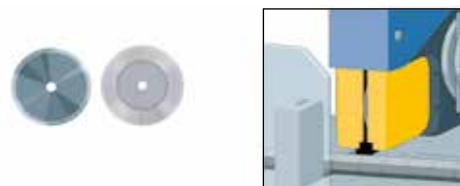
Safe hose assemblies require quality machines and tools for each step of the process:

- Optimal performance from all machines
- Experienced and trained staff
- Tested and certified workshops



CLEAN & ACCURATE CUT HOSE

The key to achieving consistent hose lengths and good quality hose assemblies is dependent on getting a straight and clean cut. The selection of machine and the type of cutting blade is determined by the types of hose and the nominal diameters (DN). Impurities in the hose, highlighted by residual particles and cutting residues, may consequentially cause damage to hydraulic systems which will cause inefficient performance, or at worst case a catastrophic and costly failure!



PERFECT SKIVED HOSE – INTERNAL & EXTERNAL

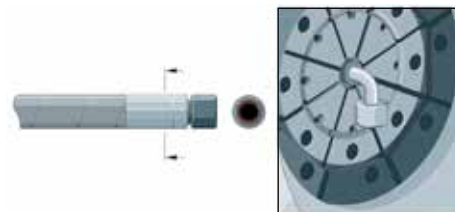
The accurate skiving of the external and internal covers with high quality skiving tools enables a surface free of wire and rubber, and therefore enables a fully engaged assembly prior to achieving a safe crimp.



SAFE CRIMPED FITTING

Crimping – the most important process of assembling

- Correct die selection is critical to the appearance and safety of the crimped coupling
- Specific radius in the profile of the individual die set segments results in optimum material conversion in the integration point
- Oval and tapered crimps are avoided by the use of UNIFLEX precision machines
- Reliable final crimp diameter assures safety as the hose assembly will meet its specified pressure rating without failure
- No material tears and sharp edges results in safe handling



MARKED HOSE ASSEMBLY

Due to DIN EN ISO each hydraulic hose assembly has to be permanently marked with name or logo of manufacturer, manufacturing date and maximum working pressure of the hose assembly. By marking the hose assembly the service life can accurately be determined. This information is essential for maintaining the integrity of the hydraulic system and most importantly for the safety of people and equipment.



CLEANED HOSE ASSEMBLY

UNIFLEX cleaning machines remove contamination in the hose so the specified standards can be met. All hose assemblies are then free from cutting debris, dirt, liquids and contamination.



TESTED HOSE ASSEMBLY

Modern UNIFLEX test benches offer various manifold options and allow testing with adjustable proof pressures. Testing of the assembly and the documenting of that testing ensures the safety of hose assemblies.



The best return on Investment since 1972.

UNIFLEX ONE STOP WORKSHOP

PRICE SUPPORT PACKAGE

If you are looking to set up a complete hose crimping workshop Uniflex can offer additional price support. From a basic workshop to lean production cells, Uniflex will be delighted to understand your needs and to share our experience in providing complete solutions for every budget. Full installation service and training is provided free of charge with all One-stop Workshop packages.

Example: **Ultra high pressure production**

HM 375 C + Touch - 315 Tonne crimper for UHP hoses. Option for speed reduction valve as required for specific hose manufacturers (See page 467).



EM 8 P - 2" Cutter (See page 508).



AB-T-UHP3-8000 - 80,000 psi. Triple pump test rig (See page 575).



The best return on Investment since 1972.

CONTAINER FITTING SERVICE

MACHINES & RACKING

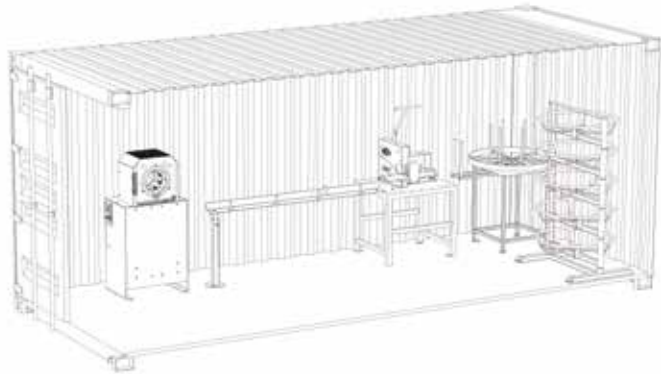
1. CHOOSE...YOUR CONTAINER

- 20 x 8ft or 15 x 8ft
- New or used
- Standard or offshore approved



2. DESIGN...YOU PERFECT WORKSHOP

- Production flow layout
- Storage selection
- Racking type and layout



3. SPECIFY...YOUR CONTAINER & MACHINES

- Container power, electrics, lighting, air supply and livery
- Crimping machine - Workshop or production
- Testing, cutting and workshop equipment



4. COMPLETE...YOUR CONTAINER - EARN MONEY!



The best return on Investment since 1972.



RELIABLE TRUE WEIGHT MOBILE WORKSHOPS ROAD READY TO CREATE A LASTING IMPRESSION



**CONFIDENTLY
AND SAFELY
EQUIPPED FOR
A GUARANTEED
LONGER LIFE!**



The best return on Investment since 1972.

MOBILE WORKSHOP

VEHICLE FITTING SERVICE - MACHINES & RACKING

WHY USE UNIFLEX?

Uniflex have a strategic alliance to provide vehicles equipped with the highest quality racking and storage solutions. Uniflex work with the best partners to ensure you have the best crimping machines, with the best quality racking.

We can now further offer our customers a range of proven products and specifications for the mobile market. In addition to the standard layouts we are also able to offer a full tailored design and fitting service.

Both of the above service options allows selection of various design specifications with options to fit all vehicles and meet all budgets.

Uniflex in house vehicle fitting service guarantees the fastest possible delivery.

FEATURES & BENEFITS

- Ultra high strength steel - 4 x stronger than mild steel
- Ultra light racking technology allows more weight for product storage - up to 30% lighter
- Dead loss zero compact lipped shelving - 25% more space
- Improved design and storage facilities in your vehicle
- Logical storage to give maximum efficiency during the production of hose assemblies
- Easy and fast stock checks
- Robust quality electrical system
- Increased safety to passengers and the cargo of the vehicle
- Reduced emissions and fuel costs
- Professional image that will give your customers confidence

Uniflex offer more than just a mobile workshop, Uniflex offers production quality and full peace of mind!

QUALITY, TESTED & SAFETY ASSURED!

Ultra high strong steel - four times stronger than normal steel.



Ultra light and durable racking.



Best quality products made to TUV and ISO 9001 standards.



Reduce CO₂ emissions and fuel costs.



The best return on Investment since 1972.

MOBILE WORKSHOP

VEHICLE FITTING SERVICE - MACHINES & RACKING

QUALITY, TESTED & SAFETY ASSURED!

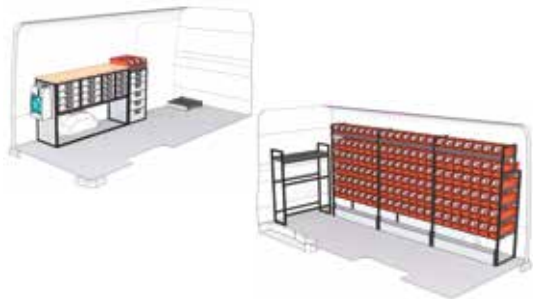
Installation in house - Full quality inspection.



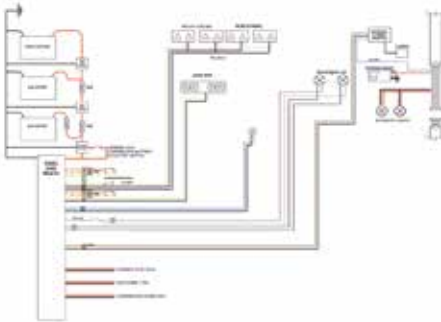
Off the shelf solutions - Quality accessories.



Flexible solutions - Bespoke design.



CE Marked electrical components - Safe to use, and easy to maintain.



A safe choice - Fully crash tested.



The best return on Investment since 1972.

MOBILE WORKSHOP - 1 1/2"

VEHICLE FITTING SERVICE - 12V DC CRIMPER



HM 200 Ecoline 12V DC package



Technical data

	HM 200 Ecoline
Crimp force (kN/Ton)	1300 / 130
Crimp range	70mm
SAE R12 / 4SH* 1 Piece	1 1/2"
SAE R15 / 4SH* 2 Piece	1"
SAE R12 / 4SH* 2 Piece	1 1/4"
Industrial**	2"
90° Elbows	1 1/2"
Speed (seconds) - Close	3,5
Speed (seconds) - Crimp	3,5
Speed (seconds) - Open	5,9
No grease: 20% less friction	✓
Control	Ecoline
Opening	+ 30mm
Opening without dies	100mm
Type of dies	239
Drive	3 kW
Oil	40 L (DC 4 L)
Weight	88 kg
L x W x H (mm)	420 x 535 x 520
Power unit L x W x H (DC)	420 x 535 x 520

Options	HM 200 Ecoline
12 / 24 Volt	✓

Ø Types of die	239 mm
6.8	50
9	50
10	50
12	50
14	60
16	60
17	60
19	60
20	60
22	60
24	60
26	75
28	75
32	75
36	75
40	75
44	75
47	75
50	75
54	75
57	75
62	75

* Fittings may vary. ** Without flange.

INCLUDING QUICK DIE CHANGE

**INCLUDING 12 x DIES
SELECT AS REQUIRED**



The best return on Investment since 1972.

MOBILE WORKSHOP - 2"

VEHICLE FITTING SERVICE - 12V DC CRIMPER



S4 Ecoline 12V DC package



Technical data

	S4 Ecoline
Crimp force (kN/Ton)	1800 / 180
Crimp range	70mm
SAE R12 / 4SH* 1 Piece	2"
SAE R15 / 4SH* 2 Piece	1 1/4"
SAE R12 / 4SH* 2 Piece	2"
Industrial	2"
90° Elbows	1 1/2"
Speed (seconds) - Close	2,7
Speed (seconds) - Crimp	2,7
Speed (seconds) - Open	4,7
No grease: 20% less friction	✓
Control	Control A
Opening	+ 35mm
Opening without dies	105mm
Type of dies	239
Drive	3 kW
Oil	35 L
Weight	120 kg
L x W x H (mm)	592 x 545 x 672

Options	S4 Ecoline
12 / 24 Volt	✓

Ø Types of die	239-xx-0-yy
6,8	50
9	50
10	50
12	50
14	50
16	65
17	65
19	65
20	65
22	65
24	65
26	65
28	80
32	80
36	80
40	80
44	80
47	100
50	100
54	100
57	100
62	100

* Fittings may vary.

INCLUDING QUICK DIE CHANGE

INCLUDING 12 x DIES
SELECT AS REQUIRED



The best return on Investment since 1972.

MOBILE WORKSHOP

VEHICLE FITTING SERVICE - 12V CUTTER



EM 3 12V DC



Technical data

	EM 3 DC
Production SAE R13 and SAE R15	-
Workshop SAE R13 and SAE R15	1 1/4"
SAE R12	1 1/4"
Industrial	2"
Max outside diameter	Ø 60mm
Noise level	93 dBA
Brake motor	-
Suction connection	Ø 40mm
Drive	12 V / 24 V 2,0 V / 3,2 kW
Cutting blade	TW 250 x 2 x 40Z
Brushing DN 5-6-8-10-12-16-19-25-31-38-51	-
L x W x H (mm)	470 x 567 x 365
Weight	29 kg
UVA Adaptor	777.054



The best return on Investment since 1972.

MOBILE WORKSHOP

VEHICLE FITTING SERVICE - TOOLS, RACKING & STORAGE

HOSE & TUBE CLEANERS

Jetcleaner classic



AB-CL-8010 - Classic

The original since 1986. Made of cast aluminium. For hoses with ID 3/16" - 2" and tubes with OD 6mm - 60mm.

AB-SK-8030 - Starter kit

Jetcleaner Classic gun, nozzles, cleaning projectiles and a projectile collector. For hoses with ID 1/4" up to 1 1/4". Comes in a protective carrying case.

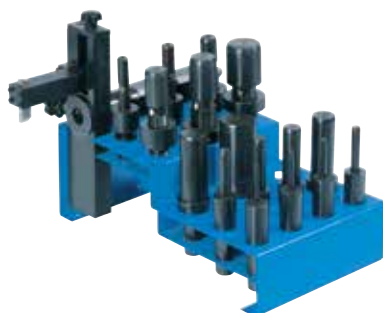
AB-CL-8030 - Hose set (thermoplastic)

Jetcleaner Classic gun, a bench stand and 11 standard thermoplastic nozzles for hoses with ID 3/16" - 2". Comes in a protective carrying case.

AB-CL-8030-S - Hose set (steel)

JETCLEANER Classic gun, a bench stand and 11 standard steel nozzles for hoses with ID 3/16" - 2". Comes in a protective carrying case.

