

SOUR SERVICE PRODUCTS

Sour Oil and Gas Service (H2S) or Standard Service

Fitok oil field components are offered for standard oil field service where H₂S is present the type "S" is offered. Fitok's "S" components are manufactured with materials and procedures specified for optimum resistance to H₂S. These material specifications and manufacturing procedures are continually updated to incorporate the latest advances and changes to NACE MR0175 compliance. Fitok type "S" valves and fittings can be supplied with standard API threaded test and gauge connections. As well as coned and threaded connections such as Medium Pressure (MP) and High Pressure (HP).

Pressure / Temperature Ratings

Valves and fittings for standard service are rated for working pressure up to 60,000 psi (4137bar) at 100°F (38°C). Type "S" components have a reduced pressure rating to a maximum 30,000 psi (2068 bar) at 38°C (100°F).

Materials

FITOK standard series valves and fittings are type 316 stainless steel, cold worked material. Type "S" valves and fittings are stainless steel annealed material. If required, complete material specifications are provided. All pressure-containing materials are used in accordance with NACE MR0175 / ISO 15156-3:2015 (E) Table A-2.



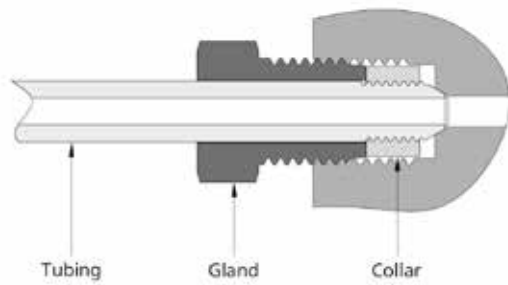
FITTINGS, TUBING & VALVES FOR SOUR GAS SERVICE

20 SERIES TUBE FITTINGS & TUBING

FEATURES

- Pressure up to 10,000 psig (690 bar)
- Coned-and-threaded connection
- Metal-to-metal seal provides perfect leak-tight service from critical vacuum to medium pressure
- Anti-vibration connection components available
- Fittings are easy to disconnect and re-tighten
- 316 annealed stainless steel is standard material. Other materials are available upon request
- Every fitting is stamped with size, material and heat code

COMPOSITION



WORKING PRESSURES OF NPT THREAD ENDS

T-Tube O.D. (in)	Working Pressure psig (bar)				
	-325 to 100°F (-198 to 37.8°C)	200°F (93°C)	400°F (204°C)	600°F (316°C)	800°F (427°C)
1/4	10000 (690)	10000 (690)	9580 (660)	9000 (620)	8420 (580)
3/8	10000 (690)	10000 (690)	9580 (660)	9000 (620)	8420 (580)
9/16	10000 (690)	10000 (690)	9580 (660)	9000 (620)	8420 (580)
3/4	10000 (690)	10000 (690)	9580 (660)	9000 (620)	8420 (580)
1	10000 (690)	10000 (690)	9580 (660)	9000 (620)	8420 (580)

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 contact Abdex.

WORKING TEMPERATURE

Temperature Rating: -325°F (-198°C) to 1200°F (649°C).

ORDERING INFORMATION

- The model types of 20 series tube fittings are the same as standard 20 series tube fittings. Ordering numbers are add "-S" to the end of standard 20 series tube fittings, if gland and collar are not required, add "-SWO" to the end of standard 20 series tube fittings.
For example:
 1. 20 series tube fittings, tube O.D. is 9/16", Union Couplings, 316 SS annealed material, the ordering number is SS-U-2FH9-S.
 2. 20 series tube fittings, tube O.D. is 3/8", Tees, 316 SS annealed material, gland and collar are not required, the ordering number is SS-TTT-2FH6-SWO.
- Sizes of 20 series tube fittings are the same as standard 20 series tube fittings, please refer to standard 20 series tube fittings, dimensions are for reference only, subject to change.

FITTINGS, TUBING & VALVES FOR SOUR GAS SERVICE

20 SERIES TUBE FITTINGS & TUBING

20 SERIES TUBING

- Working pressure: 10000 psig (690 bar)
- 316 annealed stainless steel is standard material. Other materials are available upon request.
- Material, size and heat code are indicated on the tubing surface



T-Tube O.D. (in)	Tx-Tube I.D. (in)	Material	#	Tolerance O.D. in. (mm)
1/4	0.109	316 SS annealed	SS-MT-2FH4-	0.248 / 0.243 (6.30 / 6.17)
3/8	0.203	316 SS annealed	SS-MT-2FH6-	0.307 / 0.365 (9.40 / 9.27)
9/16	0.312	316 SS annealed	SS-MT-2FH9-	0.557 / 0.552 (14.15 / 14.02)
3/4	0.438	316 SS annealed	SS-MT-2FH12-	0.745 / 0.740 (18.92 / 18.80)
1	0.562	316 SS annealed	SS-MT-2FH16-	0.995 / 0.990 (25.27 / 25.14)

Add the actual foot (feet)/meter (meters) and "-S" as a suffix to the basic ordering number to get the complete ordering number.

For example:

1. 10 feet length, O.D. is 3/8", I.D. is 0.203", 316 SS annealed 20 series tube, the complete ordering number is: SS-MT-2FH6-10 S.
2. 6 meters length, O.D. is 3/4", I.D. is 0.438", 316 SS annealed 20 series tube, the complete ordering number is: SS-MT-2FH12-6M-S.

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-S	2.75 (69.9)
1/4	0.109	SS-CTN-2FH4-3-S	3 (76.2)
1/4	0.109	SS-CTN-2FH4-4-S	4 (101.6)
1/4	0.109	SS-CTN-2FH4-6-S	6 (152.4)
1/4	0.109	SS-CTN-2FH4-8-S	8 (203.2)
1/4	0.109	SS-CTN-2FH4-10-S	10 (254.0)
1/4	0.109	SS-CTN-2FH4-12-S	12 (304.8)
3/8	0.203	SS-CTN-2FH6-3-S	3 (76.2)
3/8	0.203	SS-CTN-2FH6-4-S	4 (101.6)
3/8	0.203	SS-CTN-2FH6-6-S	6 (152.4)
3/8	0.203	SS-CTN-2FH6-8-S	8 (203.2)
3/8	0.203	SS-CTN-2FH6-10-S	10 (254.0)
3/8	0.203	SS-CTN-2FH6-12-S	12 (304.8)
9/16	0.312	SS-CTN-2FH9-4-S	4 (101.6)
9/16	0.312	SS-CTN-2FH9-6-S	6 (152.4)
9/16	0.312	SS-CTN-2FH9-8-S	8 (203.2)
9/16	0.312	SS-CTN-2FH9-10-S	10 (254.0)
9/16	0.312	SS-CTN-2FH9-12-S	12 (304.8)
3/4	0.438	SS-CTN-2FH12-4-S	4 (101.6)
3/4	0.438	SS-CTN-2FH12-6-S	6 (152.4)
3/4	0.438	SS-CTN-2FH12-8-S	8 (203.2)
3/4	0.438	SS-CTN-2FH12-10-S	10 (254.0)
3/4	0.438	SS-CTN-2FH12-12-S	12 (304.8)
1	0.562	SS-CTN-2FH16-6-S	6 (152.4)
1	0.562	SS-CTN-2FH16-8-S	8 (203.2)
1	0.562	SS-CTN-2FH16-10-S	10 (254.0)
1	0.562	SS-CTN-2FH16-12-S	12 (304.8)



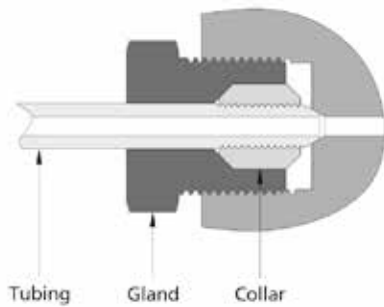
FITTINGS, TUBING & VALVES FOR SOUR GAS SERVICE

60 SERIES TUBE FITTINGS & TUBING

FEATURES

- Pressure up to 30,000 psig (2068 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 re-tighten
- 316 annealed stainless steel is standard material. Other materials are available upon request.
- Every fitting is stamped with size, material and heat code

COMPOSITION



WORKING PRESSURES

60 Series Tube End Connections used in this Catalogue

T-Tube O.D. (in)	Working Pressure psig (bar)				
	-325 to 100°F (-198 to 37.8°C)	200°F (93°C)	400°F (204°C)	600°F (316°C)	800°F (427°C)
1/4	30000 (2068)	30000 (2068)	28750 (1982)	27000 (1862)	25250 (1741)
3/8	30000 (2068)	30000 (2068)	28750 (1982)	27000 (1862)	25250 (1741)
9/16	30000 (2068)	30000 (2068)	28750 (1982)	27000 (1862)	25250 (1741)

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 contact Abdex.

WORKING TEMPERATURE

Temperature Rating: -325°F (-198°C) to 1200°F (649°C).

ORDERING INFORMATION

- The model types of 60 series tube fittings are the same as standard 60 series tube fittings.
Ordering numbers are add "-S" to the end of standard 60 series tube fittings, if gland and collar are not required, add "-SWO" to the end of standard 60 series tube fittings.
For example:
 1. 60 series tube fittings, tube O.D. is 9/16", Union Couplings, 316 SS annealed material, the ordering number is SS-U-6FH9-S.
 2. 60 series tube fittings, tube O.D. is 3/8", Tees, 316 SS annealed material, gland and collar are not required, the ordering number is SS-TTT-6FH6-SWO.
- Sizes of 60 series tube fittings are the same as standard 60 series tube fittings, please refer to standard 60 series tube fittings, dimensions are for reference only, subject to change.

FITTINGS, TUBING & VALVES FOR SOUR GAS SERVICE

60 SERIES TUBE FITTINGS & TUBING

60 SERIES TUBING

- Working pressure: 30000 psig (2068 bar).
- 316 annealed stainless steel is standard material. Other materials are available upon request.
- Material, size and heat code are indicated on the tubing surface.



T-Tube O.D. (in)	Tx-Tube I.D. (in)	Material	#	Tolerance O.D. in. (mm)
1/4	0.083	316 SS annealed	SS-HT-6FH4-	0.248 / 0.243 (6.30 / 6.17)
3/8	0.125	316 SS annealed	SS-HT-6FH6-	0.370 / 0.365 (9.40 / 9.27)
9/16	0.188	316 SS annealed	SS-HT-6FH9-	0.557 / 0.552 (14.15 / 14.02)

Add the actual foot (feet)/meter (meters) and “-S” as a suffix to the basic ordering number to get the complete ordering number.

For example:

1. 10 feet length, O.D. is 1/4”, I.D. is 0.083”, 316 SS annealed 60 series tube, the complete ordering number is: SS-HT- FH4-10-S.
2. 3 meters length, O.D. is 9/16”, I.D. is 0.188”, 316 SS annealed 60 series tube, the complete ordering number is: SS-HT-6FH9-3M-S.