HOSE SKIVING KIT - USM 2



	USM 2
Internal skiving	5/8" - 2"
External skiving	3/16" - 2"
Noise level	-
Drive	Manual
L x W x H	338 x 465 x 445
Weight	16 kg
Tool revolution	-

RACKING OPTIONS

Standard racking



Low profile 25% increase in capacity!



Drawer units



Storage boxes



The best return on Investment since 1972.

MOBILE WORKSHOP

VEHICLE FITTING SERVICE - VEHICLE SELECTION & LAYOUT

Mercedes Sprinter



Ford Transit



Peugot Boxer



DESIGNED AND DRIVEN BY YOU!

Option 1



Various other options available. Please ask our Sales team.



The best return on Investment since 1972.

MOBILE WORKSHOP

VEHICLE FITTING SERVICE - RACKING SELECTION

Option 2



Option 3



Various other options available. Please ask our Sales team.



The best return on Investment since 1972.

MOBILE WORKSHOP

VEHICLE FITTING SERVICE - ACCESSORIES

Flooring



Panel lining



Heater



Roof vent



Compressor



Gel battery



On board power



Inverter system



Din plugs



Plug sockets



Flash lights



Beacon



LED Strip lights



Worklamps fixed or magnetic



Eyewash



Safety kit



Reversing camera



Deb dispenser



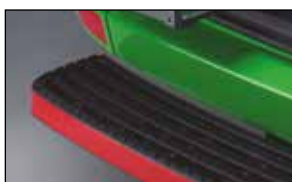
Telestep ladder



Space saving vice / cutter shelf



Steps



Panels with tool holder



Lashing straps



Fixed or swivel vice



The best return on Investment since 1972.

MOBILE WORKSHOP

LIVERY, STUDIO & MARKETING SERVICE

Together with our long term supply partners Uniflex can offer a fast and professional livery service. Full wrap, full livery or half livery, Uniflex can be trusted to do the job right first time. We can simply produce your exact livery, or we can include our design service. Protecting or helping to create your brand is our priority.

Uniflex' professional livery service offers value for money and more! We are happy to combine our professional studio shoot and marketing service. This unique service can include an eshot and advert design.

Uniflex offer more than just a mobile workshop. Uniflex offers production quality and full peace of mind.

LIVERY SERVICE

Standard wrap



Full wrap



3M Diamond reflective marking



STUDIO & MARKETING SERVICE



The best return on Investment since 1972.

THE APPLICATIONS ARE ENDLESS

BEND YOUR IDEAS INTO SHAPE

APPLICATIONS ARE ENDLESS - TUBE BENDING



**INDIVIDUAL
SOLUTIONS FOR
ANY CHALLENGE!**



MOBILE BENDING MACHINES

VERSATILE & PORTABLE



Fitted cutting ring and flaring connection system.

Technical Data

Machine Model	MB 642	MB 2060	MB 3080	MB 30115	MB 30168
Max capacity steel tube (mm)	38 x 6 / 42 x 4	60,3 x 15	88,9 x 20	115 x 20	168 x 20
Max capacity stainless steel tube (mm)	38 x 5 / 42 x 3	60,3 x 12,5	88,9 x 15	115 x 15	168 x 15
Max radius (mm)	Between 2xD and 3xD	Between 2xD and 3,5xD	Between 2xD and 3,5xD	Between 2xD and 3,5xD	Between 2xD and 4xD
Power (kW)	2	3	5	7	7,5
Weight (kg)	85	350	1000	2000	3500
L x W x H (mm)	850 x 500 x 1100	1000 x 1000 x 1200	1800 x 1350 x 1200	2000 x 2000 x 1100	3600 x 2250 x 1500
Bending direction	Max 150°	Max 150°	Max 150°	Max 150°	Max 150°
Bending drive					

Assembly Equipment

Machine Model	HA 642	RE 642	RE 2060
Max capacity steel tube (mm)	6-42	6-42	20-60
Steel pipe	1/4 - 1 1/4"	1/4 - 1 1/4"	1/2 - 2"
Power (kW)	1,1	0,55	0,75
Weight (kg)	75	28	40
L x W x H (mm)	650 x 450 x 500	300 x 400 x 250	500 x 600 x 300
Available Equipment Options	HA 642	RE 642	RE 2060
Cutting ring pre-assembly system	✓	x	x
37 Flares	✓	x	x

COMPACT MANDREL BENDING MACHINES

STATIC OR MOBILE



Off set bend device



With optional hydraulic saw

Technical Data

Machine Model	DB642 K	DB 2060 K	DB 2076 K	DB 20101 K
Max capacity steel tube (mm)	42 x 5,0	60 x 6,0	76,1 x 3,0	101,6 x 3,5
Max capacity stainless steel tube (mm)	42 x 3,0	60 x 4,0	76,1 x 2,0	101,6 x 2,0
Steel pipe	1 1/4" SCH 80	2" SCH 80	2 1/2" SCH 10	3 1/2" SCH 10
Square section (mm)	25 x 3,2	50 x 4,0	50 x 5,0	80 x 4,0
Rectangular (mm) - bending axis A	35 x 25 x 3,2	40 x 60 x 2,0	40 x 60 x 3,0	60 x 80 x 5,0
Rectangular (mm) - bending axis B	25 x 35 x 3,2	60 x 40 x 2,0	60 x 40 x 3,0	80 x 60 x 5,0
Max radius (mm)	85	150	150	205
Section modules (cm ³)	4,8	12,1	12,1	26,2
Usable length (mm)	3048	3048	3048	3048
Extension usable length (mm)	4572 / 6096	4572 / 6096	4572 / 6096	4572 / 6096
Bending speed (°/sec)	13	10	10	10
Bending axis repeatability (°)	+ / -0,1	+ / -0,1	+ / -0,1	+ / -0,1
Power (kW)	3	3	3	8
Weight (kg)	1000	1250	1250	3700
L x W x H (mm)	4380 x 900 x 1550	4450 x 900 x 1580	4450 x 900 x 1580	5000 x 1400 x 1500
Bending direction	Right to left	Right to left	Right to left	Right to left
Bending drive				
Ancillary axes drive				
Available Equipment Options	DB642 K	DB 2060 K	DB 2076 K	DB 20101 K
Off-set bend device	✓	✓	✓	✓
Length stop	✓	✓	✓	✓
Digital display of the length and rotation	✓	✓	✓	✓
Usable length extension	✓	✓	✓	✓
Controlled mandrel withdrawal	✓	✓	✓	✓
Mandrel lubrication	✓	✓	✓	✓
Following pressure die	x	x	✓	✓
Radius extension	x	x	x	x

BENDING MACHINES

ANCILLARY EQUIPMENT & SOFTWARE



Stationary mandrel bending machines



- Semi-Automatic – Fast medium series production without limitations
- Long load lengths (3000 to 6000m) – Time saving
- Digital displays with pre-selectable angles – Fastest possible and correct data entry

Mandrel bending production machines



- Fully programmable CNC touch panel control – Accurate and fast with lean set up times
- Fully or partially electrically powered – Ensures the machine is a perfect fit for both budget and application
- Option for multi-level bending – Reducing loading / feeding time

Powerful Software



- Effective online solution with continuous updates – Reduce the number of process steps the leanest possible production
- Seaman's touch screen interface – Allowing t-project technology to seamlessly work with all CAD systems
- Unique software technology - calculates to avoid collisions

Other tube bending products and services include:

Mobile forming machines

Combination axial and rotary machines

Tube cleaning machines

Fully automated production with robots

Onsite service contracts

Remote online software set up and maintenance

Please contact our Sales Team for full information and data sheets.



FORMING MACHINES

CUTTING EQUIPMENT



Axial forming machines



- Unique tool engineering – Fastest possible tool changes
- Six forming stages – Minimising tool changes
- Digital displays with part number / data storage – Fastest possible and correct data entry

Rotary forming machines type SRM



- Rotary forming – Ideal for sharp edges, sealing elements and perfect surfaces
- All drives are servo-electric with CNC control – Able to form independent of tooling
- Digital displays with part number / data storage – Fast data entry

Cutting equipment and knife shearing



- Unique cutting technology guarantees sharp edge cuts even on extreme pipe geometries – Perfect method for secondary trimming and precise shearing of tubes
- Option for 3 x blades – Able to handle the most extreme cutting demands
- Cut length optimisation – Minimises scrap / waste

Please contact our Sales Team for full information and data sheets.



ASSET FINANCE

INDEPENDENT & CONFIDENTIAL LOANS

MAJOR BENEFITS TO USING ASSET FINANCE OVER CASH PURCHASE

- Payments are **100% tax deductible**
- Asset finance enables you to let **the equipment pay for itself** as you use it, rather than upfront in one lump sum
- **Your working capital is preserved**
- Unlike an overdraft facility, an asset finance agreement **cannot be withdrawn** once active
- The interest rate is **fixed for the duration of the agreement**
- Old equipment can be **replaced now** when you need to rather than waiting until you can outright purchase
- Documentation is **simple and easy** to understand
- You can **refinance equipment** you already own to release cash

WHY USE INDEPENDENT FINANCE?

- Dedicated account managers
- You will be allocated your own personal account manager
- Rates from 3%
- Flexibility on asset type - finance any vehicle or equipment for business use including: fixtures and fittings, software and lighting
- Industry leading acceptance rates
- Same day decisions
- Highly efficient administrative processes - witness finance paperwork being signed in person to eliminate document error
- Seasonal / tailored payment plans
- Seasonal businesses can make reduced payments in quieter months
- Finance available over periods as long as 10 years
- Deferred initial payments available
- Support for new start businesses

FREQUENTLY ASKED QUESTIONS

Why use asset finance?

Finance payments are 100% tax deductible. Asset finance is the most tax efficient way of acquiring new equipment.

I thought finance was just for people who can't afford to buy?

On the contrary, asset finance is designed for profitable businesses to reduce tax liabilities.

What is the minimum and maximum amounts I can borrow?

The minimum is £1,000 + VAT. There is no maximum. Maximum lend will depend on customer credit status.

What can be financed?

Any vehicle or equipment for business use including fixtures and fittings, software and lighting.

What is your credit criteria?

We can assist both new start and established businesses.

Can I include delivery and installation costs in my finance?

Yes.

Will I have to put down a deposit?

No. We can arrange finance with no deposit.

Do you offer seasonal payment terms?

Yes.

Do you finance 100% software packages?

Yes.

Over how many years is finance available?

Any period between 1 - 10 years.

ASSET FINANCE

3 STEP PROCESS - EXAMPLES



Outline your finance requirement



Finance approval



Finance document(s) are raised ready for you to sign

Loan example £3,000

	3 Years (36 months)	5 Years (60 months)
Initial deposit	£0	£0
Loan payments	£3,140.77	£3,234.36
Balloon payments at end	£0	£0
Total payments	£3,140.77	£3,234.36
Monthly payments	£87.24	£53.91
Total interest	£140.77	£234.36
Loan amount	£3,000.00	£3,000.00
Interest rate	3%	3%
Effective annual rate	3.04%	3.04%
APR	3.04%	3.04%

Loan example £12,000

	3 Years (36 months)	5 Years (60 months)
Initial deposit	£0	£0
Loan payments	£12,563.08	£12,937.46
Balloon payments at end	£0	£0
Total payments	£12,563.08	£12,937.46
Monthly payments	£348.97	£215.62
Total interest	£12,563.08	£12,937.46
Loan amount	£12,000.00	£12,000.00
Interest rate	3%	3%
Effective annual rate	3.04%	3.04%
APR	3.04%	3.04%

Loan example £22,000

	3 Years (36 months)	5 Years (60 months)
Initial deposit	£0	£0
Loan payments	£23,032.32	£23,718.67
Balloon payments at end	£0	£0
Total payments	£23,032.32	£23,718.67
Monthly payments	£639.79	£395.31
Total interest	£1,032.32	£1,718.67
Loan amount	£22,000.000	£22,000.000
Interest rate	3%	3%
Effective annual rate	3.04%	3.04%
APR	3.04%	3.04%

Rates and amounts of loan may vary, subject to available rates and according to credit ratings.

PROFESSIONAL & FLEXIBLE TRAINING

INDEPENDENT BFPA COURSES

Abdex has successfully delivered professional and adaptable training to a wide variety of small and blue chip companies. With our strategic training partners we continue to strive and consistently monitor our delivery to further improve our training courses.

We are flexible to deliver and meet our customer's specific requirements, while still covering core elements of internationally recognised training courses.

Abdex training courses are consistently **rated above 91.2%** for all aspects. This is a proven record we are very proud of considering the wide variety of International candidates, from beginners in the industry, to offshore engineers with over 30 years experience.

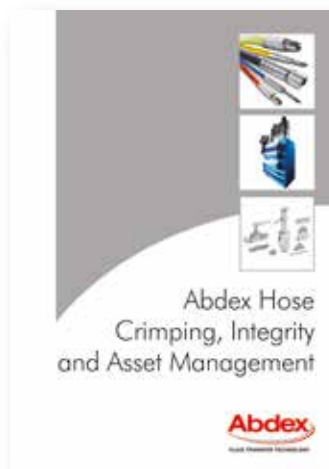
Abdex delivers training courses when and where the customer needs them. Training can be held at the customers venue or a dedicated training facility.

Our dedicated training co-ordinator will take care of every aspect of your training requirements, the arrivals, transfers, venue, refreshments, overnight stays (if required) and most importantly monitor the delivery.

Abdex have a long proven track record in training and helping people.

CURRENT "OFF THE SHELF" COURSES INCLUDE

Uniflex UX Inside - Operate and service your Uniflex crimper
BFPA Foundation course in working safely with hydraulic hose and connectors
BFPA hose assembly skills training programme
BFPA Hose integrity, inspection and management
BFPA Small bore tubing integrity course



"One of the most thorough courses I have attended"

"Very professional and competent instructor, very good course!"

"I was sceptical having to travel around the world to attend. However, turned out to be well worth the trip!"

"Very friendly, knowledgeable staff"

"During the course we discussed items I've never thought about before"

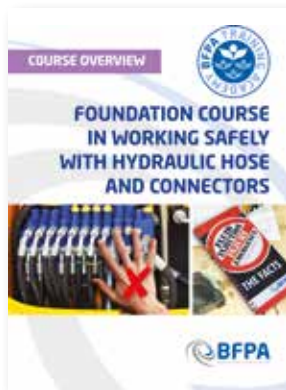
"Fantastic to get hands on training with the specific equipment we have purchased"

Please contact the Sales Team to discuss any further requirements and to receive a detailed course synopsis.



PROFESSIONAL & FLEXIBLE TRAINING

INDEPENDENT BFPA COURSES



FOUNDATION COURSE IN WORKING SAFELY WITH HYDRAULIC HOSE & CONNECTORS

This course has been developed to provide an introduction into hydraulic hose, connectors and the safe assembly of these components. This is a theory based course, in which the delegate will gain the foundation, knowledge and understanding of safe hose assembly.



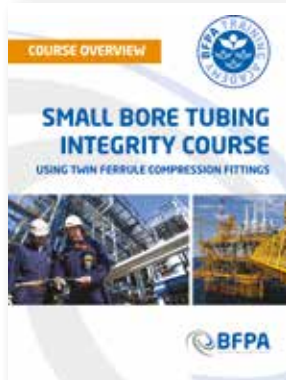
BFPA HOSE ASSEMBLY SKILLS TRAINING PROGRAMME

This is a two day course which covers both the theory and practical knowledge of safe hose assembly. It is designed to give the delegate full appreciation to enable them to develop into a quality hydraulic hose technician.



HOSE INTEGRITY, INSPECTION & MANAGEMENT

This one day course covers the key themes to include, hose life expectancy; risk analysis; competence by way of a robust competence assurance system; identify, inspect and record; hose register – recording of a hose assembly prior to it going into service; and visual hose assembly (installation) inspection check lists. All delegates will be tested and awarded with the relevant certificate - pass, merit or distinction.



SMALL BORE TUBING INTEGRITY COURSE

This course has been developed by BFPA technical experts to give candidates a valuable understanding of the complexity surrounding small bore tubing and compression fittings. The training course covers generic manufacturers twin ferrule compression fittings, thread awareness, tube / pipe differences and the preparation process, tube manipulation (bending) principles, common installation and routing techniques.

Please contact the Sales Team to discuss any further requirements and to receive a detailed course synopsis.



PROFESSIONAL & FLEXIBLE TRAINING

INDEPENDENT BFPA COURSES



Please contact the Sales Team to discuss any further requirements and to receive a detailed course synopsis.

A high-pressure orange hose is shown horizontally across the middle of the frame. The hose has several puncture points where water is being sprayed out in powerful jets. The background is solid black, which makes the bright orange hose and the white water spray stand out. The text "WORN OR DAMAGED HOSE" is printed in black on the orange surface of the hose.

WORN OR DAMAGED HOSE

TESTING, CONTROL & FLUSHING

ABOUT A-TEST

Abdex understands how critical it is to test and clean. We also understand the importance of quality, safety and traceability. A-Test was set up to allow us to specialise in high pressure equipment and electric flushing rigs.

We can manufacture and supply a complete range of machinery, from the supply of test pumps to bespoke design and custom built test and flushing rigs.

WHY ABDEX

Abdex are happy to supply specified components according to any customer specification. We can deliver medium, high and ultra high pressure with various flows to meet the most exact requirements.

You can trust Abdex to get it right from the design stage and to supply reliable equipment and support the aftermarket.

Abdex have an experienced design team to meet all requirements from concept, to completion. Our promise is to supply the best product and give the best all round, comprehensive service from start to finish - Concept, design and complete.

IN THIS SECTION

Test Rigs	560
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A-Frames, Control and Manifolds	569
Test Rig Control Panels	570
Ultra High Pressure Test Rigs	575
Flushing Rigs	577



HOSE TEST RIGS / TEST PANELS

FEATURES & BENEFITS



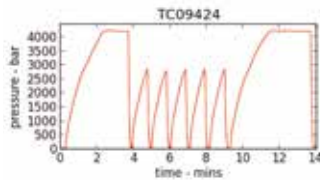
FLUID TRANSFER TECHNOLOGY

Entry level machines



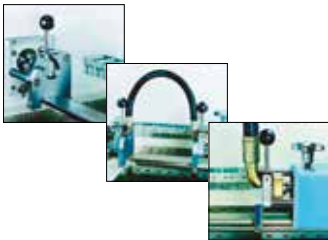
- Cost effective / price sensitive entry level machines
- Simplicity using high quality components
- Easy manual controls

Competitive data logging



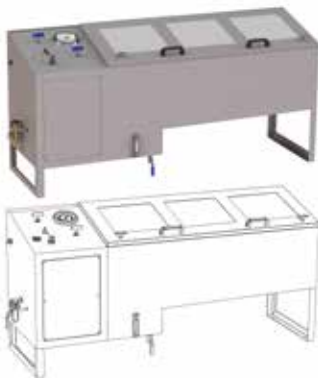
- Cost effective datalogging at surprisingly affordable prices
- Simple step process to produce PDF test certificates
- XML / CSV Open interface

Quick connect technology®



- Quick clamp technology offering the fastest production
- Improve test time and save on labour costs
- Reduce costly adaptor inventories

Fast bespoke design from concept to completion



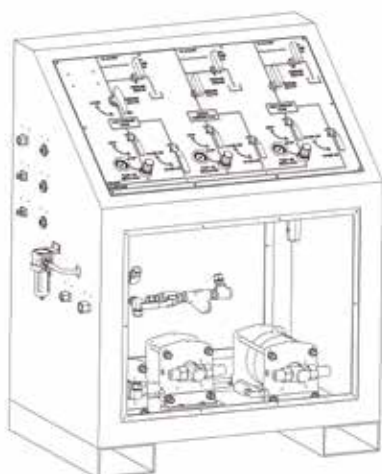
- Any test rig for any application
- Designed and manufactured to exact customer requirements using specified components as necessary
- Branded machines and software interface



Concept, design and complete!



**ALL ROUND, COMPREHENSIVE SERVICE.
CONCEPT, DESIGN AND COMPLETE!**



Concept, design and complete!

SPECIAL DESIGN - CONCEPT TO COMPLETION

VALVE BENCHES / PANELS & GAS BOOSTER POWER PACKS

Custom Test Rigs

We fully understand that some customers often have requirements that do not fall into our standard range. With the extensive knowledge of our design team we are able to offer bespoke units to meet all requirements from concept, to completion.



Valve Test Benches

Test benches can be used to test valves up to 24". Both water and gas can be used as the test medium with pressure up to 1,000 bar (14,500 psi).

ATEX approved units can also be provided on request.



Custom Power Packs

Our compact power packs ensure that all pump controls and valves are all in one place. Simple design and easy to access parts ensures that all of our units are fit for purpose, lightweight, quick to operate and easy to maintain. Stainless steel frames come as standard and we can also supply traditional chart recorders or full data logging.



Concept, design and complete!

Gas Booster Power Packs

In addition to our standard custom power packs we can also offer a full range of Gas Booster Power Packs.

Stainless steel frames come as standard and we can also supply traditional chart recorders or full data logging.



A Frames, Control and Manifolds

Abdex can offer a wide variety of Test Frames and Manifold blocks working up to 4200bar (60,000psi). Liquid and gas can easily be directed at various pressures.

Our popular "A" frame design provides a perfect working height and can be supplied with any number of ports, control valves and thermowells as required. Standard popular example below.



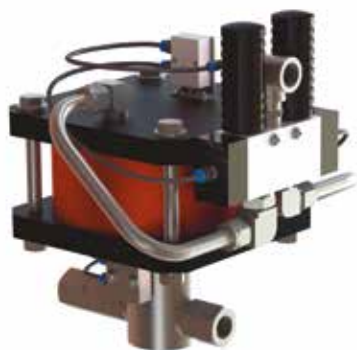
Bolt Tensioner Power Packs

Abdex manufactures 1500 bar Bolt Tensioner power packs in a variety of styles / specifications. Units can be supplied with steel or stainless steel frames. Complete with a 116 Male coupling.



AIR DRIVEN HYDRAULIC PUMPS STANDARD, HIGH & ULTRA HIGH FLOW

AB-PU-120A



AB-PU-170A



AB-PU-250D



Technical data

Standard flow pumps - 120 Series, single acting, single air drive

#	Max outlet pressure psi (bar) based on 100 psi air drive	Volume displacement ml (cu. in.) per cycle	Max flow rate ltr/min (cu.in./min)	Liquid port inlet (inch)	Liquid port outlet (inch)	Air inlet port (inch)
AB-PU-120A-34	3,400 (235)	15.72 (0.96)	4.8 (293)	1/2 NPT	1/2 NPT	3/8 NPT
AB-PU-120A-71	7,100 (490)	7.53 (0.46)	2.3 (141)	1/2 NPT	1/2 NPT	3/8 NPT
AB-PU-120A-118	11,800 (814)	4.56 (0.28)	1.39 (85)	1/2 NPT	1/2 NPT	3/8 NPT
AB-PU-120A-231	23,100 (1,594)	2.33 (0.15)	0.71 (44)	3/8 NPT	1/4 HP	3/8 NPT
AB-PU-120A-361	36,100 (2,490)	1.49 (0.09)	0.45 (28)	3/8 NPT	1/4 HP	3/8 NPT
AB-PU-425	42,500 (2,930)	1.01 (0.06)	0.31 (19)	3/8 NPT	9/16 NPT	3/8 NPT

High flow pumps - 120B Series, double acting, single air drive

#	Max outlet pressure psi (bar) based on 100 psi air drive	Volume displacement ml (cu. in.) per cycle	Max flow rate ltr/min (cu.in./min)	Liquid port inlet (inch)	Liquid port outlet (inch)	Air inlet port (inch)
AB-PU-120B-33	3,300 (228)	27.42 (1.68)	8.36 (511)	1/2 NPT	1/2 NPT	3/8 NPT
AB-PU-120B-70	7,000 (483)	13.14 (0.81)	4.01 (245)	1/2 NPT	1/2 NPT	3/8 NPT
AB-PU-120B-117	11,700 (807)	7.95 (0.49)	2.43 (149)	1/2 NPT	1/2 NPT	3/8 NPT
AB-PU-120B-230	23,000 (1,586)	4.06 (0.25)	1.24 (76)	3/8 NPT	1/4 NPT	3/8 NPT
AB-PU-120B-360	36,000 (2,483)	2.6 (0.16)	0.79 (49)	3/8 NPT	1/4 NPT	3/8 NPT

Double acting, double air drive, ultra high flow pumps - 250DHDA Series, double acting, double air drive

#	Max outlet pressure psi (bar) based on 100 psi air drive	Volume displacement ml (cu. in.) per cycle	Max flow rate ltr/min (cu.in./min)	Liquid port inlet (inch)	Liquid port outlet (inch)	Air inlet port (inch)
AB-PU-250D-65	6,500 (448)	533.72 (32.57)	34.69 (2,117)	3/4 NPT	1/2 NPT	1 NPT
AB-PU-250D-127	12,700 (875)	272.3 (16.62)	17.7 (1,080)	3/4 NPT	9/16 MP	1 NPT
AB-PU-250D-226	22,600 (1,559)	153.17 (9.35)	9.96 (608)	3/4 NPT	9/16 HP	1 NPT



Concept, design and complete!

AIR DRIVEN HYDRAULIC PUMPS

STANDARD, HIGH & ULTRA HIGH FLOW

FEATURES & BENEFITS

- Stainless steel hydraulic frame - Durable and weatherproof
- External air drive components - Easy maintenance
- 100psi air driven - No electrical power is required
- Self priming - Immediate operation
- Simple design - Lightweight and easy to install

TYPICAL APPLICATIONS

- Hydrotesting
- Clamping
- Bolt Tensioners
- Crimping Tools
- Lifting
- Valve actuation

INDUSTRIES

- Oil and gas
- Power and energy
- General manufacturing
- Mining
- Automotive
- Aerospace
- MOD
- Rail
- Hydraulics

WE CAN SUPPLY ALTERNATIVE PUMP MANUFACTURERS AND DESIGNS, ACCORDING TO CUSTOMER SPECIFICATION.