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-S	2.75 (69.9)
1/4	0.083	SS-CTN-6FH4-3-S	3 (76.2)
1/4	0.083	SS-CTN-6FH4-4-S	4 (101.6)
1/4	0.083	SS-CTN-6FH4-6-S	6 (152.4)
1/4	0.083	SS-CTN-6FH4-8-S	8 (203.2)
1/4	0.083	SS-CTN-6FH4-10-S	10 (254.0)
1/4	0.083	SS-CTN-6FH4-12-S	12 (304.8)
3/8	0.125	SS-CTN-6FH6-3-S	3 (76.2)
3/8	0.125	SS-CTN-6FH6-4-S	4 (101.6)
3/8	0.125	SS-CTN-6FH6-6-S	6 (152.4)
3/8	0.125	SS-CTN-6FH6-8-S	8 (203.2)
3/8	0.125	SS-CTN-6FH6-10-S	10 (254.0)
3/8	0.125	SS-CTN-6FH6-12-S	12 (304.8)
9/16	0.188	SS-CTN-6FH9-4-S	4 (101.6)
9/16	0.188	SS-CTN-6FH9-6-S	6 (152.4)
9/16	0.188	SS-CTN-6FH9-8-S	8 (203.2)
9/16	0.188	SS-CTN-6FH9-10-S	10 (254.0)
9/16	0.188	SS-CTN-6FH9-12-S	12 (304.8)



FITTINGS, TUBING & VALVES FOR SOUR GAS SERVICE

THREADED PIPE FITTINGS UP TO 30,000 PSIG RATED

FEATURES

- Radius junction design with elbows provides smooth flow path
- 316 annealed stainless steel is standard material. Other materials are available upon request.
- Every fitting is stamped with size, material and heat code

THREAD SPECIFICATIONS

Connection Type	Code	Thread Type	Thread Specification
NPT	NS	NPT	ASME B1.20.1, 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
O-Ring Seal SAE / MS (Accordance with SAE J1926-1)	US		
JIC (37° Flare)	AN		
JIC (37° Flare) Female Swivel	AS		
Type "M" Male	HM		

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)
Heavy-Duty SAE / MS (Accordance with SAE J1926-2)	-20°F to 550°F (-29°C to 288°C)
O-Ring Seal SAE / MS (Accordance with SAE J1926-1)	-20°F to 550°F (-29°C to 288°C)
JIC (37° Flare)	-325°F to 1200°F (-198°C to 649°C)
JIC (37° Flare) Female Swivel	-325°F to 1200°F (-198°C to 649°C)
Type "M" Male	-325°F to 1200°F (-198°C to 649°C)
O-Ring	-20°F to 550°F (-29°C to 288°C)

WORKING PRESSURE

- The working pressures of Threaded Fittings are dependent on the end connection with the lowest working pressure
- The working pressures of the end connections are shown below

End Connections	Pressure at Room Temperature psig (bar)	End Connections	Pressure at Room Temperature psig (bar)	End Connections	Pressure at Room Temperature psig (bar)
NS2	10000 (690)	RT2	10000 (690)	AN4 / AS4	10000 (690)
NS4	10000 (690)	RT4	10000 (690)	AN6 / AS6	10000 (690)
NS6	10000 (690)	RT6	10000 (690)	AN8 / AS8	10000 (690)
NS8	10000 (690)	RT8	10000 (690)	AN10 / AS10	10000 (690)
NS12	10000 (690)	RT12	10000 (690)	AN12 / AS12	10000 (690)
NS16	10000 (690)	RT16	10000 (690)	AN16 / AS16	10000 (690)

FITTINGS, TUBING & VALVES FOR SOUR GAS SERVICE

THREADED PIPE FITTINGS UP TO 30,000 PSIG RATED

End Connections	Pressure at Room Temperature psig (bar)	End Connections	Pressure at Room Temperature psig (bar)
HM9	30000 (2068)	SH7 / US7	10000 (690)
HM12	20000 (1379)	SH9 / US9	10000 (690)
HM14	30000 (2068)	SH12 / US12	10000 (690)
HM16	20000 (1379)	SH14 / US14	10000 (690)
HM21	10000 (690)	-	-

ORDERING INFORMATION

- The types of pipe fittings are the same as standard pipe fittings. Ordering numbers are add "-S" to the end of standard pipe fittings.
For example:
 - Pipe fittings, Hex Nipples, one connection is NS4, the other connection is AN6, 316 SS annealed material, the ordering number is SS-HPHN-NS4-AN6-S.
 - Pipe fittings, Hex Couplings, one connection is NS6, the other connection is AN8, 316 SS annealed material, the ordering number is SS-HPCG-NS6-AN8-S.
- Sizes of high pressure pipe fittings are the same as standard pipe fittings, please refer to standard pipe fittings, dimensions are for reference only, subject to change.

FITTINGS, TUBING & VALVES FOR SOUR GAS SERVICE

ADAPTORS & COUPLINGS UP TO 30,000 PSIG RATED

FEATURES

- 316 annealed stainless steel is standard material. Other materials are available upon request
- Every fitting is stamped with size, material, and heat code

WORKING TEMPERATURE

Connection Type	Temperature Rating
20 Series Male Ends	-325°F to 1200°F (-198°C to 649°C)
60 Series Male Ends	-325°F to 1200°F (-198°C to 649°C)
20 Series Female Ends	-325°F to 1200°F (-198°C to 649°C)
60 Series Female Ends	-325°F to 1200°F (-198°C to 649°C)
20 Series Coned and Threaded Nipples Ends	-325°F to 1200°F (-198°C to 649°C)
60 Series Coned and Threaded Nipples Ends	-325°F to 1200°F (-198°C to 649°C)
NPT Pipe Thread Ends	-325°F to 400°F (-198°C to 204°C)
JIC (37° Flare)	-325°F to 1200°F (-198°C to 649°C)
Type "M" Male	-325°F to 1200°F (-198°C to 649°C)

WORKING PRESSURE

- The working pressures of Adaptors and Couplings are dependent on the end connection with the lowest working pressure
- The working pressures of the end connections are shown down

End Connections	Pressure at Room Temperature psig (bar)	End Connections	Pressure at Room Temperature psig (bar)	End Connections	Pressure at Room Temperature psig (bar)
2MP4 / 2CP4 / 2FH4	10000 (690)	2CT4	10000 (690)	6MP4 / 6CP4 / 6FH4	30000 (2068)
2MP6 / 2CP6 / 2FH6	10000 (690)	2CT6	10000 (690)	6MP6 / 6CP6 / 6FH6	30000 (2068)
2MP9 / 2CP9 / 2FH9	10000 (690)	2CT9	10000 (690)	6MP9 / 6CP9 / 6FH9	30000 (2068)
2MP12 / 2CP12 / 2FH12	10000 (690)	2CT12	10000 (690)	-	-
2MP12 / 2CP12 / 2FH12	10000 (690)	2CT16	10000 (690)	-	-

End Connections	Pressure at Room Temperature psig (bar)	End Connections	Pressure at Room Temperature psig (bar)	End Connections	Pressure at Room Temperature psig (bar)	End Connections	Pressure at Room Temperature psig (bar)
6CT4	30000 (2068)	NS2	10000 (690)	AN4	10000 (690)	HM9	30000 (2068)
6CT6	30000 (2068)	NS4	10000 (690)	AN6	10000 (690)	HM12	20000 (1379)
6CT9	30000 (2068)	NS6	10000 (690)	AN8	10000 (690)	HM14	30000 (2068)
-	-	NS8	10000 (690)	AN10	10000 (690)	HM16	20000 (1379)
-	-	NS12	10000 (690)	AN12	10000 (690)	HM21	10000 (690)
-	-	NS16	10000 (690)	AN16	10000 (690)	-	-













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: 3/8-24	6MP6/6CP6/6FH6: 3/4-16	NS4: 1/4-18 NPT	AN6: 9/16-18	HM12: 3/4-16
2MP9/2CP9/2FH9: 13/16-16	2CT9: 9/16-18	6MP9/6CP9/6FH9: 1-1/8-12	NS6: 3/8-18 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: 1-14	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	6CT9: 9/16-18



FITTINGS, TUBING & VALVES FOR SOUR GAS SERVICE

ADAPTORS & COUPLINGS UP TO 30,000 PSIG RATED

CONFIGURATION	FITTING TYPE
	"2MP" 20 Series Male "one-piece"
	"6MP" 60 Series Male "one-piece"
	"2CP" 20 Series Male "two-piece"
	"6CP" 60 Series Male "two-piece"
	"2FH" 20 Series Female
	"6FH" 60 Series Female
	"NS" Female NPT Thread
	"2CT" 20 Series Coned and Threaded Nipples
	"6CT" 60 Series Coned and Threaded Nipples
	"NS" Male NPT Thread
	"AN" Male JIC
	"HM" Type "M" Male

ORDERING INFORMATION

- The types of adapters and couplings don't contain connection "MP", "CP" and "FH", other types are the same as standard adapters and couplings.
Ordering numbers are add "-S" to the end of standard adapters and couplings. If adapters and couplings required contain 20 series female "2FH" or 60 series female "6FH", and gland and collar are not required, add "-SWO" to the end of standard adapters and couplings.
For example:
 - Adapters and couplings, male to male adapters, one connection is 2MP9, the other connection is NS8, 316 SS annealed material, the ordering number is SS-MMA-2MP9-NS8-S.
 - Adapters and couplings, female to male adapters, one connection is 6FH4, the other connection is NS6, 316 SS annealed material, gland and collar are not required, the ordering number is SS-FMA-6FH4-NS6-SWO.
- Sizes of adapters and couplings are the same as standard adapters and couplings, please refer to standard adapters and couplings, dimensions are for reference only, subject to change.

FITTINGS, TUBING & VALVES FOR SOUR GAS SERVICE

NEEDLE VALVES TO 30,000 PSI (2068 BAR) RATED

FEATURES

- Non-rotating stem and bar stock body design
- 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
- PTFE is the standard packing material (not contain 60N Series Needle Valves), RPTFE glass is also available
- Packing gland and upper stem material have been selected to optimize thread cycle life
- Five flow patterns are available

15N SERIES

Connector Size	Connector Type	Orifice in. (mm)	Cv	Pressure at Room Temperature psig (bar)	Operating Temperature
1/8 NPT	FNS2	0.078 (1.98)	0.11	10,000 (690)	-325°F ~ 400°F (-198°C ~ 204°C)
1/8 BSPT	FRT2				
1/4 NPT	FNS4	0.203 (5.16)	0.63	10,000 (690)	
1/4 BSPT	FRT4				
3/8 NPT	FNS6	0.219 (5.56)	0.75	10,000 (690)	
3/8 BSPT	FRT6				
1/2 NPT	FNS8	0.312 (7.92)	1.30	10,000 (690)	
1/2 BSPT	FRT8				

20N SERIES

Type O.D. in.	Connector Type	Orifice in. (mm)	Cv	Pressure at Room Temperature psig (bar)	Operating Temperature
1/4	2FH4	0.094 (2.39)	0.12	10,000 (690)	-325°F ~ 600°F (-198°C ~ 316°C)
3/8	2FH6	0.204 (5.18)	0.68	10,000 (690)	
9/16	2FH9	0.312 (7.92)	1.30	10,000 (690)	
3/4	2FH12	0.438 (11.13)	2.50	10,000 (690)	
1	2FH16	0.561 (14.27)	4.40	10,000 (690)	

30N SERIES

Type O.D. in.	Connector Type	Orifice in. (mm)	Cv	Pressure at Room Temperature psig (bar)	Operating Temperature
1/4	6FH4	0.094 (2.39)	0.12	20,000 (1379)	-325°F ~ 600°F (-198°C ~ 316°C)
3/8	6FH6	0.125 (3.18)	0.23	20,000 (1379)	
9/16	6FH9	0.125 (3.18)	0.33	20,000 (1379)	

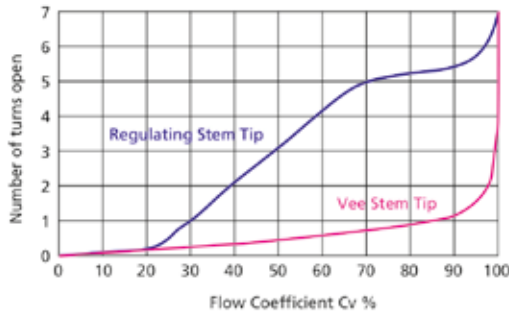
60N SERIES

Type O.D. in.	Connector Type	Orifice in. (mm)	Cv	Pressure at Room Temperature psig (bar)	Operating Temperature
1/4	6FH4	0.063 (1.59)	0.08	30,000 (2086)	-325°F ~ 600°F (-198°C ~ 316°C)
3/8	6FH6	0.063 (1.59)	0.09	30,000 (2086)	
9/16	6FH9	0.078 (1.98)	0.14	30,000 (2086)	

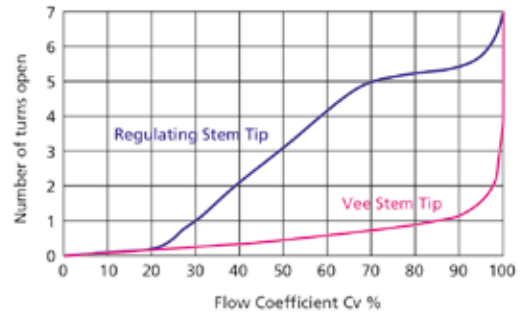
FITTINGS, TUBING & VALVES FOR SOUR GAS SERVICE

NEEDLE VALVES TO 30,000 PSI (2068 BAR) RATED

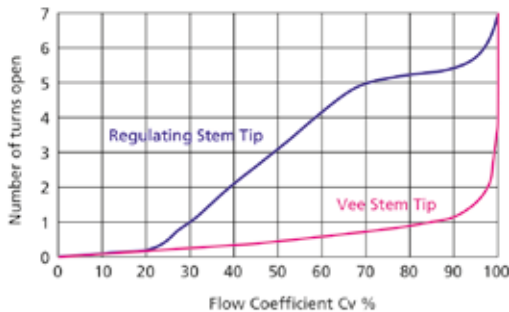
FLOW DATA FOR 15N SERIES AT 100°F (38°C)



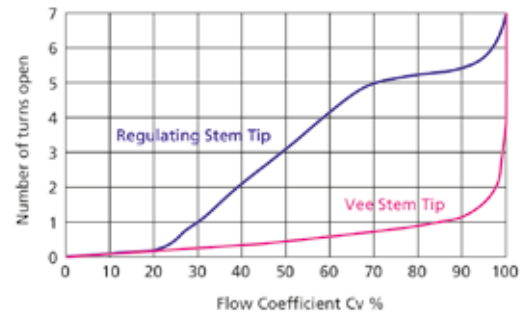
FLOW DATA FOR 20N SERIES AT 100°F (38°C)



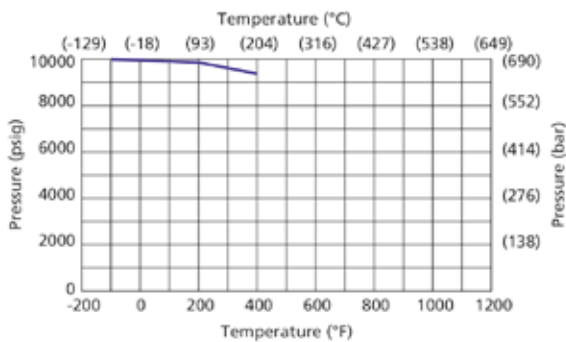
FLOW DATA FOR 30N SERIES AT 100°F (38°C)



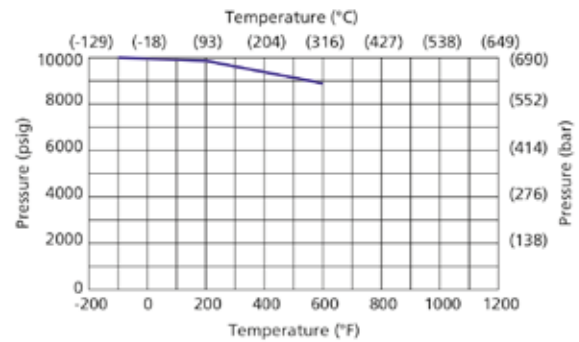
FLOW DATA FOR 60N SERIES AT 100°F (38°C)



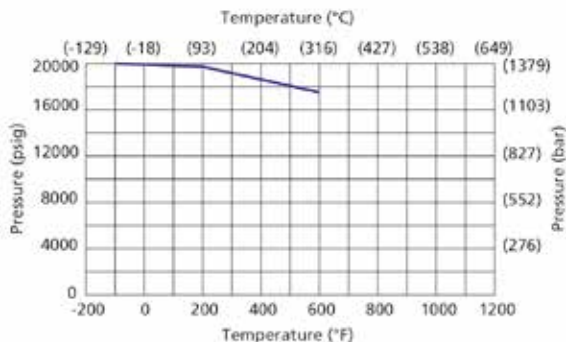
PRESSURE & TEMPERATURE 15N SERIES



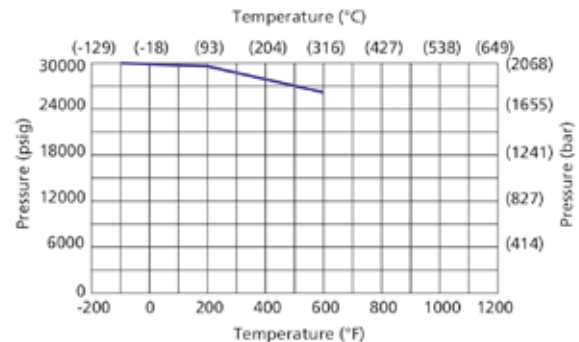
PRESSURE & TEMPERATURE 20N SERIES



PRESSURE & TEMPERATURE 30N SERIES



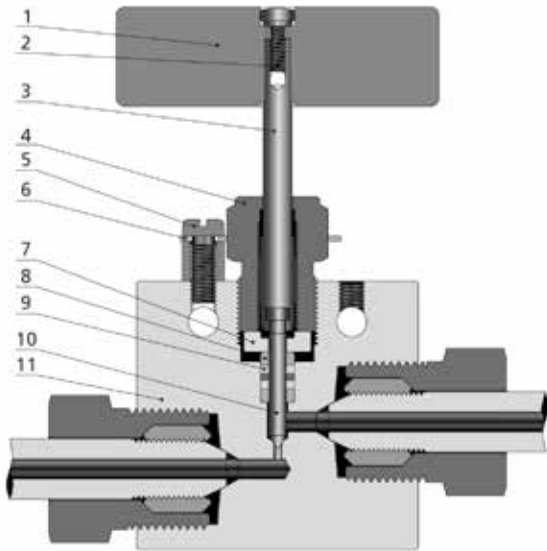
PRESSURE & TEMPERATURE 60N SERIES



FITTINGS, TUBING & VALVES FOR SOUR GAS SERVICE

NEEDLE VALVES TO 30,000 PSI (2068 BAR) RATED

STANDARD MATERIALS OF CONSTRUCTION

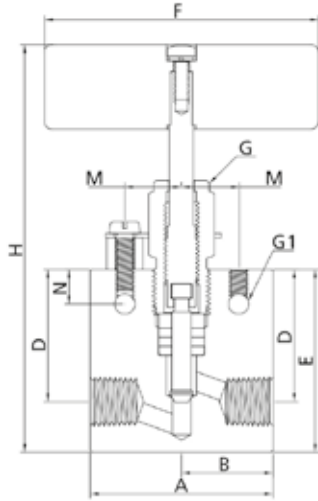


Item	Component	Material Grade / ASTM Specification
1	Handle	Stainless Steel
2	Handle Screw	Stainless Steel
3	Upper Stem	316 SS / A479
4	Packing Gland	304 SS / A479
5	Locking Screw	Stainless Steel
6	Locking Plate	304 SS / A240
7	Packing Ring	316 SS / A479
8	Packing	PTFE / RPTFE
9	Packing Washer	316 SS annealed
10	Lower Stem	Alloy 725
11	Body	316 SS annealed
-	Lubricant	Molybdenum disulfide

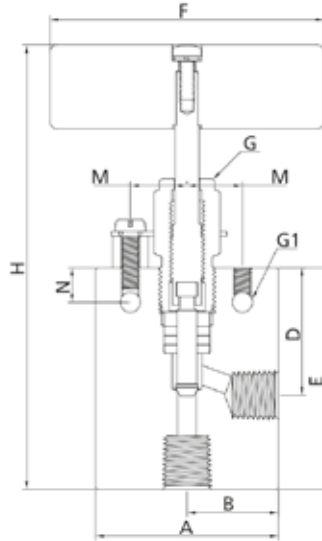
FITTINGS, TUBING & VALVES FOR SOUR GAS SERVICE

DIMENSIONS - THREADED END CONNECTIONS

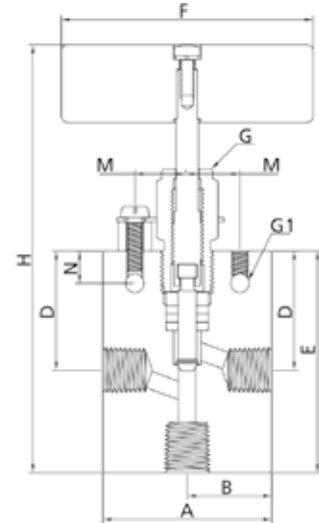
STRAIGHT



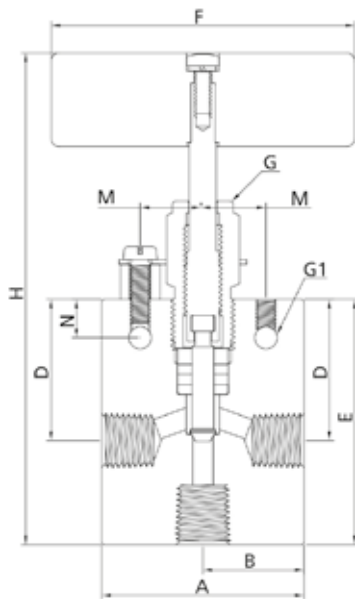
ANGLE



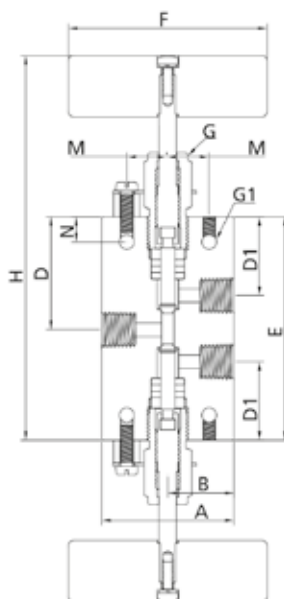
3-WAY/2 ON PRESSURE



3 WAY/1 ON PRESSURE



3 WAY/2 STEM MANIFOLD



FITTINGS, TUBING & VALVES FOR SOUR GAS SERVICE

DIMENSIONS - THREADED END CONNECTIONS

15N SERIES (STRAIGHT)

#	Connection Type	Orifice in. (mm)	A	B	D	E	F	G	G1	H	M	N	Thickness
			in. (mm)										
15NSS-FNS2-1-S	FNS2	0.078 (1.98)	1.50 (38.1)	0.75 (19.1)	0.81 (20.6)	1.25 (31.8)	1.75 (44.5)	0.50 (12.7)	0.17 (4.3)	3.00 (76.4)	0.56 (14.2)	0.31 (7.9)	0.63 (15.9)
15NSS-FRT2-1-S	FRT2												
15NSS-FNS4-1-S	FNS4	0.203 (5.2)	2.00 (50.8)	1.00 (25.4)	1.41 (35.8)	2.00 (50.8)	3.00 (76.2)	0.63 (15.9)	0.22 (5.6)	4.89 (124.1)	0.62 (15.8)	0.38 (9.7)	0.75 (19.1)
15NSS-FRT4-1-S	FRT4												
15NSS-FNS6-1-S	FNS6	0.219 (5.56)	2.50 (63.5)	1.25 (31.8)	1.41 (35.8)	2.00 (50.8)	3.00 (76.2)	0.63 (15.9)	0.22 (5.6)	4.85 (123.1)	0.62 (15.8)	0.38 (9.7)	1.00 (25.4)
15NSS-FRT6-1-S	FRT6												
15NSS-FNS8-1-S	FNS8	0.312 (7.92)	3.00 (76.2)	1.50 (38.1)	2.06 (52.3)	2.88 (73.2)	4.00 (101.6)	0.81 (20.6)	0.34 (8.6)	6.18 (157.2)	0.69 (17.5)	0.50 (12.7)	1.38 (35.1)
15NSS-FRT8-1-S	FRT8												

15N SERIES (ANGLE)

#	Connection Type	Orifice in. (mm)	A	B	D	E	F	G	G1	H	M	N	Thickness
			in. (mm)										
15NSS-FNS2-2-S	FNS2	0.078 (1.98)	1.50 (38.1)	0.75 (19.1)	0.81 (20.6)	1.38 (34.9)	1.75 (44.5)	0.50 (12.7)	0.17 (4.3)	3.13 (79.5)	0.56 (14.2)	0.31 (7.9)	0.63 (15.9)
15NSS-FRT2-2-S	FRT2												
15NSS-FNS4-2-S	FNS4	0.203 (5.2)	2.00 (50.8)	1.00 (25.4)	1.41 (35.8)	2.44 (62.0)	3.00 (76.2)	0.63 (15.9)	0.22 (5.6)	5.33 (135.4)	0.62 (15.8)	0.38 (9.7)	0.75 (19.1)
15NSS-FRT4-2-S	FRT4												
15NSS-FNS6-2-S	FNS6	0.219 (5.56)	2.50 (63.5)	1.25 (31.8)	1.41 (35.8)	2.44 (62.0)	3.00 (76.2)	0.63 (15.9)	0.22 (5.6)	5.34 (135.7)	0.62 (15.8)	0.38 (9.7)	1.00 (25.4)
15NSS-FRT6-2-S	FRT6												
15NSS-FNS8-2-S	FNS8	0.312 (7.92)	3.00 (76.2)	1.50 (38.1)	2.06 (52.3)	3.38 (85.9)	4.00 (101.6)	0.81 (20.6)	0.34 (8.6)	6.69 (169.9)	0.69 (17.5)	0.50 (12.7)	1.38 (35.1)
15NSS-FRT8-2-S	FRT8												

15N SERIES (3 WAY/2 ON PRESSURE)