Concept, design and complete!



HYDROTEST POWER PACKS

BOLT TENSIONER POWER PACKS

Standard flow power pack



Technical data

Standard flow power pack - 120 Series, single acting, single air drive

#	Max outlet pressure psi (bar) based on 100 psi air drive	Volume displacement ml (cu. in.) per cycle	Max flow rate ltr/min (cu.in./min)	Liquid port outlet (inch)	Air inlet port (inch)
AB-HP-34	3,400 (235)	15.72 (0.96)	4.8 (293)	1/2 NPT	3/8 NPT
AB-HP-71	7,100 (490)	7.53 (0.46)	2.3 (141)	1/2 NPT	3/8 NPT
AB-HP-118	11,800 (814)	4.56 (0.28)	1.39 (85)	1/2 NPT	3/8 NPT
AB-HP-231	23,100 (1,594)	2.33 (0.15)	0.71 (44)	1/4 HP	3/8 NPT
AB-HP-361	36,100 (2,490)	1.49 (0.09)	0.45 (28)	1/4 HP	3/8 NPT
AB-HP-425	42,500 (2,930)	1.01 (0.06)	0.31 (19)	9/16 NPT	1/2 NPT

High flow power pack - 120B Series, double acting, single air drive

#	Max outlet pressure psi (bar) based on 100 psi air drive	Volume displacement ml (cu. in.) per cycle	Max flow rate ltr/min (cu.in./min)	Liquid port outlet (inch)	Air inlet port (inch)
AB-PU-120B-33	3,300 (228)	27.42 (1.68)	8.36 (511)	1/2 NPT	3/8 NPT
AB-PU-120B-70	7,000 (483)	13.14 (0.81)	4.01 (245)	1/2 NPT	3/8 NPT
AB-PU-120B-117	11,700 (807)	7.95 (0.49)	2.43 (149)	1/2 NPT	3/8 NPT
AB-PU-120B-230	23,000 (1,586)	4.06 (0.25)	1.24 (76)	1/4 NPT	3/8 NPT
AB-PU-120B-360	36,000 (2,483)	2.6 (0.16)	0.79 (49)	1/4 NPT	3/8 NPT

Double acting, double air drive, ultra high flow power pack - 250DHDA Series, double acting, double air drive

#	Max outlet pressure psi (bar) based on 100 psi air drive	Volume displacement ml (cu. in.) per cycle	Max flow rate ltr/min (cu.in./min)	External fluid connection (no tank)	Liquid port outlet (inch)	Air inlet port (inch)
AB-DAHP2-65	6,500 (448)	533.72 (32.57)	34.69 (2,117)	1 NPT	1/2 NPT	1 NPT
AB-DAHP2-127	12,700 (875)	272.3 (16.62)	17.7 (1,080)	1 NPT	9/16 MP	1 NPT
AB-DAHP2-226	22,600 (1,559)	153.17 (9.35)	9.96 (608)	1 NPT	9/16 HP	1 NPT

Bolt tensioner power pack

#	Max outlet pressure psi (bar) based on 100 psi air drive	Volume displacement ml (cu. in.) per cycle	Max flow rate ltr/min (cu.in./min)	Liquid port outlet (inch)	Air inlet port (inch)
AB-BTP-230	23,000 (1586)	2.33 (0.15)	0.71 (44)	116 Male	3/8 NPT



Concept, design and complete!

HYDROTEST POWER PACKS BOLT TENSIONER POWER PACKS

Abdex air driven hydraulic pump units are designed and engineered for easy maintenance. All with stainless steel frames the standard range covers pressures from 3400 to 45,900psi with a 100psi air drive. Single and double acting for increased volume displacement. Units are compact and lightweight for easy transportation.

Compatible with all hydraulic fluids and most liquefied gases (Gas booster units are also available). Other pressures and model types are available up to 80,000psi on request.

Abdex bolt tensioner power packs are supplied complete with a 116 quick male connection. Different frames and customer branding are also available. Various options and accessories can also be supplied.

FEATURES & BENEFITS

- Stainless steel hydraulic frame - Durable and weatherproof
- 100 psi air driven - No electrical power is required
- Self priming - Immediate operation
- Simple design - Compact and lightweight so fully portable
- Clearly labelled controls - Improved safety

OPTIONAL EXTRAS

- Chart recorders - Integral or free standing
- Full data logging and software
- External connection to liquid supply

WE CAN SUPPLY ALTERNATIVE PUMP MANUFACTURERS AND DESIGNS, ACCORDING TO CUSTOMER SPECIFICATION.



Concept, design and complete!

DATA LOGGING BOX & SOFTWARE SET RETRO FIT & MULTI USAGE

AB-DLB-150 / 200 / 400



Technical data

	AB-DLB-150 / 200 / 400
Test pressure	1500 / 2000 / 4000 bar
Colour	Black
Test medium	Water, oil or gas
Frame material	Black pelican unbreakable instrument case
High and low pressure pipe work	Stainless steel
Low pressure connection	1/2" NPTF
Medium pressure connection (1500 bar)	9/16" MPF supplied complete with gland nuts and collars
High pressure connection	9/16" HPF supplied complete with gland nuts and collars
Weight	4.5 kg
Dimensions (mm)	300 x 248 x 184

FEATURES & BENEFITS

- Inline data logging - Fast and easy to install
- Easy to use software - Fast and simple data storage and production of professional test certificates
- Single data logging box - Can be used for data collection on multiple test rigs



OPTIONS

- Perma-Log data acquisition inline installation (full data logging kit supplied and installed without box)
- Adaptors are available on request



Concept, design and complete!

Test - A frame



Manifolds and valves



Technical data

	Test frames, valves and manifolds
Test pressure	Up to 4137 bar / 60,000 psi
End ports	2 x 1/2" NPT Port complete with 9/16" HP ports
Top ports	4 x 1/2" NPT Port complete with 9/16" HP control valve
Valves	Stainless steel
Frame	Stainless steel
Weight (without valves and fittings)	20 kg
L x W x H (mm)	600 x 350 x 769

Abdex can offer a wide variety of Test Frames and Manifold blocks working up to 4200 bar (60,000 psi). Liquid and gas can easily be directed at the pressures required.

Our popular "A" frame design provides a perfect working height and can be supplied with any number of ports, control valves and thermowells as required.



Concept, design and complete!

TEST RIG CONTROL PANELS SPECIAL DESIGN

AB-CP-HP2-15-50



Technical data

	AB-CP-HP20-15-50
Test pressure	200 - 50,000 psi (14 - 3,447 bar)
Drive	Manual control
Flow	14.75 LPM at 0 psi pressure 2.1 LPM at 0 psi pressure 0.6 LPM at 0 psi pressure
Capacity	Air 100 psi
Colour	Grey pantone 429C
Noise level	70 dBA
Test medium	Water
Frame material	Grey
Lower pressure pipework	Stainless steel
High pressure pipework	Stainless steel
Stainless steel engraved panel	Yes
Weight	250 kg
L x W x H (mm)	1000 x 700 x 1300

FEATURES & BENEFITS

- Top quality components and design - low maintenance (see photo below)
- Three pump design - Lean and fast operation
- Transducer and software - Easy to produce test certificates (see test certificate example below)



Concept, design and complete!

Detailed Specification

Air controls - Separate operation of all three pumps including; air filter, air regulators and start / stop valves. Both pumps will also have a secondary air regulator, set to limit the pressure of the pump.

Fluid inlet line - Tank isolation valve and fluid strainer.

Fluid isolation valve - Each pump would have a separate fluid inlet isolation valve.

Pump 1 low pressure - Air operated pump capable of generating pressure that would be limited to 100 bar (1450 psi) with an air drive of 100psi, and 14.75 LPM at 0 psi pressure.

Low pressure isolation valve - Included.

Low pressure gauge - Gauge scale 0-150 bar (1500 psi) gauge size 6" diameter, direct mount.

Low pressure release valve - Set at 110 bar (1600 psi).

Pump 2 medium pressure - Air operated pump capable of generating pressure that would be limited to 700 bar (10000 psi) with an air drive of 100psi, and 2.1 LPM at 0 psi pressure.

Medium pressure isolation valve - Included.

Medium Pressure Gauge - Gauge scale 0-1000 bar (15000 psi) gauge size 6" diameter, direct mount.

Medium pressure release valve - Set at 770 bar (11165 psi).

Pump 3 high pressure - Air operated pump capable of generating pressure that would be limited to 3450 bar (50025 psi) with an air drive of 100 psi, and 0.6 LPM at 0 psi pressure.

High pressure isolation valve - Included.

High pressure gauge - Gauge scale 0-5000 bar (72500 psi) Gauge size 6" diameter, direct mount.

High pressure release valve - Set at 3790 Bar (55000 psi).

P 160 Ecoline



Technical data

	P 160 Ecoline
Test pressure	150 - 1300 bar
Drive	Intensifier
Flow	1,1 l / min
Capacity	7 bar, 20 l / min
Tank dimension	1200 x 600 x 250 mm
Test bench dimension	1400 x 600 x 1200 mm
Reservoir capacity	33 l
Alternative drive filling pump 405.904 / 405.914	0,5 kW 220-240 V 50/60 Hz 1 Ph
Paint	RAL 5012 Blue
Weight - when empty	120 kg
Noise level	72 dBA
Accessories	P 160 Ecoline
Suction filter / 100 µm	✓
Air preparation unit	✓
Steck-O-Adaptor (s-series only)	DN 4/6/8/10/12/ G 1/2" 405.901
Anti-corrosive additive	EM 10 l

Options	P 160 Ecoline
High pressure pump*	-
Low pressure pump	-
Test tank extension	-

* Only one of the two options possible



Retro fit data logging box and software.
Refer to page 568.



The best return on Investment since 1972.

HOSE TEST RIGS

ECOLINE TEST RIG WITH DATA LOGGING

AB-TR-1300-DL



Technical data

	AB-TR-1300-DL
Test pressure	150 - 1300 bar
Drive	Intensifier
Air supply (psi)	100
Flow (at zero pressure)	0.33 L/M
Tank dimensions (mm)	400 x 650 x 180
Tank capacity	33 litres
Test bench dimensions (mm)	230 x 46 x 98
Reservoir capacity (litres)	33
Side panel	Can be removed for longer hoses
Test outlet	9/16" UNF suitable for 1/4" MP fitting - Adaptors are available
Data logging and software	Full traceability and production of certificates
Paint	Grey Pantone 429C
Weight	150 kg
Noise Level	72 dBA

FEATURES & BENEFITS

- Easy to use data logging software - Quick to install and navigate
- Clear certificates - Gives customer confidence and full traceability
- Easy access panels to the front and rear - Fast and easy maintenance



OPTIONAL EXTRAS

- External water supply
- High pressure pump increased flow to 1.15 L / M
- Pre-fill pump to 16 L / M
- Isolation valve to manually isolate the pump from test hose
- 100 Litre tank
- Increased test cabinet to 3800mm long
- Full test compartment Interlock
- Laptop and software set up
- Printer connected and set up with laptop
- Test adaptors



Concept, design and complete!

LEAN PRODUCTION TEST RIG QUICK CONNECT TECHNOLOGY

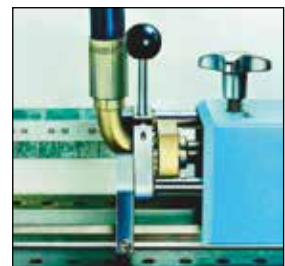
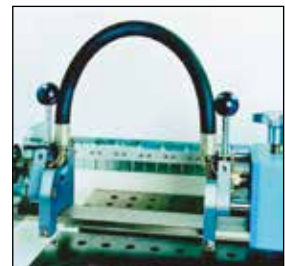
P200



Technical data

	P200
Test pressure	150 - 1300 bar
Control	Control B + Touch
Drive	Intensifier
Capacity	7 bar, 20 NI / min
Flow (effectively)	5 L / min
Tank dimension	1590 x 795 x 370 mm
Test bench dimension	2210 x 950 x 1325 mm
Reservoir capacity	100 l
Floor Pump	0,38 kW 400 V 50 Hz 3 Ph
Paint	RAL 5012 Blue RAL 7021 Grey
Weight - when empty	210 kg
Noise level	72 dBA
Accessories	P200
Suction filter	✓
Air preparation unit	✓
Holding disc	HS 400 Ø 8-10 / 10-12 / 12-15 / 15-18 / 18-21 / 21-24 / 24-27 / 27-30 / 30-33 / 33-36 / 36-39 / 39-42
Sealing cones	DSP 400-2 (30°- Ø 2,2), DSP 400-3 (30°- Ø 3,8), DSP 400-4 (80°- Ø 2,2), DSP 400-5 (80°- Ø 3,8), DSP 400-7 (30°- Ø 11), DSP 400-8 (80°- Ø 6,5)
Blind sealing cones	BDSP 400-1 (30°- Ø 2,2), BDSP 400-6 (80°- Ø 2,2), BDSP 400-9 (30°- Ø 11)
Sealing disc	DS 400-1 (120°)
Anticorrosive additive	EM 10 I

Options	P200
High pressure	150 - 3000 bar
Low pressure	20 - 150 bar
Stainless steel tank	✓
Extended version on request	✓



A handful of sealing cones replaces hundred of threaded adaptors!