#	Connection Type	Orifice in. (mm)	A	B	D	E	F	G	G1	H	M	N	Thickness
			in. (mm)										
15NSS-FNS2-4-S	FNS2	0.078 (1.98)	1.50 (38.1)	0.75 (19.1)	0.81 (20.6)	1.57 (40.0)	1.75 (44.5)	0.50 (12.7)	0.17 (4.3)	3.33 (84.3)	0.56 (14.2)	0.31 (7.9)	0.63 (15.9)
15NSS-FRT2-4-S	FRT2												
15NSS-FNS4-4-S	FNS4	0.203 (5.2)	2.00 (50.8)	1.00 (25.4)	1.41 (35.8)	2.62 (66.6)	3.00 (76.2)	0.63 (15.9)	0.22 (5.6)	5.51 (140.0)	0.62 (15.8)	0.38 (9.7)	0.75 (19.1)
15NSS-FRT4-4-S	FRT4												
15NSS-FNS6-4-S	FNS6	0.219 (5.56)	2.50 (63.5)	1.25 (31.8)	1.41 (35.8)	2.62 (66.6)	3.00 (76.2)	0.63 (15.9)	0.22 (5.6)	5.47 (138.9)	0.62 (15.8)	0.38 (9.7)	1.00 (25.4)
15NSS-FRT6-4-S	FRT6												
15NSS-FNS8-4-S	FNS8	0.312 (7.92)	3.00 (76.2)	1.50 (38.1)	2.06 (52.3)	3.62 (92.0)	4.00 (101.6)	0.81 (20.6)	0.34 (8.6)	6.94 (176.2)	0.69 (17.5)	0.50 (12.7)	1.38 (35.1)
15NSS-FRT8-4-S	FRT8												

15N SERIES (3 WAY/1 ON PRESSURE)

#	Connection Type	Orifice in. (mm)	A	B	D	E	F	G	G1	H	M	N	Thickness
			in. (mm)										
15NSS-FNS2-5-S	FNS2	0.078 (1.98)	1.50 (38.1)	0.75 (19.1)	0.81 (20.6)	1.38 (35.0)	1.75 (44.5)	0.50 (12.7)	0.17 (4.3)	3.13 (79.5)	0.56 (14.2)	0.31 (7.9)	0.63 (15.9)
15NSS-FRT2-5-S	FRT2												
15NSS-FNS4-5-S	FNS4	0.203 (5.2)	2.00 (50.8)	1.00 (25.4)	1.41 (35.8)	2.44 (62.0)	3.00 (76.2)	0.63 (15.9)	0.22 (5.6)	5.33 (135.4)	0.62 (15.8)	0.38 (9.7)	0.75 (19.1)
15NSS-FRT4-5-S	FRT4												
15NSS-FNS6-5-S	FNS6	0.219 (5.56)	2.50 (63.5)	1.25 (31.8)	1.41 (35.8)	2.44 (62.0)	3.00 (76.2)	0.63 (15.9)	0.22 (5.6)	5.34 (135.7)	0.62 (15.8)	0.38 (9.7)	1.00 (25.4)
15NSS-FRT6-5-S	FRT6												
15NSS-FNS8-5-S	FNS8	0.312 (7.92)	3.00 (76.2)	1.50 (38.1)	2.06 (52.3)	3.38 (85.9)	4.00 (101.6)	0.81 (20.6)	0.34 (8.6)	6.69 (169.9)	0.69 (17.5)	0.50 (12.7)	1.38 (35.1)
15NSS-FRT8-5-S	FRT8												

FITTINGS, TUBING & VALVES FOR SOUR GAS SERVICE

DIMENSIONS - THREADED END CONNECTIONS

15N SERIES (3 WAY/2 STEM MANIFOLD)

#	Connection Type	Orifice in. (mm)	A	B	D	D1	E	F	G	G1	H	M	N	Thickness
			in. (mm)											
15NSS-FNS2-6-S	FNS2	0.078 (1.98)	1.50 (38.1)	0.75 (19.1)	1.00 (25.6)	0.68 (17.2)	2.02 (51.2)	1.75 (44.5)	0.50 (12.7)	0.17 (4.3)	3.77 (95.8)	0.56 (14.2)	0.31 (7.9)	0.63 (15.9)
15NSS-FRT2-6-S	FRT2													
15NSS-FNS4-6-S	FNS4	0.203 (5.2)	2.00 (50.8)	1.00 (25.4)	1.69 (42.9)	1.19 (30.2)	3.38 (85.9)	3.00 (76.2)	0.63 (15.9)	0.22 (5.6)	6.27 (159.2)	0.62 (15.8)	0.38 (9.7)	0.75 (19.1)
15NSS-FRT4-6-S	FRT4													
15NSS-FNS6-6-S	FNS6	0.219 (5.56)	2.50 (63.5)	1.25 (31.8)	1.69 (42.9)	1.19 (30.2)	3.38 (85.9)	3.00 (76.2)	0.63 (15.9)	0.22 (5.6)	6.22 (158.1)	0.62 (15.8)	0.38 (9.7)	1.00 (25.4)
15NSS-FRT6-6-S	FRT6													
15NSS-FNS8-6-S	FNS8	0.312 (7.92)	3.00 (76.2)	1.50 (38.1)	2.56 (65.1)	1.75 (44.5)	5.12 (130.1)	4.00 (101.6)	0.81 (20.6)	0.34 (8.6)	8.43 (214.2)	0.69 (17.5)	0.50 (12.7)	1.38 (35.1)
15NSS-FRT8-6-S	FRT8													

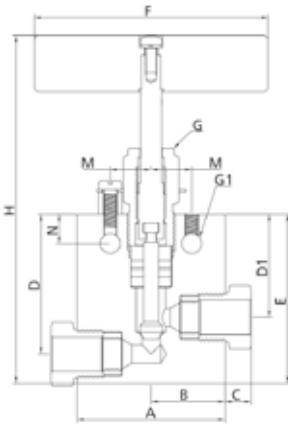
Notes

1. G is the drill dimension of packing gland mounting hole.
2. G1 is the dimension of bracket mounting hole.
3. panel mounting drill size: 0.25" all valves.
4. H is the dimension of stem in closed position.
5. All dimensions for reference only and subject to change. For dimensions not shown above, please contact Abdex.

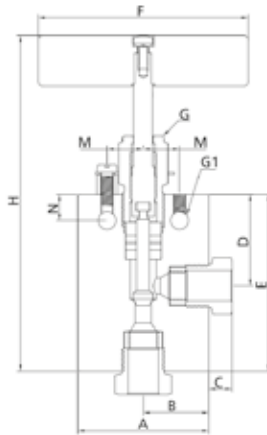
FITTINGS, TUBING & VALVES FOR SOUR GAS SERVICE

MEDIUM & HIGH PRESSURE END CONNECTIONS

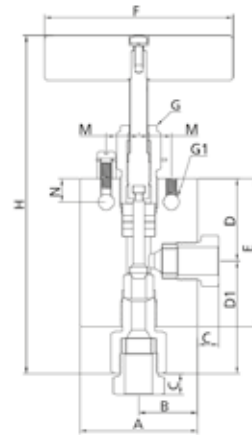
STRAIGHT



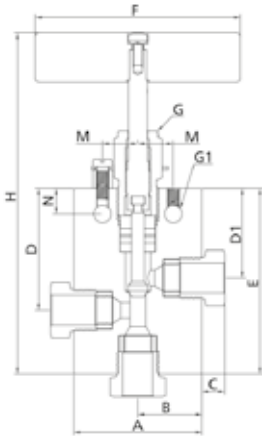
ANGLE



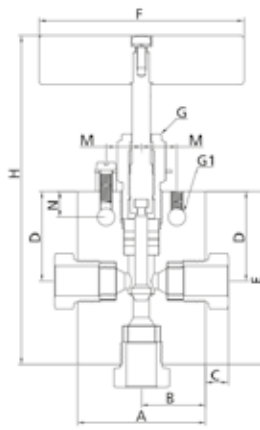
ANGLE (REPLACEABLE SEAT)



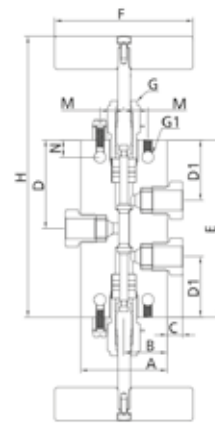
3 WAY/2 ON PRESSURE



3 WAY/1 STEM MANIFOLD



3 WAY/2 STEM MANIFOLD



20N SERIES (STRAIGHT)

#	Connection Type	Orifice in. (mm)	A	B	C	D	D1	E	F	G	G1	H	M	N	Thickness
			in. (mm)												
20NSS-MF4-1-S	MF4	0.125 (3.18)	2.00 (50.8)	1.00 (25.4)	0.38 (9.7)	1.62 (41.2)	1.19 (30.2)	2.00 (50.8)	3.00 (76.2)	0.63 (15.9)	0.22 (5.6)	4.85 (123.1)	0.62 (15.8)	0.38 (9.7)	0.75 (19.1)
20NSS-MF6-1-S	MF6	0.204 (5.18)	2.00 (50.8)	1.00 (25.4)	0.44 (11.2)	1.62 (41.2)	1.19 (30.2)	2.00 (50.8)	3.00 (76.2)	0.63 (15.9)	0.22 (5.6)	4.89 (124.2)	0.62 (15.8)	0.38 (9.7)	0.75 (19.1)
20NSS-MF9-1-S	MF9	0.312 (7.92)	2.50 (63.5)	1.25 (31.8)	0.55 (14.0)	2.37 (60.3)	1.75 (44.5)	2.88 (73.2)	4.00 (101.6)	0.81 (20.6)	0.34 (8.6)	6.18 (157.2)	0.69 (17.5)	0.50 (12.7)	1.00 (25.4)
20NSS-MF12-1-S	MF12	0.438 (11.13)	3.00 (76.2)	1.50 (38.1)	0.60 (15.2)	3.00 (76.2)	2.25 (57.2)	3.75 (95.3)	10.25 (260.4)	1.00 (25.4)	0.44 (11.2)	7.37 (187.2)	0.88 (22.4)	0.63 (16.0)	1.38 (35.1)
20NSS-MF16-1-S	MF16	0.562 (14.27)	4.12 (104.6)	2.06 (52.3)	0.74 (18.7)	3.75 (95.3)	2.81 (71.4)	4.63 (117.6)	10.25 (260.4)	1.37 (34.9)	0.56 (14.2)	9.45 (240.1)	1.25 (31.8)	1.13 (28.7)	1.75 (44.5)



FITTINGS, TUBING & VALVES FOR SOUR GAS SERVICE

MEDIUM & HIGH PRESSURE END CONNECTIONS

20NSS SERIES (ANGLE)

#	Connection Type	Orifice in. (mm)	A	B	C	D	E	F	G	G1	H	M	N	Thickness
			in. (mm)											
20NSS-MF4-2-S	MF4	0.125 (3.18)	2.00 (50.8)	1.00 (25.4)	0.38 (9.7)	1.19 (30.2)	2.44 (61.9)	3.00 (76.2)	0.63 (15.9)	0.22 (5.6)	5.28 (134.2)	0.62 (15.8)	0.38 (9.7)	0.75 (19.1)
20NSS-MF6-2-S	MF6	0.204 (5.18)	2.00 (50.8)	1.00 (25.4)	0.44 (11.2)	1.19 (30.2)	2.44 (61.9)	3.00 (76.2)	0.63 (15.9)	0.22 (5.6)	5.33 (135.4)	0.62 (15.8)	0.38 (9.7)	0.75 (19.1)
20NSS-MF9-2-S	MF9	0.312 (7.92)	2.50 (63.5)	1.25 (31.8)	0.55 (14.0)	1.75 (44.5)	3.38 (85.9)	4.00 (101.6)	0.81 (20.6)	0.34 (8.6)	6.69 (170.0)	0.69 (17.5)	0.50 (12.7)	1.00 (25.4)
20NSS-MF12-2-S	MF12	0.438 (11.13)	3.00 (76.2)	1.50 (38.1)	0.60 (15.2)	2.25 (57.2)	4.25 (108.0)	10.25 (260.4)	1.00 (25.4)	0.44 (11.2)	7.37 (187.2)	0.88 (22.4)	0.63 (16.0)	1.38 (35.1)
20NSS-MF16-2-S	MF16	0.562 (14.27)	4.12 (104.6)	2.06 (52.3)	0.74 (18.7)	2.81 (71.4)	5.12 (130.1)	10.25 (260.4)	1.37 (34.9)	0.56 (14.2)	9.94 (252.6)	1.25 (31.8)	1.13 (28.7)	1.75 (44.5)