Standard package

Lean fast
change system



The best return on Investment since 1972.

MULTIPLE LEAN PRODUCTION TEST RIG QUICK CONNECT & DUAL CHAMBER

P 300



Technical data

	P 300
Test pressure	100 - 1000 bar
Drive	Control B + Touch
Located with control unit	Air / Hydraulic 3kW with pressure intensity
Flow	13 l / min
Capacity	400-50-3 (VAC)
Tank dimension	3750 x 2400 x 870 mm
Closed control unit	3750 x 1450 x 870 mm
Aggregate dimension	830 x 740 x 1340 mm
Reservoir capacity	140 l
Colour	RAL 5012 Blue RAL 7021 Grey
Weight tank	1000 kg
Weight power unit	200 kg
Noise level	70 dBA
Max hose length	up to 2500 mm
Test medium	Test oil
Accessories	P 300
Press filter / 12 µm	✓
Air preparation unit	✓
Sealing cones set	✓

Options	P 300
Second chambers	✓
Hose size	Clamping up to 22 mm / 3/4" larger adaptors as required

**A handful of sealing cones replaces
hundred of threaded adaptors!**

Up to 120 hoses per hour!



Fast-change-system

Standard package

Laser printer Control C + Touch



Concept, design and complete!

UHP TRIPLE PUMP TEST RIG

TESTING UP TO 80,000 PSI

UHP TRIPLE PUMP TEST RIG - TESTING UP TO 80,000 PSI

AB-T-UHP3 - 600 / 6000 / 8000



Alternative tank option



Technical data

	UHP Triple pump test rig
Test pressure	600 - 80,000 psi (41 - 5,516 bar)
Drive	Manual control
Flow	13 LPM @ 0 psi pressure 1.2 LPM @ 0psi pressure 0.4 LPM @ 0psi pressure
Capacity	Air 100 psi
Colour	Grey Pantone 429 C
Noise	70 dBA
Test Medium	Water
Frame material	Steel
Low pressure pipework	Stainless steel
High pressure pipework	Stainless steel
Stainless steel engraved panel	✓
Weight	250 kg
L x W x H (mm)	2500 x 700 x 1300

FEATURES & BENEFITS

- Top quality components and design - Low maintenance (photo below)
- Transducer and software - Easy to produce test certificates and data storage (Certificate example below)
- Three pump design - Lean and fast operation
- Easy access panels to the front and rear - Fast and easy maintenance
- Forklift access points - Easy to move and transport
- Testing to EN1829-2 - Meeting stringent safety standards



OPTIONAL EXTRAS

- Impulse Testing - 1.5 x WP - hold for 1 minute, 5 x cycles up to WP and down to zero, 1.5 x WP - hold for 1 minute - Parker Polyflex test procedure
- Bespoke and retrofit test tanks
- Touch screen control
- Bespoke step control and software.



Concept, design and complete!

HOSE FLUSHING MACHINES

FEATURES & BENEFITS



Quality pumps



- Fastest flow rates for lean production
- Test Pressures up to 15,000psi
- Optimum flow rates for large flow lines and umbilicals

Superior design features



- Easy and faster to operate
- Cleanliness standards to NAS1638 Class 6, or higher
- Custom designed and ATEX compliant as required

Touch screen technology or data transfer



- Easy to operate
- Fast features selection and data transfer
- Open source data capture using CSV / XML files

Robust stainless steel frame design



- Corrosion and heat resistant
- Strength to weight advantage
- Designed to be fully portable with frame lifting pockets and eyes



Concept, design and complete!

FLUSHING RIGS

WATER GLYCOL & MINERAL OIL

AB-FR-WG-800-25-1500



AB-FR-300-52-600



AB-MO-500-33-1500



Technical data

	AB-FR-WG-8000-25-15000	AB-FR-3000-52-6000	AB-MO-5000-33-15000
Fluid	Water glycol	Water glycol	Mineral oil
Optimum flow pressure (psi)	8,000	3,000	5,000
Flow rate at optimum pressure	25 L / M	52 L / M	33 L / M
Test pressure (psi)	15,000	6,000	15,000
L x W x H (mm)	1500 x 1100 x 1992	1500 x 1100 x 1992	1500 x 1100 x 1992
Weight	1000 kg	1000 kg	1000 kg

FEATURES & BENEFITS

- Digital flow meter - provides litres / min and resettable total litres figures
- Pump cut out feature to prevent running dry
- Stainless steel frame
- Integral drip tray to contain spillages
- Designed to be fully portable with frame lifting pockets and eyes
- Designed and manufactured in the UK using the best components
- Best quality hydrostatic test pump
- Filtration to ensure cleanliness of the system
- Air blast cooler



OPTIONAL EXTRAS

- Laser Particle Counter – Stand alone particle counter to analyse fluid cleanliness to industry standards
- 6 Port A Frame Manifold – Manifolds are supplied with six 9/16" high pressure ports which will be plugged as standard. If required, manifolds can have additional valves and adaptors added to suit specific requirements
- Pressure Transducers – A simple connection from the transducer to a laptop through a USB lead, complete with software. The transducers will allow for accurate test pressure readings and can provide the option of test certificates to be printed
- Chart Recorders – 12" stand alone chart recorders complete with connection hoses to connect to the flushing rig test line
- Hoses – A range of hoses to suit various sizes and applications
- All flushing rigs are available for rental - Please contact our Sales Team for more information



Concept, design and complete!



TECHNICAL INFORMATION

TECHNICAL INFORMATION

The following pages contain important technical information on products found in this catalogue. There is a particular focus on Thermoplastic products that can help in determining the best suitable product for your application.

If you do not find the information you are looking for or would like further clarification, please contact Abdex directly.



IN THIS SECTION

Chemical Resistance Table	
Thermoplastic Hose	580
General Information	
Flow Rate	583
Hose Selection	584
Units and Conversions	585
General Engineering	
Recommended Tightening Procedures	586
Permeability Coefficient	587
Hydraulic / Pneumatic Symbols	588
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CHEMICAL RESISTANCE TABLE

THERMOPLASTIC HOSE

RATINGS CODE

- G Good to excellent. Little or no swelling, tensile or surface changes. Preferred choice.
 L Marginal or conditional. Noticeable effects but not necessarily indicating lack of serviceability. Further testing suggested for specific application. Very long-term effects such as stiffening or potential for crazing should be evaluated.
 P Poor or unsatisfactory. Not recommended without extensive and realistic testing.
 - Indicates that this was not tested.

MATERIALS CODE FOR HOSE CORE TUBES

- N Polyamide.
 M Coextruded tube with Fluoropolymer inner liner.

MATERIALS CODE FOR HOSE COVER

- N Polyamide.
 U / HF Polyurethane.

NOTES ON THE CHEMICAL RESISTANCE TABLE

- The fluid resistance tables are simplified rating tabulations based on immersion tests at 24°C. Higher temperatures tend to reduce ratings. Since final selection depends on pressure, fluid and ambient temperature and other factors not known to Abdex, no performance guarantee is expressed or implied. The indications do not imply any compliance with standards and regulations and do not refer to possible changes of colour, taste or smell. For food and drinking water specially approved materials have to be used. For fluids not listed or for advice on particular applications, please consult please consult Abdex.
- Hose applications for these fluids must take into account legal and insurance regulations. The chemical resistance indicated does not express or imply approval by certain institutions.
- Satisfactory at some concentrations and temperatures, unsatisfactory at others.
- For gas applications, the cover should be pin-pricked and the pressure must not be released quickly. Special safety guard accessories are to be used to prevent damage or personal injury in the event of failure.
- Chemical resistance does not imply low permeation rates. Please consult Abdex for a recommendation for your specific requirements.
- The indication of chemical resistance does not imply any special food compatibility; it refers only to the chemical resistance of the material.
- Chemical resistance does not imply acceptability for use in airless paint spray applications. These applications require a special, electrically conductive hose.

Chemical	N	U / HF	M
Acetone	G	P	L
Acetylene	-	-	-
Air (4)	G	G	G
Ammonium Chloride	P	G	G
Ammonium Hydroxide	G	P	G
Anhydrous Ammonia	P	P	-
Aniline	P	P	G
Aromatic Hydrocarbons	G	L	-
Asphalt	G	G	L
Benzene	G	L	G
Butane (2) (4)	G	L	-
Calcium Chloride	-	G	G
Carbon Dioxide (4)	G	G	-
Carbon Monoxide (4)	-	G	-
Carbon Tetrachloride	G	P	G
Chlorinated Hydrocarbon Base Fluids	G	L	-
Chlorinated Petroleum Oil	G	L	-
Chlorinated Solvents	-	P	-
Chlorine, Gaseous, Dry	P	P	-

CHEMICAL RESISTANCE TABLE

THERMOPLASTIC HOSE

Chemical	N	U / HF	M
Chromic Acid	-	P	L
Citric Acid Solutions	G	L	G
Crude Petroleum Oil	G	G	-
Cyclohexan (2)	G	G	G
Diesel Fuel (2)	G	G	-
Diester Oils	G	P	-
Ethanol (6)	G	L	-
Ethers	G	P	G
Ethylene Glycol	G	L	G
Ethylene Oxide	G	L	-
Fatty Acids	G	-	G
Formaldehyde	L	P	G
Formic Acid J	P	P	G
Fuel Oil (2)	G	L	G
Gas (Oil) (2)	G	G	-
Gasoline	G	-	G
Glycerine	G	L	G
Glycols (to 135°F)	G	L	G
Grease (petroleum base)	G	G	--
Hexane (2)	G	G	G
Hydraulic Fluid (petroleum base)	G	G	L
Hydraulic Fluid phosphate ester base)	G	L	-
Hydraulic Fluid water base)	G	G	-
Hydraulic oil (petroleum base)	G	G	L
Hydrochloric Acid	L	P	G
Hydrofluoric Acid	P	P	G
Hydrolube (hydraulic fluid/water glycol base)	G	L	-
IRUS 902 (hydraulic fluid/water-oil emulsion)	G	G	-
Isooctane (2)	G	G	G
Kerosene (2)	G	L	G
Ketones	G	P	G
Lime (calcium oxide)	G	G	G
Lindol (hydraulic fluid/phosphate esters)	G	P	-
LP-Gas	-	-	-
Lubricating Oils (diester base)	G	P	-
Lubricating Oils (petroleum base)	G	G	G
Methane	-	-	-
Methanol	G	P	-
Methyl Alcohol (6)	G	P	G
Methyl Ethyl Ketone (MEK)	G	P	G
Methyl Ethyl Ketone Peroxide (MEKP)	L	P	-
Methyl Isobutyl Ketone (MIBK)	G	P	G
Methylen Chloride	L	P	G
Mineral Oil	G	G	G
Mineral Spirits	-	L	-
Motor Oils	G	G	G
Naphta	G	P	G
Natural Gas (4)	-	-	-
Nitric Acid	P	P	L
Nitrobenzene	G	P	G
Nitrogen, Gaseous (4) (5)	G	G	G

CHEMICAL RESISTANCE TABLE

THERMOPLASTIC HOSE

Chemical	N	U / HF	M
Nitrous Oxide	L	-	-
Oil (SAE)	G	G	-
Oxygen, Gaseous (4) (5) (6)	G	G	G
Pentane (2)	G	L	G
Perchloric Acid	P	P	L
Petroleum Ether	-	-	-
Petroleum Oils	G	G	-
Phenols	P	P	-
Phosphate Esters (above 135 °F)	G	P	-
Phosphate Esters (to 135 °F)	G	P	-
Propane (4) (5)	-	-	-
Propylen Glycol	-	G	G
Salt Water	-	-	G
Silicone Greases	G	G	-
Silicone Oils	G	G	-
Sodium Borate	G	G	G
Sodium Carbonate	-	-	-
Sodium Chloride Solutions	G	G	G
Sodium Hydroxide, 50%	P	P	G
Sodium Hypochloride	P	P	G
Steam	P	P	G
Straight Synthetic Oils (phosphate esters)	G	P	-
Sulphur Dioxide	L	L	G
Sulphur Hexafluoride Gas (4) (5)	G	G	-
Sulphuric Acid	P	P	-
Toluol, Toluene	G	L	G
Trichlorethylene	L	P	G
Ucon (hydraulic fluid/water glycol base)	G	L	-
Water (above 60 °C) (6)	G	P	L
Water (to 60 °C) (6)	G	G	G
Water Glycols (above 60 °C)	L	P	-
Water Glycols (to 60 °C)	G	L	-
Water in oil Emulsions (above 60 °C)	L	P	-
Water in oil Emulsions (to 60 °C)	G	L	-
Xylene	G	P	G
Zinc Chloride	G	G	G

GENERAL INFORMATION

FLOW RATE

Flow capacities of Parker hose at recommended flow velocities

The chart below is provided as an aid in the determination of the correct hose size.
Suitable for hydraulic applications.