20NSS SERIES (ANGLE / REPLACEABLE SEAT)

#	Connection Type	Orifice in. (mm)	A	B	C	D	D1	E	F	G	G1	H	M	N	Thickness
			in. (mm)												
20NSS-MF4-3-S	MF4	0.125 (3.18)	2.00 (50.8)	1.00 (25.4)	0.38 (9.7)	1.19 (30.2)	2.13 (54.0)	2.25 (57.2)	3.00 (76.2)	0.63 (15.9)	0.22 (5.6)	6.10 (154.9)	0.62 (15.8)	0.38 (9.7)	0.75 (19.1)
20NSS-MF6-3-S	MF6	0.204 (5.18)	2.00 (50.8)	1.00 (25.4)	0.44 (11.2)	1.19 (30.2)	2.13 (54.0)	2.25 (57.2)	3.00 (76.2)	0.63 (15.9)	0.22 (5.6)	6.16 (156.5)	0.62 (15.8)	0.38 (9.7)	0.75 (19.1)
20NSS-MF9-3-S	MF9	0.312 (7.92)	2.50 (63.5)	1.25 (31.8)	0.55 (14.0)	1.75 (44.5)	2.50 (63.5)	3.13 (79.4)	4.00 (101.6)	0.81 (20.6)	0.34 (8.6)	7.58 (192.1)	0.69 (17.5)	0.50 (12.7)	1.00 (25.4)
20NSS-MF12-3-S	MF12	0.438 (11.13)	3.00 (76.2)	1.50 (38.1)	0.60 (15.2)	2.25 (57.2)	3.44 (87.4)	4.25 (108.0)	10.25 (260.4)	1.00 (25.4)	0.44 (11.2)	9.30 (236.3)	0.88 (22.4)	0.63 (16.0)	1.38 (35.1)
20NSS-MF16-3-S	MF16	0.562 (14.27)	4.12 (104.6)	2.06 (52.3)	0.74 (18.7)	2.81 (71.4)	4.22 (107.4)	5.25 (133.4)	10.25 (260.4)	1.37 (34.9)	0.56 (14.2)	11.86 (301.3)	1.25 (31.8)	1.13 (28.7)	1.75 (44.5)

20NSS SERIES (3-WAY/2 ON PRESSURE)

#	Connection Type	Orifice in. (mm)	A	B	C	D	D1	E	F	G	G1	H	M	N	Thickness
			in. (mm)												
20NSS-MF4-4-S	MF4	0.125 (3.18)	2.00 (50.8)	1.00 (25.4)	0.38 (9.7)	1.63 (41.3)	1.19 (30.2)	2.63 (66.7)	3.00 (76.2)	0.63 (15.9)	0.22 (5.6)	5.47 (139.0)	0.62 (15.8)	0.38 (9.7)	0.75 (19.1)
20NSS-MF6-4-S	MF6	0.204 (5.18)	2.00 (50.8)	1.00 (25.4)	0.44 (11.2)	1.63 (41.3)	1.19 (30.2)	2.63 (66.7)	3.00 (76.2)	0.63 (15.9)	0.22 (5.6)	5.52 (140.1)	0.62 (15.8)	0.38 (9.7)	0.75 (19.1)
20NSS-MF9-4-S	MF9	0.312 (7.92)	2.50 (63.5)	1.25 (31.8)	0.55 (14.0)	2.37 (60.3)	1.75 (44.5)	3.63 (92.1)	4.00 (101.6)	0.81 (20.6)	0.34 (8.6)	6.94 (176.3)	0.69 (17.5)	0.50 (12.7)	1.00 (25.4)
20NSS-MF12-4-S	MF12	0.438 (11.13)	3.00 (76.2)	1.50 (38.1)	0.60 (15.2)	3.00 (76.2)	2.25 (57.2)	4.63 (117.5)	10.25 (260.4)	1.00 (25.4)	0.44 (11.2)	8.24 (209.4)	0.88 (22.4)	0.63 (16.0)	1.38 (35.1)
20NSS-MF16-4-S	MF16	0.562 (14.27)	4.12 (104.6)	2.06 (52.3)	0.74 (18.7)	3.75 (95.3)	2.81 (71.4)	5.88 (149.4)	10.25 (260.4)	1.37 (34.9)	0.56 (14.2)	10.70 (271.9)	1.25 (31.8)	1.13 (28.7)	1.75 (44.5)

20NSS SERIES (3 WAY/1 ON PRESSURE)

#	Connection Type	Orifice in. (mm)	A	B	C	D	E	F	G	G1	H	M	N	Thickness
			in. (mm)											
20NSS-MF4-5-S	MF4	0.125 (3.18)	2.00 (50.8)	1.00 (25.4)	0.38 (9.7)	1.19 (30.2)	2.44 (61.9)	3.00 (76.2)	0.63 (15.9)	0.22 (5.6)	5.28 (134.2)	0.62 (15.8)	0.38 (9.7)	0.75 (19.1)
20NSS-MF6-5-S	MF6	0.204 (5.18)	2.00 (50.8)	1.00 (25.4)	0.44 (11.2)	1.19 (30.2)	2.44 (61.9)	3.00 (76.2)	0.63 (15.9)	0.22 (5.6)	5.33 (135.4)	0.62 (15.8)	0.38 (9.7)	0.75 (19.1)
20NSS-MF9-5-S	MF9	0.312 (7.92)	2.50 (63.5)	1.25 (31.8)	0.55 (14.0)	1.75 (44.5)	3.38 (85.9)	4.00 (101.6)	0.81 (20.6)	0.34 (8.6)	6.69 (170.0)	0.69 (17.5)	0.50 (12.7)	1.00 (25.4)
20NSS-MF12-5-S	MF12	0.438 (11.13)	3.00 (76.2)	1.50 (38.1)	0.60 (15.2)	2.25 (57.2)	4.25 (108.0)	10.25 (260.4)	1.00 (25.4)	0.44 (11.2)	7.87 (199.9)	0.88 (22.4)	0.63 (16.0)	1.38 (35.1)
20NSS-MF16-5-S	MF16	0.562 (14.27)	4.12 (104.6)	2.06 (52.3)	0.74 (18.7)	2.81 (71.4)	5.12 (130.1)	10.25 (260.4)	1.37 (34.9)	0.56 (14.2)	9.94 (252.6)	1.25 (31.8)	1.13 (28.7)	1.75 (44.5)



FITTINGS, TUBING & VALVES FOR SOUR GAS SERVICE

MEDIUM & HIGH PRESSURE END CONNECTIONS

20N SERIES (3-WAY/2 STEM MANIFOLD)

#	Connection Type	Orifice in. (mm)	A	B	C	D	E	F	G	G1	H	M	N	Thickness
			in. (mm)											
20NSS-MF4-6-S	MF4	0.125 (3.18)	2.00 (50.8)	1.00 (25.4)	0.38 (9.7)	1.19 (30.2)	2.44 (61.9)	3.00 (76.2)	0.63 (15.9)	0.22 (5.6)	5.28 (134.2)	0.62 (15.8)	0.38 (9.7)	0.75 (19.1)
20NSS-MF6-6-S	MF6	0.204 (5.18)	2.00 (50.8)	1.00 (25.4)	0.44 (11.2)	1.19 (30.2)	2.44 (61.9)	3.00 (76.2)	0.63 (15.9)	0.22 (5.6)	5.33 (135.4)	0.62 (15.8)	0.38 (9.7)	0.75 (19.1)
20NSS-MF9-6-S	MF9	0.312 (7.92)	2.50 (63.5)	1.25 (31.8)	0.55 (14.0)	1.75 (44.5)	3.38 (85.9)	4.00 (101.6)	0.81 (20.6)	0.34 (8.6)	6.69 (170.0)	0.69 (17.5)	0.50 (12.7)	1.00 (25.4)
20NSS-MF12-6-S	MF12	0.438 (11.13)	3.00 (76.2)	1.50 (38.1)	0.60 (15.2)	2.25 (57.2)	4.25 (108.0)	10.25 (260.4)	1.00 (25.4)	0.44 (11.2)	7.87 (199.9)	0.88 (22.4)	0.63 (16.0)	1.38 (35.1)
20NSS-MF16-6-S	MF16	0.562 (14.27)	4.12 (104.6)	2.06 (52.3)	0.74 (18.7)	2.81 (71.4)	5.12 (130.1)	10.25 (260.4)	1.37 (34.9)	0.56 (14.2)	9.94 (252.6)	1.25 (31.8)	1.13 (28.7)	1.75 (44.5)

30N SERIES (STRAIGHT)

#	Connection Type	Orifice in. (mm)	A	B	C	D	D1	E	F	G	G1	H	M	N	Thickness
			in. (mm)												
30NSS-HF4-1-S	HF4	0.094 (2.39)	2.00 (50.8)	1.00 (25.4)	0.47 (11.9)	1.50 (38.1)	1.12 (28.5)	2.00 (50.8)	3.00 (76.2)	0.81 (20.6)	0.22 (5.6)	4.69 (119.1)	0.69 (17.5)	0.38 (9.7)	1.00 (25.4)
30NSS-HF6-1-S	HF6	0.125 (3.18)	2.00 (50.8)	1.00 (25.4)	0.61 (15.6)	1.50 (38.1)	1.12 (28.5)	2.00 (50.8)	3.00 (76.2)	0.81 (20.6)	0.22 (5.6)	4.69 (119.1)	0.69 (17.5)	0.38 (9.7)	1.00 (25.4)
30NSS-HF9-1-S	HF9	0.125 (3.18)	2.62 (66.6)	1.31 (33.3)	0.95 (24.1)	1.56 (39.6)	1.12 (28.5)	2.44 (62.0)	3.00 (76.2)	0.81 (20.6)	0.28 (7.1)	5.13 (130.0)	0.69 (17.5)	0.38 (9.7)	1.50 (38.1)

30N SERIES (ANGLE)

#	Connection Type	Orifice in. (mm)	A	B	C	D	E	F	G	G1	H	M	N	Thickness
			in. (mm)											
30NSS-HF4-2-S	HF4	0.094 (2.39)	2.00 (50.8)	1.00 (25.4)	0.47 (11.9)	1.12 (28.5)	2.00 (50.8)	3.00 (76.2)	0.81 (20.6)	0.22 (5.6)	4.69 (119.1)	0.69 (17.5)	0.38 (9.7)	1.00 (25.4)
30NSS-HF6-2-S	HF6	0.125 (3.18)	2.00 (50.8)	1.00 (25.4)	0.61 (15.6)	1.12 (28.5)	2.25 (57.2)	3.00 (76.2)	0.81 (20.6)	0.22 (5.6)	4.69 (119.1)	0.69 (17.5)	0.38 (9.7)	1.00 (25.4)
30NSS-HF9-2-S	HF9	0.125 (3.18)	2.62 (66.6)	1.31 (33.3)	0.95 (24.1)	1.12 (28.5)	2.44 (62.0)	3.00 (76.2)	0.81 (20.6)	0.28 (7.1)	5.13 (130.3)	0.69 (17.5)	0.38 (9.7)	1.50 (38.1)

30N SERIES (ANGLE / REPLACEABLE SEAT)

#	Connection Type	Orifice in. (mm)	A	B	C	D	D1	E	F	G	G1	H	M	N	Thickness
			in. (mm)												
30NSS-HF4-3-S	HF4	0.094 (2.39)	2.00 (50.8)	1.00 (25.4)	0.47 (11.9)	1.12 (28.5)	2.06 (52.3)	2.38 (60.5)	3.00 (76.2)	0.81 (20.6)	0.22 (5.6)	5.88 (149.2)	0.69 (17.5)	0.38 (9.7)	1.00 (25.4)
30NSS-HF6-3-S	HF6	0.125 (3.18)	2.00 (50.8)	1.00 (25.4)	0.61 (15.6)	1.12 (28.5)	2.31 (58.67)	2.38 (60.5)	3.00 (76.2)	0.81 (20.6)	0.22 (5.6)	6.12 (155.4)	0.69 (17.5)	0.38 (9.7)	1.00 (25.4)
30NSS-HF9-3-S	HF9	0.125 (3.18)	2.62 (66.6)	1.31 (33.3)	0.95 (24.1)	1.12 (28.5)	2.55 (65.0)	2.44 (62.0)	3.00 (76.2)	0.81 (20.6)	0.28 (7.1)	6.39 (162.4)	0.69 (17.5)	0.38 (9.7)	1.50 (38.1)