Example:

At 10 gallons per minute (gal/min), what is the proper hose size within the recommended velocity range for pressure lines?

Locate 10 gallons per minute in the left-hand column and 25 feet per second in the right-hand column (the maximum recommended velocity range for pressure lines).

Lay a straight line across these two points. The inside diameter shown in the centre column is above -6 so we have to use -8 (1/2").

For suction hose, follow the same procedure except use recommended velocity range for intake lines in the right-hand column.

Where:

Q - flow in gallons per minute (gal/min and l/min)

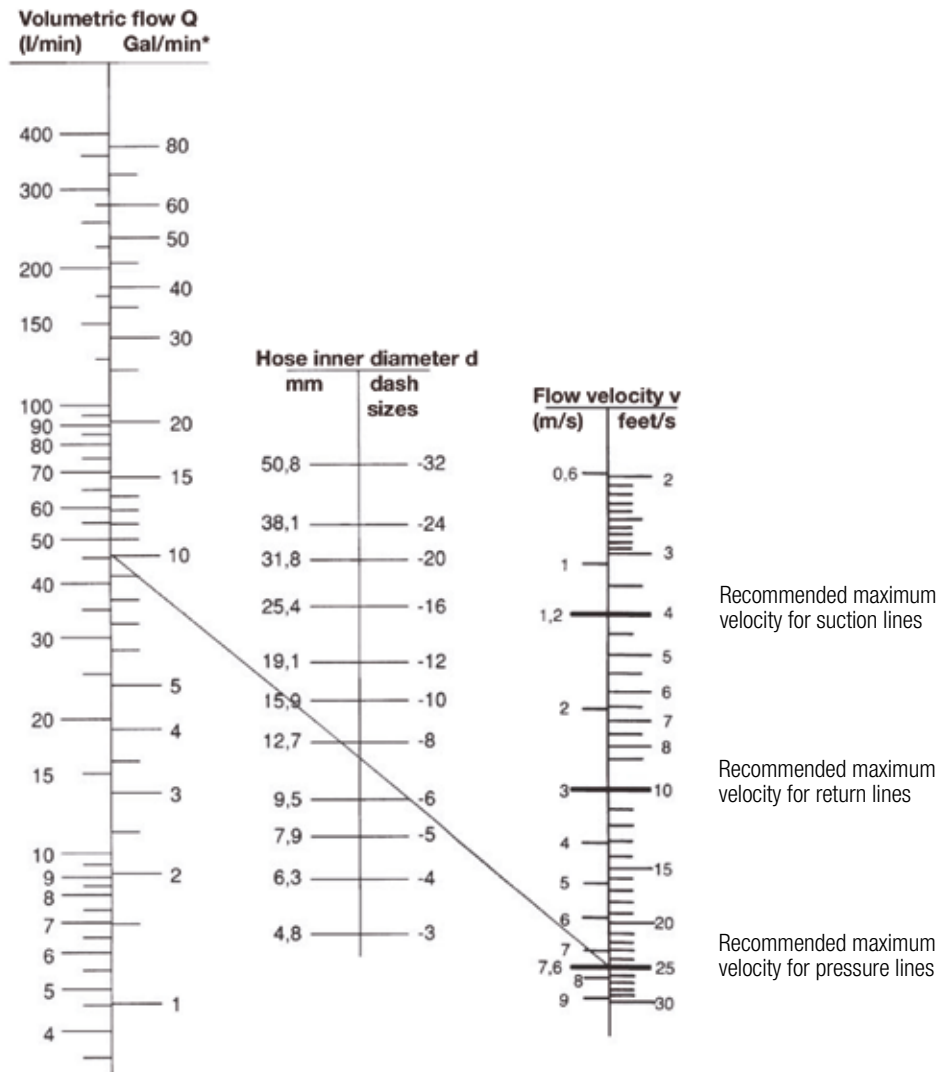
V - velocity in feet per second (f/s and m/s)

d - hose inside diameter (mm and dash size)

Conversion factors:

gal/min x 4.546 = l/min

feet/s x 0.3948 = m/s



* gallons are UK gallons.

Recommended velocities are according to hydraulic fluids of maximum viscosity 315 S.S.U at 38°C working at room temperature within 18° and 68°C.

GENERAL INFORMATION

HOW TO SELECT THE RIGHT HOSE

SIZE

ID
OD
Hose length (OAL or uncoupled length)
Tolerances

TEMPERATURE

Of material being conveyed (high, low, ambient)
Of outside exposure (high, low, ambient)
Intermittent?
Constant?
Sub-zero exposure?

APPLICATION(S)

Indoor and / or outdoor use
Intermittent or continuous use
Flexibility required (Min. bend radius)
Movement (static, vibrations, flexing)
External conditions: Abrasion
Oil
Solvents
Acid
Ozone
Electrical / static conductive
Oil resistance: Tube
Cover
Flame resistance
Non-contaminating materials
Hose currently in use
Current hose service life / failure description
Service life desired

MATERIAL(S) BEING CONVEYED

Solids (size, description)
Gaseous (volatility, inert)
Liquids (flammability, causticity, acid / alkaline, solution / concentration)
Chemical Names (generic)

PRESSURE(S)

Working pressure (including surges)
Burst pressure
Suction or vacuum requirements
Velocity
Impulse

ENDS & FITTINGS

Factory applied fittings: Type of threads
Male / Female
Reusable / Non-reusable
Material for fittings
Built-in fittings / ends: beaded
Flanged
Rubber-lined
Other
Cut to length
Crimp specs / crimper (hydraulics)

DELIVERY

Lead time
Quantity
Stock / non-stock
Special print
Special packaging

S
T
A
M
P
E
D

METRIC CONVERSION CHART

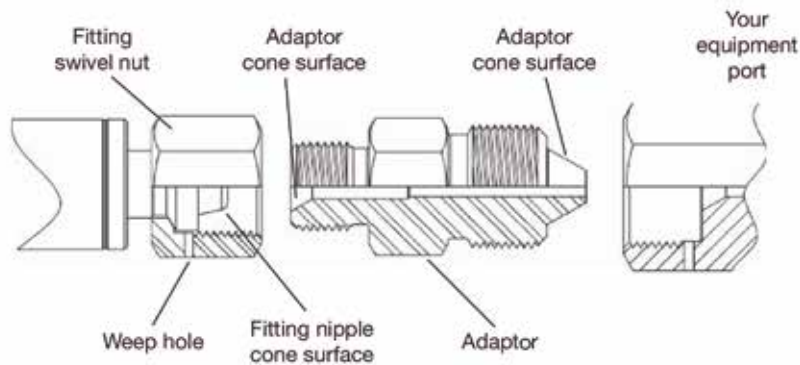
	English to Metric			Metric to English		
	To Convert From	To	Multiply	To Convert From	To	Multiply
Area	sq. in. (in ²)	sq. mm. (mm ²)	645.16	sq. mm (mm ²)	sq. in. (in ²)	0.00155
	sq. in. (in ²)	sq. cm. (cm ²)	6.4516			
	sq. ft. (ft ²)	sq. metres (m ²)	0.0929			
Density	Pounds / cubic foot (lb/ft)	Kilograms / Cubic metre (kg/m ³)	16.02	Kilograms / Cubic metre (kg/m ³)	Pounds / Cubic foot (lb/ft)	0.0624
Energy	British Thermal Units (Btu) (1 J = Ws = 0.2388 cal)	Joules (J)	1055	Joules (J)	British Thermal Units (Btu)	0.000947
Force	Pounds - Force (lbf) (1N = 0.102 kgf)	Newtons (N)	4.448	Newtons (N)	Pounds - Force (lbf)	0.2248
Length	Inches (in)	Millimetres (mm)	25.4	Millimetres (mm)	Inches (in)	0.03937
	Feet (ft)	Metres (m)	0.3048	Metres (m)	Feet (ft)	3.281
	Miles (mi)	Kilometres (km)	1.609	Kilometres (km)	Miles (mi)	0.621
Mass (weight)	Ounces (oz.)	Grams (g)	28.35	Grams (g)	Ounces (oz.)	0.035
	Pounds - Mass (lb)	Kilograms (kg)	0.4536	Kilograms (kg)	Pounds - Mass (lb)	2.205
	Short tons (2000 lb) (tn)	Metre tons (1000 kg)	0.0972	Metric tonnes (1000 kg)	Short tons (2000 lb) (tn)	1.102
Power	Horsepower (550 ft. lb/s) (hp)	Kilowatts (kW)	0.7457	Kilowatts (kW)	Horsepower (550 ft. lb/s) (hp)	1.341
Pressure	Pounds / square / inch (psi)	Kilograms (f) / square cm (kg (f)/cm ²)	0.0703	Kilograms (f) / square cm (kg (f)/cm ²)	Pounds / square inch (psi)	14.22
	Pounds / square / inch (psi)	Kilopascals (kPa)	6.8948	Kilopascals (kPa)	Pounds / square inch (psi)	0.145
	Pounds / square / inch (psi)	Bars (100 kPa)	0.06895	Bars (1000 kPa)	Pounds / square inch (psi)	14.503
Stress	Pounds / square inch (psi) (1N/mm ² =1MPa)	Megapascals (MPa)	0.006895	Megapascals (MPa)	Pounds / square inch (psi)	145.039
Temperature	Degrees Fahrenheit (°F)	Degrees Celsius (°C)	5/9 (after subtracting 32)	Degrees Celsius (°C)	Degrees Fahrenheit (°F)	9/5 (then add 32)
Torque or bending moment	Pounds - Force - Foot (lb-ft)	Newtons-metre (Nm)	1.3567	Newtons-metre (Nm)	Pounds - Force - Foot (lb-ft)	0.737
	Pounds - Force - Foot (lb-in)	Newtons-metre (Nm)	0.113	Newtons-metre (Nm)	Pounds - Force - Foot (lb-in)	8.85
Velocity	Feet / seconds (ft/s)	Metre / second (m/s)	0.3048	Metre / second (m/s)	Feet / seconds (ft/s)	3.2808
Viscosity	Dynamic (centipoise)	Pascal-second (Pas)	0.001	Pascal-second (Pas)	Dynamic (centipoise)	1000
	Kenematic-foot ² / sec (ft ² /s)	Metre ² / sec (m ² /s)	0.0929	Metre ² / sec (m ² /s)	Kenematic-foot ² / sec (ft ² /s)	10.7643
Volume	Cubic inch (in ³)	Cubic centimetre (cm ³) (millimetre)	16.3871	Cubic centimetre (cm ³) (millimetre)	Cubic inch (in ³)	0.061
	Quarts (qt)	Litres (1000 cm ³)	0.9464	Litres (1000 cm ³)	Quarts (qt)	1.057
	Gallons (gal)	Litres	3.7854	Litres	Gallons (gal)	0.2642

GENERAL ENGINEERING

RECOMMENDED TIGHTENING PROCEDURES

TIGHTENING PROCEDURES

	Connection	Thread Sizes	Tightening Torque	
			ft / lb	M / m
High Pressure	1/4	9/16 - 18	25	34
	3/8	3/4 - 16	50	69
	9/16	1 1/8 - 12	75	103
Medium Pressure	1/4	7/16 - 20	20	28
	3/8	9/16 - 20	30	41
	9/16	13/16 - 16	85	117
	3/4	3/4 NPSM	90	124
	1	1 3/8 - 12	125	173
Type "M" Swivel	A9	9/16 - 18	25 - 30	34 - 41
	A12	3/4 - 16	40 - 50	55 - 69
	A14	7/8 - 14	50 - 60	69 - 83
	A16	1 - 12	75 - 85	103 - 117
	A21	1 5/16 - 12	100 - 120	138 - 166



Leakage at swivel nut-to-adaptor joint

(Seen by leak at weep hole in swivel nut)

1. Reduce system pressure to zero.
2. Unscrew swivel nut and check cone surfaces of adaptor and hose insert.
3. If hose insert is damaged, return hose to Abdex for repair and retest.
4. If cone surfaces look good after cleaning, re-tighten swivel nut. Do not exceed 150% of recommended torque.

Leakage at type "M" adaptor-to-port

(Seen by leak at weep hole in pressure port, or leak at threads for NPT adapters)

1. Reduce system pressure to zero.
2. Slacken hose swivel nut.
3. Tighten adaptor into port.
4. Re-tighten swivel nut.

Never use the swivel nut to tighten the adaptor into the port.

PERMABILITY COEFFICIENT

$$\text{Permability Coefficient} = \frac{V}{A \times T \times p}$$

Where:

V - volume of gas, in cm³, which diffuses through a 1mm thickness.