FITTINGS, TUBING & VALVES FOR SOUR GAS SERVICE

MEDIUM & HIGH PRESSURE END CONNECTIONS

30N SERIES (3-WAY/2 ON PRESSURE)

#	Connection Type	Orifice in. (mm)	A	B	C	D	D1	E	F	G	G1	H	M	N	Thickness
			in. (mm)												
30NSS-HF4-4-S	HF4	0.094 (2.39)	2.00 (50.8)	1.00 (25.4)	0.47 (11.9)	1.50 (38.1)	1.12 (28.5)	2.12 (53.9)	3.00 (76.2)	0.81 (20.6)	0.22 (5.6)	4.81 (122.2)	0.69 (17.5)	0.38 (9.7)	1.00 (25.4)
30NSS-HF6-4-S	HF6	0.125 (3.18)	2.00 (50.8)	1.00 (25.4)	0.61 (15.6)	1.50 (38.1)	1.12 (28.5)	2.50 (63.5)	3.00 (76.2)	0.81 (20.6)	0.22 (5.6)	5.19 (131.9)	0.69 (17.5)	0.38 (9.7)	1.00 (25.4)
30NSS-HF9-4-S	HF9	0.125 (3.18)	2.62 (66.6)	1.31 (33.3)	0.95 (24.1)	1.56 (39.6)	1.12 (28.5)	2.88 (73.2)	3.00 (76.2)	0.81 (20.6)	0.28 (7.1)	5.57 (141.5)	0.69 (17.5)	0.38 (9.7)	1.50 (38.1)

30N SERIES (3-WAY/1 ON PRESSURE)

#	Connection Type	Orifice in. (mm)	A	B	C	D	E	F	G	G1	H	M	N	Thickness
			in. (mm)											
30NSS-HF4-5-S	HF4	0.094 (2.39)	2.00 (50.8)	1.00 (25.4)	0.47 (11.9)	1.12 (28.5)	2.00 (50.8)	3.00 (76.2)	0.81 (20.6)	0.22 (5.6)	4.69 (119.1)	0.69 (17.5)	0.38 (9.7)	1.00 (25.4)
30NSS-HF6-5-S	HF6	0.125 (3.18)	2.00 (50.8)	1.00 (25.4)	0.61 (15.6)	1.12 (28.5)	2.25 (57.2)	3.00 (76.2)	0.81 (20.6)	0.22 (5.6)	4.95 (125.7)	0.69 (17.5)	0.38 (9.7)	1.00 (25.4)
30NSS-HF9-5-S	HF9	0.125 (3.18)	2.62 (66.6)	1.31 (33.3)	0.95 (24.1)	1.12 (28.5)	2.44 (62.0)	3.00 (76.2)	0.81 (20.6)	0.28 (7.1)	5.13 (130.3)	0.69 (17.5)	0.38 (9.7)	1.50 (38.1)

30N SERIES (3-WAY/2 STEM MANIFOLD)

#	Connection Type	Orifice in. (mm)	A	B	C	D	D1	E	F	G	G1	H	M	N	Thickness
			in. (mm)												
30NSS-HF4-6-S	HF4	0.094 (2.39)	2.00 (50.8)	1.00 (25.4)	0.47 (11.9)	1.53 (38.9)	1.12 (28.5)	3.06 (77.7)	3.00 (76.2)	0.81 (20.6)	0.22 (5.6)	5.75 (146.0)	0.69 (17.5)	0.38 (9.7)	1.00 (25.4)
30NSS-HF6-6-S	HF6	0.125 (3.18)	2.00 (50.8)	1.00 (25.4)	0.61 (15.6)	1.62 (41.2)	1.12 (28.5)	3.25 (82.6)	3.00 (76.2)	0.81 (20.6)	0.22 (5.6)	5.94 (150.9)	0.69 (17.5)	0.38 (9.7)	1.00 (25.4)
30NSS-HF9-6-S	HF9	0.125 (3.18)	2.62 (66.6)	1.31 (33.3)	0.95 (24.1)	1.88 (47.8)	1.12 (28.5)	3.75 (95.3)	3.00 (76.2)	0.81 (20.6)	0.28 (7.1)	6.44 (163.6)	0.69 (17.5)	0.38 (9.7)	1.50 (38.1)

60N SERIES (STRAIGHT)

#	Connection Type	Orifice in. (mm)	A	B	C	D	D1	E	F	G	G1	H	M	N	Thickness
			in. (mm)												
60NSS-HF4-TG1-S	HF4	0.063 (1.59)	2.00 (50.8)	1.00 (25.4)	0.47 (11.9)	1.69 (42.9)	1.31 (33.3)	2.13 (54.0)	3.00 (76.2)	0.81 (20.6)	0.22 (5.6)	4.77 (121.1)	0.69 (17.5)	0.38 (9.7)	1.00 (25.4)
60NSS-HF6-TG1-S	HF6	0.063 (1.59)	2.00 (50.8)	1.00 (25.4)	0.61 (15.6)	1.69 (42.9)	1.31 (33.3)	2.25 (57.2)	3.00 (76.2)	0.81 (20.6)	0.22 (5.6)	4.89 (124.3)	0.69 (17.5)	0.38 (9.7)	1.00 (25.4)
60NSS-HF9-TG1-S	HF9	0.078 (1.98)	2.62 (66.6)	1.31 (33.3)	0.95 (24.1)	1.75 (44.5)	1.31 (33.3)	2.50 (63.5)	3.00 (76.2)	0.81 (20.6)	0.28 (7.1)	5.14 (130.6)	0.69 (17.5)	0.38 (9.7)	1.50 (38.1)

60N SERIES (ANGLE)

#	Connection Type	Orifice in. (mm)	A	B	C	D	E	F	G	G1	H	M	N	Thickness
			in. (mm)											
60NSS-HF4-TG2-S	HF4	0.063 (1.59)	2.00 (50.8)	1.00 (25.4)	0.47 (11.9)	1.31 (33.3)	2.38 (60.5)	3.00 (76.2)	0.81 (20.6)	0.22 (5.6)	5.02 (127.5)	0.69 (17.5)	0.38 (9.7)	1.00 (25.4)
60NSS-HF6-TG2-S	HF6	0.063 (1.59)	2.00 (50.8)	1.00 (25.4)	0.61 (15.6)	1.31 (33.3)	2.62 (66.6)	3.00 (76.2)	0.81 (20.6)	0.22 (5.6)	5.26 (133.5)	0.69 (17.5)	0.38 (9.7)	1.00 (25.4)
60NSS-HF9-TG2-S	HF9	0.078 (1.98)	2.62 (66.6)	1.31 (33.3)	0.95 (24.1)	1.31 (33.3)	2.81 (71.4)	3.00 (76.2)	0.81 (20.6)	0.28 (7.1)	5.45 (138.5)	0.69 (17.5)	0.38 (9.7)	1.50 (38.1)

FITTINGS, TUBING & VALVES FOR SOUR GAS SERVICE

MEDIUM & HIGH PRESSURE END CONNECTIONS

60N SERIES (3-WAY/2 ON PRESSURE)

#	Connection Type	Orifice in. (mm)	A	B	C	D	D1	E	F	G	G1	H	M	N	Thickness
			in. (mm)												
60NSS-HF4-TG4-S	HF4	0.063 (1.59)	2.00 (50.8)	1.00 (25.4)	0.47 (11.9)	1.69 (42.9)	1.31 (33.3)	2.38 (60.5)	3.00 (76.2)	1.00 (25.4)	0.22 (5.6)	5.26 (133.6)	0.69 (17.5)	0.38 (9.7)	1.00 (25.4)
60NSS-HF6-TG4-S	HF6	0.063 (1.59)	2.00 (50.8)	1.00 (25.4)	0.61 (15.6)	1.69 (42.9)	1.31 (33.3)	2.75 (68.9)	3.00 (76.2)	1.00 (25.4)	0.22 (5.6)	5.34 (134.8)	0.69 (17.5)	0.38 (9.7)	1.00 (25.4)
60NSS-HF9-TG4-S	HF9	0.078 (1.98)	2.62 (66.6)	1.31 (33.3)	0.95 (24.1)	1.75 (44.5)	1.31 (33.3)	3.03 (77.0)	3.00 (76.2)	1.00 (25.4)	0.28 (7.1)	5.67 (143.9)	0.69 (17.5)	0.38 (9.7)	1.50 (38.1)

60N SERIES (3-WAY/1 ON PRESSURE)

#	Connection Type	Orifice in. (mm)	A	B	C	D	E	F	G	G1	H	M	N	Thickness
			in. (mm)											
60NSS-HF4-TG5-S	HF4	0.063 (1.59)	2.00 (50.8)	1.00 (25.4)	0.47 (11.9)	1.31 (33.3)	2.38 (60.5)	3.00 (76.2)	1.00 (25.4)	0.22 (5.6)	5.02 (127.5)	0.69 (17.5)	0.38 (9.7)	1.00 (25.4)
60NSS-HF6-TG5-S	HF6	0.063 (1.59)	2.00 (50.8)	1.00 (25.4)	0.61 (15.6)	1.31 (33.3)	2.62 (66.6)	3.00 (76.2)	1.00 (25.4)	0.22 (5.6)	5.26 (133.5)	0.69 (17.5)	0.38 (9.7)	1.00 (25.4)
60NSS-HF9-TG5-S	HF9	0.078 (1.98)	2.62 (66.6)	1.31 (33.3)	0.95 (24.1)	1.31 (33.3)	2.81 (71.4)	3.00 (76.2)	1.00 (25.4)	0.28 (7.1)	5.45 (138.5)	0.69 (17.5)	0.38 (9.7)	1.50 (38.1)

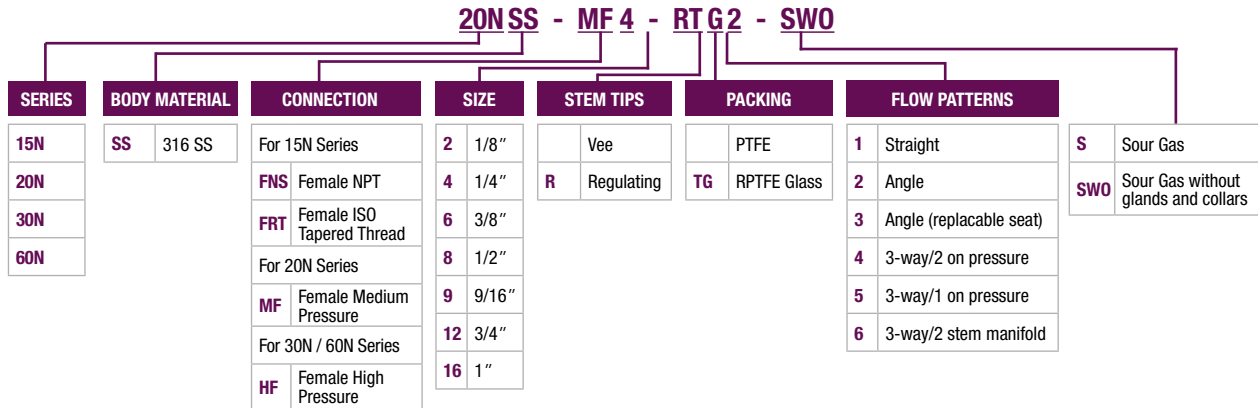
60N SERIES (3-WAY/2 STEM MANIFOLD)

#	Connection Type	Orifice in. (mm)	A	B	C	D	D1	E	F	G	G1	H	M	N	Thickness
			in. (mm)												
60NSS-HF4-TG6-S	HF4	0.063 (1.59)	2.00 (50.8)	1.00 (25.4)	0.47 (11.9)	1.72 (43.69)	1.31 (33.3)	3.44 (87.4)	3.00 (76.2)	1.00 (25.4)	0.22 (5.6)	6.08 (154.5)	0.69 (17.5)	0.38 (9.7)	1.00 (25.4)
60NSS-HF6-TG6-S	HF6	0.063 (1.59)	2.00 (50.8)	1.00 (25.4)	0.61 (15.6)	1.88 (47.8)	1.31 (33.3)	3.75 (95.3)	3.00 (76.2)	1.00 (25.4)	0.22 (5.6)	6.39 (162.3)	0.69 (17.5)	0.38 (9.7)	1.00 (25.4)
60NSS-HF9-TG6-S	HF9	0.078 (1.98)	2.62 (66.6)	1.31 (33.3)	0.95 (24.1)	2.06 (52.3)	1.31 (33.3)	4.12 (104.6)	3.00 (76.2)	1.00 (25.4)	0.28 (7.1)	6.76 (171.8)	0.69 (17.5)	0.38 (9.7)	1.50 (38.1)

FITTINGS, TUBING & VALVES FOR SOUR GAS SERVICE

PART NUMBER DESCRIPTION

PART NUMBER DESCRIPTION



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.