A - area across which the gas diffuses, in m².

T - diffusion time, in days.

p - pressure difference across the plastic, in bar.

PERMABILITY COEFFICIENT PER DIN 53380

Material	Gas				
	N ²	O ²	CO ²	H ²	He
PTFE	50	150	1500	-	3500
PVDF	3	2	10	-	60
PA-6 XE 3289	1	4	10	100*	60*
PA-6 A 28 NZ	0.5	2	5	50*	30*
PA-12 L 2124	-	30	180	210	160
PA-12 P40 TL	-	-	105	-	-
PA-12 L 25W40	8	35	150	1000*	500*
PA-12 L 2140	-	12	71	-	130
PA-11 P 40 TL	-	-	55	130	-
PA-11 POLT	2	20	65	65	-
POM H 2320	5	10	130	35	40
POM 150 SA	2	4	20	-	-
PEE 4055	150	-	3000	-	1400
PEE 5556	120	-	1600	-	900
PEE 7246	-	-	-	-	300

* Calculated value. Diffusion constants based on normal room temperature. Actual behaviour may vary considerably because of variations in processing the plastic.

GENERAL ENGINEERING

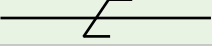
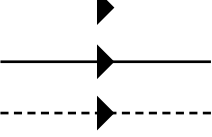
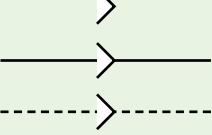
HYDRAULIC & PNEUMATIC SYMBOLS

HYDRAULIC & PNEUMATIC SYMBOLS

ISO 1219-1 covers graphic symbols for both hydraulic and pneumatic equipment. For circuit diagram layout rules see BS ISO 1219-2.

For port identification and operator marking see ISO 9461 (Hydraulic) or BS ISO 5599 (Pneumatic).

Graphic symbols for fluid power systems

	Supply lines, return lines, component enclosure, symbol enclosure
	Pilot (control) line, drain line, flushing line, bleed line
	Electrical control line
	Frame for several components
	Hose assembly
	Drain to tank
	Return to tank
	Connection of two fluid lines (indicated by the connection point ●)
	Two fluid lines crossing (no connection)
	Hydraulic source of energy
	Pneumatic source of energy
	Valve control - solenoid
	Valve control - Proportional solenoid
	Valve control - Lever
	Valve control - Pedal
	Valve control - Electro-hydraulic (pilot operated DCV)
	Valve control - Spring
	Valve control - Pneumatic spring
	Valve control - Manual override

SYSTEMS OF UNITS & CONVERSIONS

Graphic symbols for fluid power systems

	Hydraulic pump Fixed displacement, one direction of rotation, one direction of flow, internal case drain
	Hydraulic pump Variable displacement, one direction of rotation, two directions of flow, external case drain
	Hydraulic motor Fixed displacement, one direction of rotation, internal case drain
	Hydraulic motor Variable displacement, bi-directional rotation, external case drain
	Compressor: clockwise rotation
	Air motor: one direction of rotation
	1. Diaphragm accumulator 2. Bladder accumulator 3. Piston accumulator 4. Back-up bottle 5. Air reservoir [pressurised]

Directional control valves (DCV's)

	2/2 Valve (2 ports, 2 positions)
	3/2 Valve (3 ports, 2 positions)
	3/2 Poppet valve (reversible flow, leak-free closure)
	4/2 Valve (4 ports, 2 positions)
	5/2 Valve (5 ports, 2 positions)

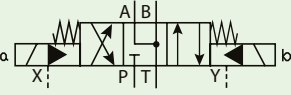
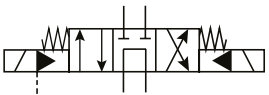
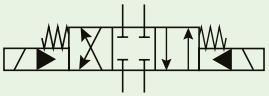
Direct operated (by solenoid) DCV's

	4/2 "spring return" or "spring offset" DCV
	4/2 "detented" or "impulse" DCV
	4/3 spring centred DCV (open centre spool)
	"force controlled" or "non-feedback" proportional DCV (shown with integral amplifier)

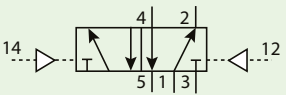
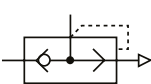
GENERAL ENGINEERING

HYDRAULIC & PNEUMATIC SYMBOLS

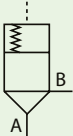
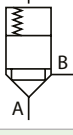
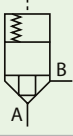
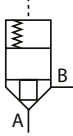
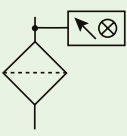
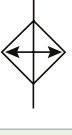
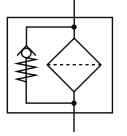
Port and solenoid identification for hydraulic valves according to ISO 9461
 Electro-hydraulic ("pilot operated" or "two-stage") DCV's. Solenoid operated pilot stage (A and B).
 Spring centred main stage (various spool configurations shown).

	External pilot supply (X), external pilot drain (Y)
	External pilot supply, internal pilot drain
	Internal pilot supply, internal pilot drain

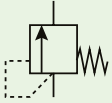
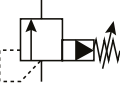
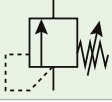
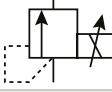
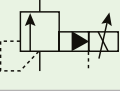
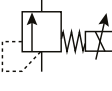
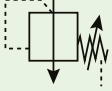
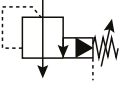
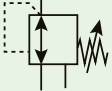
Port identification for pneumatic valves according to ISO 11727

	Direct operated (by pneumatic pilot) 5/2 DCV
	Pneumatic quick-exhaust valve with possibility of connection to the exhaust port
	Pneumatic exhaust silencer with no possibility of connection to the outlet port

2/2 cartridge valves ("slip in valves" or "logic elements")

	Pressure control, normally closed, area ratio: 1
	Directional control, area ratio: >0.5
	Directional control, area ratio: <0.5
	Directional control, area ratio: <0.5 (with damping nose or throttle nose)
	Filter with optical clogging indicator
	Filter with bypass (the enclosure indicates that the component has two or more main functions that are connected to each other)
	Cooler (with no indication of the cooling fluid flow path)
	Heater (with no indication of the heat exchange fluid flow path)

GENERAL ENGINEERING HYDRAULIC & PNEUMATIC SYMBOLS

	Direct operated ("single-stage") relief valve with adjustable spring
	Pilot operated ("two-stage") relief valve
	Direct operated sequence valve (external spring chamber drain)
	Direct operated proportional relief valve (solenoid acts directly on valve poppet)
	Pilot operated proportional relief valve (external pilot drain)
	Direct operated proportional relief valve (solenoid acts on valve poppet via spring - this type of valve is often equipped with a stroke transducer)
	Direct operated reducing valve
	Pilot operated reducing valve
	Direct operated 3-way reducing valve ("reducing/relieving" valve)

	Check valve without spring (symbol often used for valves with only a light spring)
	Check valve with spring (spring is drawn if its rating is significant)
	Pilot to open check valve ("PO check valve")
	Vented (or "4 port") pilot to open check valve
	Quick connect coupling (this symbol also used for pressure test points)

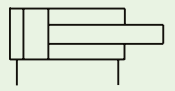
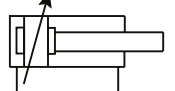
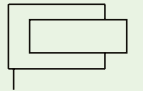
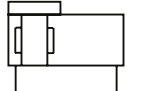
GENERAL ENGINEERING

HYDRAULIC & PNEUMATIC SYMBOLS

	Throttle valve with adjustable opening
	Pressure compensated and temperature (viscosity) compensated flow control valve with fixed setting
	Pressure compensated and temperature (viscosity) compensated flow control valve with adjustable setting and reverse flow check valve

	Normally open isolation valve (ball valve, gate valve, globe valve etc. or a fully open needle valve)
	Normally closed isolation valve (ball valve, gate valve, globe valve etc. or a fully closed needle valve)
	3 way ball valve ("L" configuration)
	3 way ball valve ("T" configuration)
	3 way ball valve ("inverted T" configuration)
	4 way ball valve ("X" configuration)

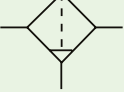
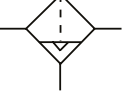
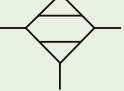
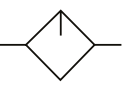
Cylinders (linear actuators)

	Double-acting cylinder (single rod)
	Cylinder with adjustable cushions at each end of stroke
	Single-acting ("plunger") cylinder
	"Rodless" cylinder [band type] with non-adjustable cushioning

GENERAL ENGINEERING

HYDRAULIC & PNEUMATIC SYMBOLS

Compressed air preparation

	Filter with separator with manual drain
	Filter with separator with automatic drain
	Air dryer
	Lubricator

	Permanent magnet
	Stroke transducer (as used on proportional valves with position feedback)
	Stroke limiter (adjustable)
	Stroke limiter (fixed setting)
	Flowmeter (type of output not shown)

GENERAL ENGINEERING FORMULAE

PUMPS & MOTORS

Flow rate (L/min)	$Q = \frac{D_n}{1000}$
Shaft torque (Nm)	$T = \frac{D_p}{20 \pi}$
Shaft power (kW)	$P_{SH} = \frac{T_n}{9549.3}$
Hydraulic power (kW)	$P_H = \frac{Q_p}{600}$

CYLINDERS

Pressure (N/m ²)	$\frac{F}{A}$
Flow rate (L/min)	$Q = 60 \times 10^3 \times A_v$
Quick calculation	Power (kW) $P = \frac{\text{tonnes} \times \text{mm/sec}}{100}$

ABBREVIATIONS

F	Force (N)
A	Area (m ²)
V	Velocity (m/s)
P	Pressure (bar)
D	Displacement (cm ³ /rev)
n	Shaft Speed (rev/min)
Øp	Pressure drop (bar)
Q	Flow Rate (L/min)
T	Shaft Torque (Nm)
P_{SH}	Shaft Power (kW)
P_H	Hydraulic Power (kW)

PRESSURE LOSS IN PIPES

Flow (L/min)	Tube bore size (mm)								
	5	7	10	13	16	21	25	30	36
1	0.69	0.22							
2	1.38	0.44							
3	2.07	0.66	0.17						
5	4.14	1.24	0.24						
7.5	6.55	1.72	0.31						
10		3.10	0.38	0.14					
15		5.38	0.69	0.21	0.08				
20			1.10	0.30	0.14				
30			2.21	0.69	0.25	0.04			
40				1.17	0.45	0.08	0.04		
50					0.59	0.12	0.07	0.03	
75					1.13	0.23	0.14	0.06	0.02
100						0.41	0.22	0.13	0.03
150							0.45	0.23	0.06
200								0.41	0.10
250									0.16

This chart gives the approximate pressure drop in smooth bore straight pipes, in bar per 3 m length. Bends and fittings will increase the above pressure losses and manufacturers should be consulted for more accurate figures.

PRESSURE DROP THROUGH PIPES

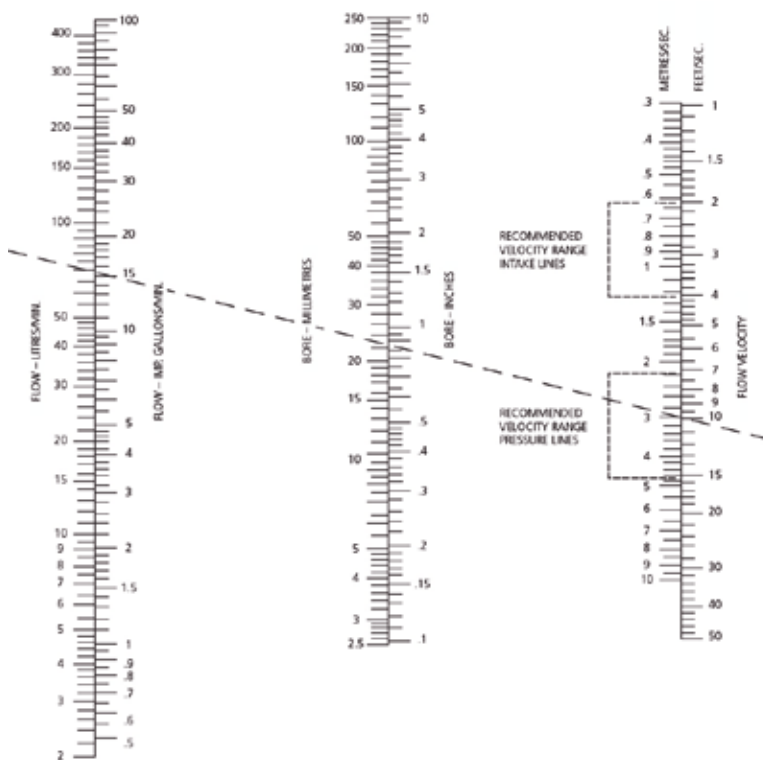
Δp	Pressure drop (bar)
Q	Free air flow (m ³ /s) = l/s $\times 10^{-3}$
L	Pipe length (m)
d	Internal pipe diameter (m)
p	Pressure (bar)

VELOCITY THROUGH PIPES

v	Flow velocity (m/s)
p	Initial pressure (bar)
d	Internal pipe diameter (mm)

If the free air flow is known, the minimum inside diameter to keep velocity below 6 m/s, can be found from:
For normal installations, where the pressure is about 7 bar gauge, this can be simplified to:
d (mm) should be greater than $5 \times Q$

PRESSURE DROP IN PIPES & HOSES



Nomogram for determining pipe sizes in relation to flow rates and recommended velocity ranges.