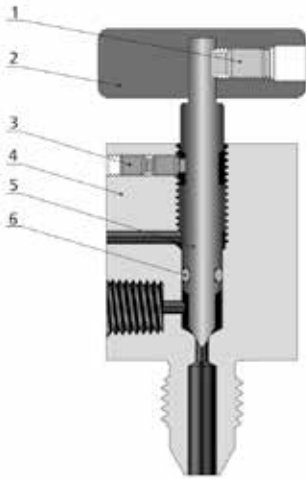
FITTINGS, TUBING & VALVES FOR SOUR GAS SERVICE

BLEED VALVES - 20,000 PSI (1379 BAR) RATED

FEATURES

- One piece hex construction compact design allows easy installation
- Working temperature range: 0°F to 400°F (-17.8°C to 204°C)
- 1/8" Female NPT outlet connection
- Easy to assemble and replace O-ring
- Positive locking screw design prevents accidental removal of the stem
- Tee handle for easy operation

STANDARD MATERIALS OF CONSTRUCTION



Item	Component	Material Grade / ASTM Specification
1	Handle Screw	Stainless Steel
2	Handle	Stainless Steel
3	Locking Screw	Stainless Steel
4	Body	316 SS annealed
5	Stem	Alloys 725
6	O-Ring	FFKM
-	Lubricant	Molybdenum disulfide / Fluorinated-based

TECHNICAL DATA

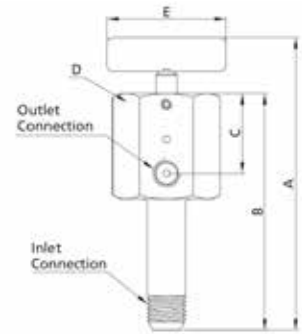
Series	Connection Type (Inlet)	Orifice in. (mm)	Pressure at Room Temperature psig (bar)
20BV	MM6	0.094 (2.4)	10,000 (690)
	MM9	0.094 (2.4)	10,000 (690)
	MCT6	0.094 (2.4)	10,000 (690)
	MCT9	0.094 (2.4)	10,000 (690)
30BV	HM6	0.094 (2.4)	20,000 (1379)
	HM9	0.094 (2.4)	20,000 (1379)
	HCT6	0.094 (2.4)	20,000 (1379)
	HCT9	0.094 (2.4)	20,000 (1379)

FITTINGS, TUBING & VALVES FOR SOUR GAS SERVICE

BLEED VALVES - 20,000 PSI (1379 BAR) RATED

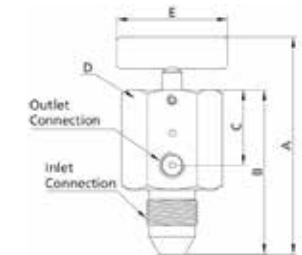
TYPE 1

#	Connection Type (Inlet)	Connection Type (Outlet)	Orifice in. (mm)	A	B	C	D	E
				in. (mm)				
20BVSS-MCT6-FNS2-S	MCT6	FNS2	0.094 (2.4)	3.61 (91.7)	2.78 (70.5)	1.18 (30.0)	1.37 (34.9)	1.75 (44.5)
20BVSS-MCT9-FNS2-S	MCT9	FNS2	0.094 (2.4)	3.82 (75.8)	1.18 (30.0)	1.18 (30.0)	1.37 (34.9)	1.75 (44.5)
20BVSS-HCT6-FNS2-S	HCT6	FNS2	0.094 (2.4)	4.09 (103.9)	3.26 (82.7)	1.18 (30.0)	1.37 (34.9)	1.75 (44.5)
20BVSS-HCT9-FNS2-S	HCT9	FNS2	0.094 (2.4)	4.68 (118.9)	3.85 (97.7)	1.18 (30.0)	1.37 (34.9)	1.75 (44.5)



TYPE 2

#	Connection Type (Inlet)	Connection Type (Outlet)	Orifice in. (mm)	A	B	C	D	E
				in. (mm)				
20BVSS-2MP6-FNS2-S	2MP6	FNS2	0.094 (2.4)	3.41 (86.7)	2.58 (65.6)	1.18 (30.0)	1.37 (34.9)	1.75 (44.5)
20BVSS-2MP9-FNS2-S	2MP9	FNS2	0.094 (2.4)	3.41 (86.7)	2.58 (65.6)	1.18 (30.0)	1.37 (34.9)	1.75 (44.5)
30BVSS-6MP6-FNS2-S	6MP6	FNS2	0.094 (2.4)	3.41 (86.7)	2.58 (65.6)	1.18 (30.0)	1.37 (34.9)	1.75 (44.5)
30BVSS-6MP9-FNS2-S	6MP9	FNS2	0.094 (2.4)	3.41 (86.7)	2.58 (65.6)	1.18 (30.0)	1.37 (34.9)	1.75 (44.5)



PART NUMBER DESCRIPTION

20BVSS - MCT9 - FNS2 - S

SERIES	BODY MATERIAL	CONNECTION INLET	CONNECTION OUTLET	SOUR GAS SERVICE
20BV	SS 316 SS	MM6 3/8" Male Medium Pressure	FNS2 1/8" Female NPT	S Sour Gas
30BV		MM9 9/16" Male Medium Pressure		
		MCT6 3/8" Medium Pressure Coned and Threaded Nipples		
		MCT9 9/16" Medium Pressure Coned and Threaded Nipples		
		HM6 3/8" Male High Pressure		
		HM9 9/16" Male High Pressure		
		HCT6 3/8" High Pressure Coned and Threaded Nipples		
		HCT9 9/16" High Pressure Coned and Threaded Nipples		

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.

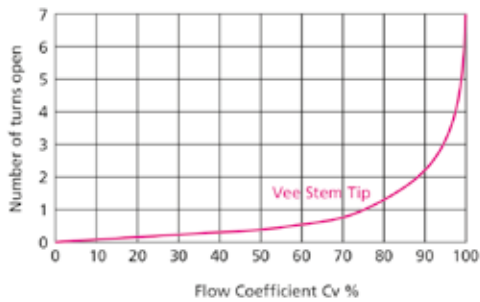
FITTINGS, TUBING & VALVES FOR SOUR GAS SERVICE

BLEED VALVES - 20,000 PSI (1379 BAR) RATED

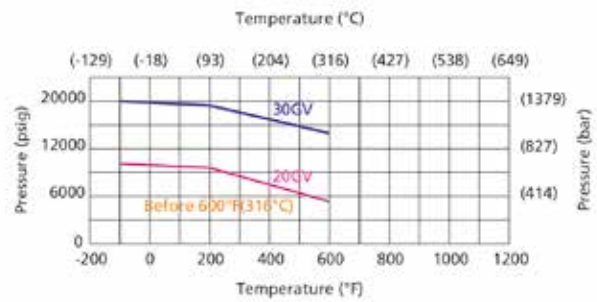
FEATURES

- One inlet, three outlet ports
- Metal-to-metal seating achieves ideal shutoff, longer stem/seat service lifetime for abrasive flow, excellent corrosion resistance and greater durability for repeated on/off cycles
- PTFE is the standard packing material, RPTFE glass also available
- The material of packing gland and upper stem have been selected to achieve reduced handle torque and extended thread cycle life
- The location of packing is under the thread of valve stem
- The locking device of packing gland is reliable

FLOW DATA AT 100°F (38°C)



PRESSURE & TEMPERATURE



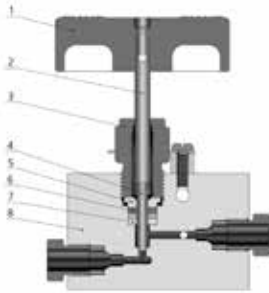
TECHNICAL DATA

Series	Connection Type (Inlet)	Orifice in. (mm)	Pressure at Room Temperature psig (bar)
20GV	2FH6	0.125 (3.18)	10,000 (690)
	2FH9	0.125 (3.18)	10,000 (690)
30GV	6FH6	0.125 (3.18)	20,000 (1379)
	6FH9	0.125 (3.18)	20,000 (1379)

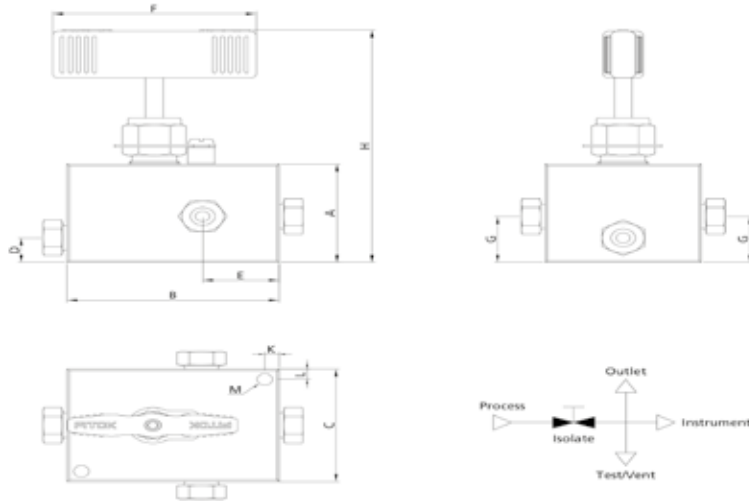
FITTINGS, TUBING & VALVES FOR SOUR GAS SERVICE

DIMENSIONS - GAUGE VALVES

STANDARD MATERIALS OF CONSTRUCTION



Item	Component	Material Grade / ASTM Specification
1	Handle	Stainless Steel
2	Upper Stem	17-4PH / A564
3	Packing Gland	304 SS / A479
4	Lower Stem	Alloy 725
5	Packing Ring	C63000 / B150
6	Packing	PTFE / RPTFE
7	Packing Washer	17-4PH / A564
8	Body	316 SS annealed
-	Lubricant	Molybdenum Disulfide



#	Connection Type	Orifice in. (mm)	A	B	C	D	E	F	G	H	K	L	M
			in. (mm)										
20GVSS-MF6-S	MF6	0.125 (3.18)	2.00 (50.8)	3.12 (79.3)	2.00 (50.8)	0.50 (12.7)	1.13 (28.6)	3.00 (76.2)	0.94 (23.8)	4.68 (118.9)	0.38 (9.7)	0.25 (6.4)	0.28 (7.1)
20GVSS-MF9-S	MF9	0.125 (3.18)	2.00 (50.8)	3.88 (98.6)	2.75 (69.9)	0.66 (16.8)	1.38 (34.9)	3.00 (76.2)	0.94 (23.8)	4.68 (118.9)	0.38 (9.7)	0.38 (9.7)	0.28 (7.1)
30GVSS-HF6-S	HF6	0.125 (3.18)	2.00 (50.8)	3.12 (79.3)	2.00 (50.8)	0.50 (12.7)	1.13 (28.6)	3.00 (76.2)	0.94 (23.8)	4.68 (118.9)	0.38 (9.7)	0.38 (9.7)	0.28 (7.1)
30GVSS-HF9-S	HF9	0.125 (3.18)	2.00 (50.8)	3.88 (98.6)	2.75 (69.9)	0.66 (16.8)	1.38 (34.9)	3.00 (76.2)	0.94 (23.8)	4.68 (118.9)	0.38 (9.7)	0.38 (9.7)	0.28 (7.1)



FITTINGS, TUBING & VALVES FOR SOUR GAS SERVICE

PART NUMBER DESCRIPTION - GAUGE VALVES

PART NUMBER DESCRIPTION

20GV SS - MF6 - TG - SWO

SERIES	BODY MATERIAL	CONNECTION	PACKING	SOUR GAS SERVICE
20GV	SS 316 SS	2FH6 3/8" Female Medium Pressure	PTFE	S Sour Gas
30GV		2FH9 9/16" Female Medium Pressure	TG RPTFE Glass	SWO Sour Gas without glands and collars
		6FH6 3/8" Female High Pressure		
		6FH9 9/16" Female High Pressure		

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.

FITTINGS, TUBING & VALVES FOR SOUR GAS SERVICE

CHECK VALVES - UP TO 30,000 PSI (2068 BAR) RATED

FEATURES

(Thread) O-ring Check Valves

- Provides unidirectional flow and tight shut-off for liquids and gases with high reliability. When differential drops below cracking pressure, valve shuts off (Not for use as relief valve).
- Resilient O-ring seat design for noise-free closing leakage-free
- Cracking pressure: 14 psig~26 psig (0.966 bar~1.794 bar)

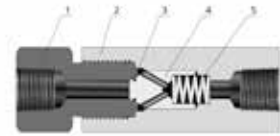
(Thread) Ball Check Valves

- Prevents reverse flow where leak-tight shut-off is not mandatory. When differential drops below cracking pressure, valve closes (Not for use as relief valve).
- Ball and poppet are an integral design to assure positive, in-line seating without "chatter"
- Poppet is designed essentially for axial flow with minimum pressure drop

STANDARD MATERIALS

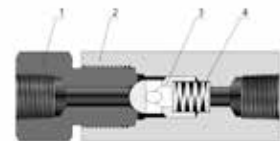
THREADED O-RING CHECK VALVES FOR 15C SERIES

Item	Component	Material Grade / ASTM Specification
1	Cover Gland	Annealed Stainless Steel
2	Valve Body	316 SS Annealed
3	O-Ring	FFKM
4	Poppet	316 SS Annealed
5	Spring	High Nickel Alloy
-	Lubricant	Molybdenum Disulfide



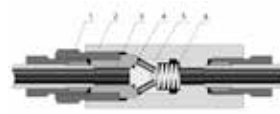
THREADED BALL CHECK VALVES FOR 15CO SERIES

Item	Component	Material Grade / ASTM Specification
1	Cover Gland	Annealed Stainless Steel
2	Valve Body	316 SS Annealed
3	Ball Poppet	316 SS Annealed
4	Spring	High Nickel Alloy
-	Lubricant	Molybdenum Disulfide



O-RING CHECK VALVE FOR 20C SERIES

Item	Component	Material Grade / ASTM Specification
1	Cover Gland	Annealed Stainless Steel
2	Valve Body	316 SS Annealed
3	Cover	316 SS Annealed
4	O-Ring	FFKM
5	Poppet	316 SS Annealed
6	Spring	High Nickel Alloy
-	Lubricant	Molybdenum Disulfide

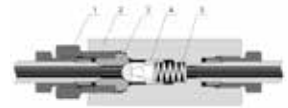


FITTINGS, TUBING & VALVES FOR SOUR GAS SERVICE

CHECK VALVES - UP TO 30,000 PSI (2068 BAR) RATED

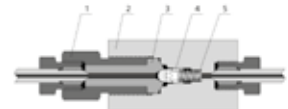
BALL CHECK VALVE FOR 20C0 SERIES

Item	Component	Material Grade / ASTM Specification
1	Cover Gland	Annealed Stainless Steel
2	Valve Body	316 SS Annealed
3	Cover	316 SS Annealed
4	Ball Poppet	316 SS Annealed
5	Spring	High Nickel Alloy
-	Lubricant	Molybdenum Disulfide



BALL CHECK VALVE FOR 60C0 SERIES

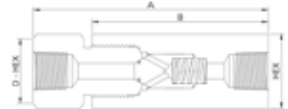
Item	Component	Material Grade / ASTM Specification
1	Cover Gland	Annealed Stainless Steel
2	Valve Body	316 SS Annealed
3	Cover	316 SS Annealed
4	Ball Poppet	316 SS Annealed
5	Spring	High Nickel Alloy
-	Lubricant	Molybdenum Disulfide



TECHNICAL DATA AND DIMENSIONS

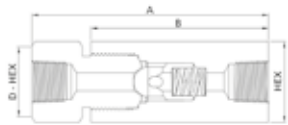
15C Series Pipe O-ring Check Valves

#	Connection Type	Orifice in. (mm)	Rated Cv	A	B	D-HEX	HEX	Working Pressure psig (bar)	Working temperature °F (°C)
				in. (mm)					
15CSS-FNS4-S	FNS4	0.12 (3.05)	0.28	3.30 (83.8)	2.38 (60.3)	0.94 (23.8)	0.94 (23.8)	10,000 (690)	0°F to 400°F (-17.8°C to 204°C)
15CSS-FNS6-S	FNS6	0.22 (5.59)	0.84	3.95 (100.33)	2.88 (73.2)	1.13 (28.6)	1.13 (28.6)	10,000 (690)	0°F to 400°F (-17.8°C to 204°C)
15CSS-FNS8-S	FNS8	0.36 (9.12)	2.30	5.07 (128.8)	3.88 (98.6)	1.38 (34.9)	1.38 (34.9)	10,000 (690)	0°F to 400°F (-17.8°C to 204°C)



15C0 Series Pipe Ball Check Valves

#	Connection Type	Orifice in. (mm)	Rated Cv	A	B	D-HEX	HEX	Working Pressure psig (bar)	Working temperature °F (°C)
				in. (mm)					
15COSS-FNS4-S	FNS4	0.12 (3.05)	0.28	3.30 (83.8)	2.38 (60.3)	0.94 (23.8)	0.94 (23.8)	10,000 (690)	-110°F to 400°F (-79°C to 204°C)
15COSS-FNS6-S	FNS6	0.22 (5.59)	0.84	3.95 (100.33)	2.88 (73.2)	1.13 (28.6)	1.13 (28.6)	10,000 (690)	0°F to 400°F (-17.8°C to 204°C)
15COSS-FNS8-S	FNS8	0.36 (9.12)	2.30	5.07 (128.8)	3.88 (98.6)	1.38 (34.9)	1.38 (34.9)	10,000 (690)	0°F to 400°F (-17.8°C to 204°C)

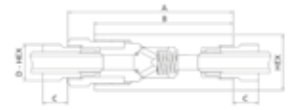


FITTINGS, TUBING & VALVES FOR SOUR GAS SERVICE

CHECK VALVES - UP TO 30,000 PSI (2068 BAR) RATED

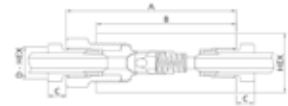
20C Series O-ring Check Valves

#	Connection Type	Orifice in. (mm)	Rated Cv	A	B	C	D-HEX	HEX	Working Pressure psig (bar)	Working temperature °F (°C)
				in. (mm)						
20CSS-MF4-S	MF4	0.125 (3.18)	0.28	2.94 (74.7)	2.50 (63.5)	0.38 (0.95)	0.50 (12.7)	0.81 (20.6)	10,000 (690)	0°F to 400°F (-17.8°C to 204°C)
20CSS-MF6-S	MF6	0.218 (5.54)	0.84	3.12 (79.3)	2.62 (66.6)	0.44 (11.2)	0.62 (15.8)	1.00 (25.4)	10,000 (690)	0°F to 400°F (-17.8°C to 204°C)
20CSS-MF9-S	MF9	0.359 (9.12)	2.30	4.18 (106.2)	3.50 (88.9)	0.55 (14.0)	0.94 (23.9)	1.38 (35.1)	10,000 (690)	0°F to 400°F (-17.8°C to 204°C)
20CSS-MF12-S	MF12	0.516 (13.11)	4.70	5.50 (139)	4.75 (120.7)	0.60 (15.2)	1.19 (30.2)	1.75 (44.5)	10,000 (690)	0°F to 400°F (-17.8°C to 204°C)
20CSS-MF16-S	MF16	0.688 (17.48)	7.40	6.91 (175.6)	5.75 (146.1)	0.74 (18.8)	1.38 (35.1)	2.12 (53.9)	10,000 (690)	0°F to 400°F (-17.8°C to 204°C)



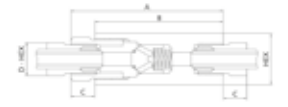
20CO Series Ball Check Valves

#	Connection Type	Orifice in. (mm)	Rated Cv	A	B	C	D-HEX	HEX	Working Pressure psig (bar)	Working temperature °F (°C)
				in. (mm)						
20COSS-MF4-S	MF4	0.125 (3.18)	0.28	2.94 (74.7)	2.50 (63.5)	0.38 (0.95)	0.50 (12.7)	0.81 (20.6)	10,000 (690)	-110°F to 1200°F (-79°C to 649°C)
20COSS-MF6-S	MF6	0.218 (5.54)	0.84	3.12 (79.3)	2.62 (66.6)	0.44 (11.2)	0.62 (15.8)	1.00 (25.4)	10,000 (690)	-110°F to 1200°F (-79°C to 649°C)
20COSS-MF9-S	MF9	0.359 (9.12)	2.30	4.18 (106.2)	3.50 (88.9)	0.55 (14.0)	0.94 (23.9)	1.38 (35.1)	10,000 (690)	-110°F to 1200°F (-79°C to 649°C)
20COSS-MF12-S	MF12	0.516 (13.11)	4.70	5.50 (139)	4.75 (120.7)	0.60 (15.2)	1.19 (30.2)	1.75 (44.5)	10,000 (690)	-110°F to 1200°F (-79°C to 649°C)
20COSS-MF16-S	MF16	0.688 (17.48)	7.40	6.91 (175.6)	5.75 (146.1)	0.74 (18.8)	1.38 (35.1)	2.12 (53.9)	10,000 (690)	-110°F to 1200°F (-79°C to 649°C)



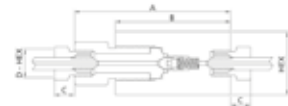
60C Series O-ring Check Valves

#	Connection Type	Orifice in. (mm)	Rated Cv	A	B	C	D-HEX	HEX	Working Pressure psig (bar)	Working temperature °F (°C)
				in. (mm)						
60CSS-HF4-S	HF4	0.094 (2.39)	0.15	3.38 (85.9)	2.50 (63.5)	0.47 (11.9)	0.63 (16.0)	1.18 (30.0)	30,000 (2068)	0°F to 400°F (-17.8°C to 204°C)
60CSS-HF6-S	HF6	0.125 (3.18)	0.28	3.86 (98.1)	2.80 (71.0)	0.61 (15.5)	0.81 (20.6)	1.18 (30.0)	30,000 (2068)	0°F to 400°F (-17.8°C to 204°C)
60CSS-HF9-S	HF9	0.187 (4.75)	0.63	4.62 (117.4)	3.38 (85.85)	0.95 (24.1)	1.12 (28.5)	1.50 (38.1)	30,000 (2068)	0°F to 400°F (-17.8°C to 204°C)



60CO Series Ball Check Valves

#	Connection Type	Orifice in. (mm)	Rated Cv	A	B	C	D-HEX	HEX	Working Pressure psig (bar)	Working temperature °F (°C)
				in. (mm)						
60COSS-HF4-S	HF4	0.094 (2.39)	0.15	3.38 (85.9)	2.50 (63.5)	0.47 (11.9)	0.63 (16.0)	1.18 (30.0)	30,000 (2068)	-100°F to 1200°F (-79°C to 649°C)
60COSS-HF6-S	HF6	0.125 (3.18)	0.28	3.86 (98.1)	2.80 (71.0)	0.61 (15.5)	0.81 (20.6)	1.18 (30.0)	30,000 (2068)	-100°F to 1200°F (-79°C to 649°C)
60COSS-HF9-S	HF9	0.187 (4.75)	0.63	4.62 (117.4)	3.38 (85.85)	0.95 (24.1)	1.12 (28.5)	1.50 (38.1)	30,000 (2068)	-100°F to 1200°F (-79°C to 649°C)



FITTINGS, TUBING & VALVES FOR SOUR GAS SERVICE

PART NUMBER DESCRIPTION - CHECK VALVES

PART NUMBER DESCRIPTION

20C SS - MF 4 - SWO

SERIES	BODY MATERIAL	CONNECTION TYPE	CONNECTION SIZE	SOUR GAS SERVICE
15C	SS 316 SS	For 15C / 15CO Series	4 1/4"	S Sour Gas
15CO		FNS NPT (Female)	6 3/8"	
20C		For 20C / 20CO Series	8 1/2"	SWO Sour Gas without glands and collars
20CO		2FH 20 Series	9 9/16"	
60C		For 60C / 60CO Series	12 3/4"	
60CO		6FH 60 Series	16 1"	

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.

FITTINGS, TUBING & VALVES FOR SOUR GAS SERVICE

HOSE ASSEMBLIES - NACE COMPLIANCE

NACE COMPLIANCE

Abdex can manufacture hoses for use with H₂S in Sour Gas Applications that satisfy different levels of NACE compliance.

Our range of thermoplastic hoses can be supplied with methanol washed Nylon 11 Core Tubes which have excellent chemical resistance. Methanol washing the core tube means for a smoother bore for less pressure drop but also for longer resistance against stress cracking in long term applications.

We can supply hose assemblies with different materials. In NACE applications Nitronic 50 or Inconel 625 is often specified.