Based on the formula:
Velocity of fluid in pipe (m/s) = $\frac{\text{Flow rate (l/min)} \times 21.22}{d^2}$

d = Bore of pipe (mm)

Recommended velocity ranges based on oils having a maximum viscosity grade of 70 cSt at 38°C and operating between 18°C and 51°C.

Note: For pipe runs greater than 10 m pipe size should be increased correspondingly. Intake line should never exceed 1m in length.

GENERAL ENGINEERING FORMULAE

HYDRAULIC FLUIDS, SEALS & CONTAMINATION CONTROL

ISO Classification of hydraulic fluids – BS ISO 6743-4

HH	Non-inhibited refined mineral oils
HL	Refined mineral oils with improved anti-rust and anti-oxidation properties
HM	Oils of HL type with improved anti-wear properties
HV	Oils of HM type with improved viscosity/temperature properties HFAE Oil-in-water emulsions
HFAS	Chemical solutions in water
HFB	Water-in-oil emulsions
HFC	Water polymer solutions
HFDR	Synthetic fluids containing no water and consisting of phosphate esters
HFDU	Synthetic fluids containing no water and of other composition

Environmentally acceptable hydraulic fluids

HETG	Tryglycerides
HEPG	Polyglycols
HEES	Synthetic esters
HEPR	Polyalphaolefins

Viscosity classification of hydraulic fluids – ISO 3448 (BS 4231)

Each viscosity grade is designated by the nearest whole number to its mid-point kinematic viscosity in centistokes at 40 °C. It is abbreviated ISO VG. Common viscosity grades of hydraulic fluids are VG 22, 32, 46 and 68.

Thus HM32 is a mineral oil with improved anti-rust, anti-oxidation and anti-wear properties having a viscosity of approximately 32 centistokes at 40 °C.

SEALS

Seal Material	Recommended for:
Acrylonitrile butadiene (NBR)	Air, oil, water, water/glycol
Polyurethane (AU)	Oil
Polyurethane (EU)	Air, oil, water
Fluorocarbon rubber (FKM)	Air, oil, water, phosphate esters (except alkyl phosphates)
Ethylene propylene diene* (EPDM)	Air, water, water/glycol, phosphate esters
Polytetrafluoroethylene - virgin, bronze-filled, glass-filled, carbon-filled (PTFE)	Air, oil, water, water/glycol, phosphate esters
Thermoplastic polyester elastomer	Oil, water
Ultra high molecular weight polyethylene (UHMWPE)	Oil, water, water/glycol

*EPDM is not recommended for mineral oil as it will swell rapidly.

FLUID & HYDRAULIC CLEANLINESS

Cleanliness control

The presence of particulate contamination (dirt) is the single most important factor governing the life and reliability of fluid power systems. Operating with clean fluids is essential to achieve modern performance and reliability requirements.

Target cleanliness level (TCL) for a hydraulic system

The TCL is the operational cleanliness of the system and the level that should be achieved and maintained by the cleanliness control measures designed for that system.

The TCL should be selected at the design stage and used to define the cleanliness through the production and commissioning processes. The method for selecting the TCL described is based upon both the sensitivity of the system to particulate contamination and the life and reliability required by the user.

Design and cleanliness

Filtration Standards

A wide range of standards are available to test a filter's capability to perform under various system conditions, namely:-

Parameter	
Collapse/Burst Resistance	BS ISO 2941
Fabrication Integrity	BS ISO 2942
Fluid Compatibility	BS ISO 2943
End Load Strength	BS ISO 3723
Flow Fatigue Test	BS ISO 3724
Flow/Pressure Loss	BS ISO 3968
Pressure Fatigue (Housings)	BS ISO 10771-1
Filter Qualification Programme	BS ISO 10770
Testing differential pressure devices	BS ISO 16860
Filtration Performance	BS ISO 16889
Flow fatigue using high viscosity fluid	BS ISO 23181

Degree of filtration – BS ISO 16889

This ISO standard describes the "Multi-pass" method for evaluating the filtration performance of a hydraulic filter element. The element is subject to a constant circulation of oil during which fresh contaminant (ISO Medium Test Dust) is injected into the rig. The contaminant that is not removed by the element under test is re-circulated, thereby simulating service conditions. The test continues until the element is 'blocked'.

The measure of the filter's ability to remove contaminant is determined by the analysis of fluid samples extracted from upstream and downstream of the filter and expressed as the Filtration Ratio $\beta_x(c)$, thus:- for the sizes measured.

BS ISO 16889 specifies a number of ratings to define the element's performance over a wide size range and gives the $\mu m(c)$ rating at $\beta(c)$ values of 2, 10, 75, 100, 200 and 1000.

The test also gives a measure of the element's ability to retain quantities of ISO Medium Test Dust.

Cleanliness of components

Components should be cleaned to a level that is commensurate with the system TCL. Guidelines on how to achieve and measure component cleanliness are provided in BS ISO/TR 10949 and BS ISO 18413.

Flushing

Flushing is a process designed to remove dirt introduced into the system during manufacture, assembly and initial operation. It is also used when significant maintenance is undertaken. The requirements are summarised below:-

- A turbulent flow regime to pick up the particles from the walls of components and transport them to the flushing filter
- The Reynolds Number (Re) defines the flow condition and should be greater than 4,000 thus:-

$$Re = 21,200 \times Q / (v \times d)$$
or

$$Q > 0.189 \times v \times d \text{ (l/min) to achieve } Re \geq 4,000$$

Q = Flow rate (L/min)

v = Viscosity (mm/s)

d = Pipe diameter (mm)

- A 'fine' filter to capture transported particles quickly and effectively

Taking fluid Samples

Fluid samples are extracted from the hydraulic system to determine the operating cleanliness level and whether the TCL is being achieved. To ensure that the data is representative, care must be taken with this process and pre-cleaned sample bottles are essential.

GENERAL ENGINEERING

FORMULAE

Measuring fluid cleanliness

The size range of interest in Fluid Power is generally from 2 to 100 μm . A range of instruments and techniques are available to measure the numbers or concentration of particles in either the hydraulic fluid or the component. These are:-

Measurement	
Gravimetric analysis (weight) (only suitable for 'dirty' systems or components)	ISO 4405
Optical Microscope and Image Analysis	BS ISO 4407
Automatic Particle Counting (APC)	BS ISO 11500
Filter/Mesh Blockage	BS ISO 21018 Part 3
Comparison Slide Method 05/44	BS 8465 and DEF STAN
Calibration of APCs (bottle analysis)	BS ISO 11171
Calibration of on-line APCs	BS ISO 11943

BS ISO 21018-1 gives guidance on both how to select the most suitable technique and monitor, and on the use of online instruments.

Reporting fluid cleanliness

A convenient and preferred method of reporting the data from the above techniques is to convert the particle numbers into broad codes, as described in BS ISO 4406. The interval between each code is effectively a doubling of contamination.

The code is constructed from the combination of three range numbers selected from the following table to describe the numbers of particles at that size.

Changes to certain ISO standards have resulted in differences in the labelling of sizes used in different techniques. These are described in BS ISO/TR 16386. For Automatic Particle Counters (APCs) the sizes are 4/6/14 $\mu\text{m(c)}$, e.g. ISO 17/15/12 (note that ' $\mu\text{m(c)}$ ' refers to APCs calibrated to BS ISO 11171 or 11943). If the APC cannot count at the 4 $\mu\text{m(c)}$ size, a hyphen ("-") is used in place of the first code to signify this. Likewise, if the technique used does not include this size or it is not applicable, the other two sizes 6 and 14 μm (monitors) or 5 and 15 μm (microscopic techniques) are used. A typical code is ISO -/15/12. The last two sizes in both code formats are roughly comparable with each other.

Cleanliness management

Essential points:

- The system should be correctly designed to achieve and maintain the TCL.
- Inspect filters regularly for signs of blockage and replace when indicating blockage.
- Filter oil into the system.
- Monitor the fluid cleanliness on a regular basis.
- Promptly implement corrective actions if the TCL is exceeded to limit damage to components.
- Have specifications for both fluid cleanliness (TCL) and filters.
- Educate personnel involved with the process on the need and benefits of cleanliness.

Number of particles per millilitre		
More than	Up to and including	Scale number
40000	80000	23
20000	40000	22
10000	20000	21
5000	10000	20
2500	5000	19
1300	2500	18
640	1300	17
320	640	16
160	320	15
80	160	14
40	80	13
20	40	12
10	20	11
5	10	10
2.5	5	9
1.3	2.5	8
0.64	1.3	7
0.32	0.64	6
0.16	0.32	5
0.08	0.16	4
0.04	0.08	3
0.02	0.04	2
0.01	0.02	1



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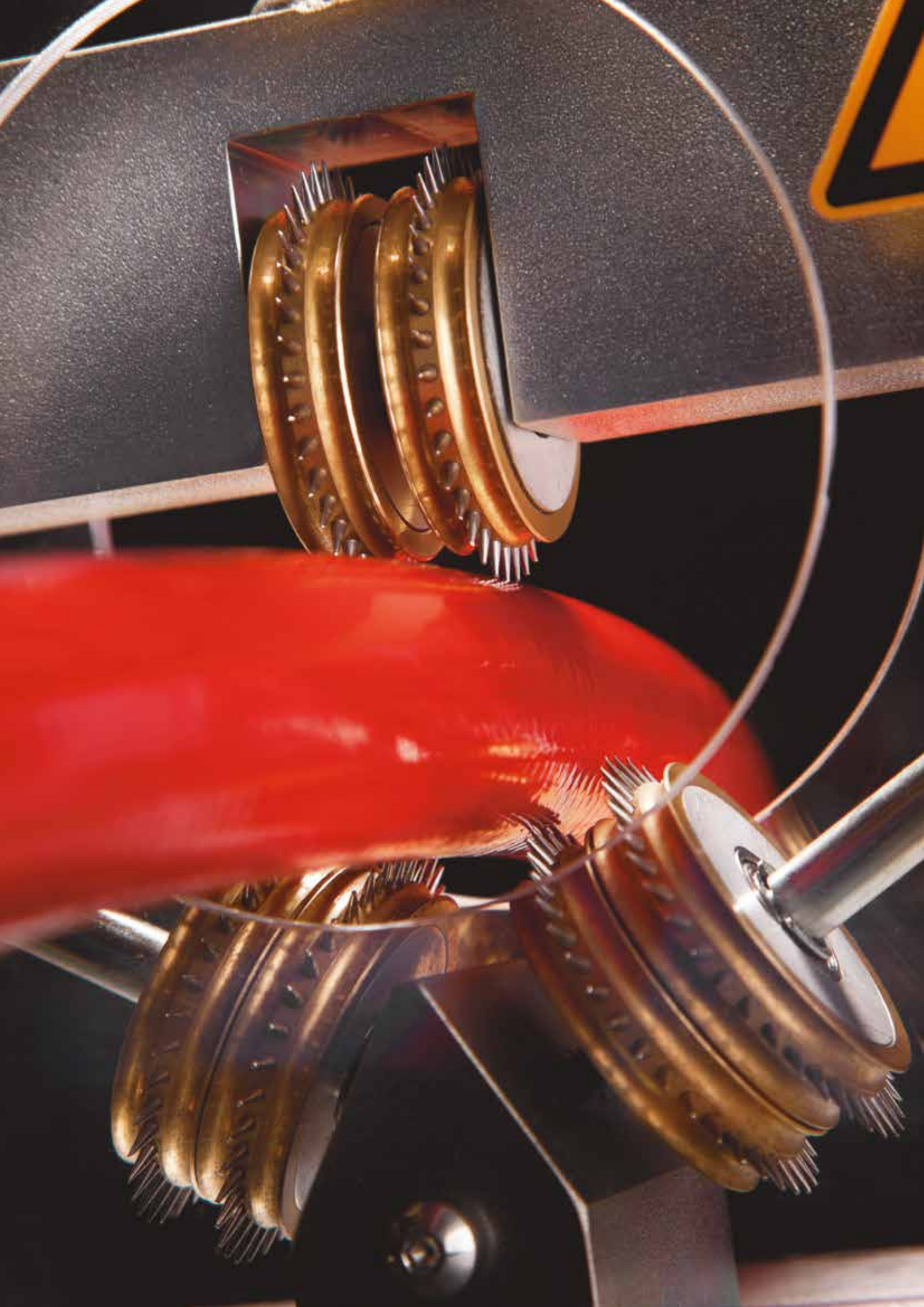
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