

# Subsea Hydraulic Needle Valves

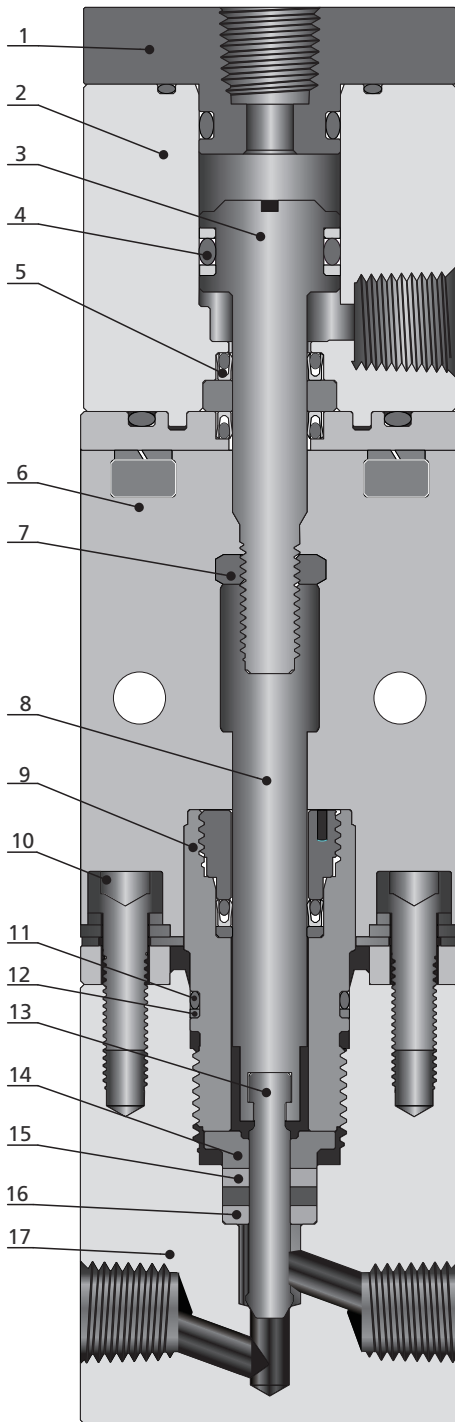
## Features

- ⦿ Working pressure up to 20,000 psig (1379 bar)
- ⦿ Maximum external pressure: 6,000 psig (414 bar)
- ⦿ Hydraulic supply pressure: 3,000 psig (207 bar)
- ⦿ Working temperature: 0 to 175°F (-18 to 80°C)
- ⦿ High tensile 316 stainless steel for valve body
- ⦿ Standard stem seal material: PTFE
- ⦿ Available to NACE MR0175
- ⦿ Metal-to-metal seating to ensure ideal shut-off, longer stem/seat service lifetime for abrasive flow, excellent corrosion resistance and greater durability for repeated on/off cycles
- ⦿ Reliable packing gland locking device
- ⦿ Wide selection of tube and pipe end fittings available
- ⦿ 2-way straight and angle flow patterns available
- ⦿ Orifice: 0.203"
- ⦿ Rated Cv: 0.75
- ⦿ Maximum water depth: 13,800 ft. (4200 m)



|                                     |
|-------------------------------------|
| Fittings                            |
| Tubing                              |
| Quick Couplings                     |
| Line Filters                        |
| Valves                              |
| Sour Service Products               |
| Subsea Valves                       |
| Tools and Installation Instructions |
| Technical Information               |
| Part Number Crossover Charts        |

## Standard Materials of Construction



| Item | Component             | Material Grade   |
|------|-----------------------|------------------|
| 1    | Gland                 | 316 SS           |
| 2    | Actuator Body         | 316 SS           |
| 3    | Piston Rod            | 316 SS           |
| 4    | O-Ring                | Fluorocarbon FKM |
| 5    | Piston Seal           | UHMWPE           |
| 6    | Support Block         | 316 SS           |
| 7    | Nut                   | Stainless Steel  |
| 8    | Upper Stem            | 316 SS           |
| 9    | Packing Gland         | 316 SS           |
| 10   | Locking Screw         | SS               |
| 11   | O-Ring                | NBR              |
| 12   | O-Ring Retainer       | PTFE             |
| 13   | <i>Lower Stem</i>     | <i>S17400</i>    |
| 14   | Packing Ring          | C63000           |
| 15   | <i>Packing</i>        | <i>PTFE</i>      |
| 16   | <i>Packing Washer</i> | <i>S17400</i>    |
| 17   | <i>Body</i>           | <i>316 SS</i>    |

*Wetted components listed in italics.*

Fittings

Tubing

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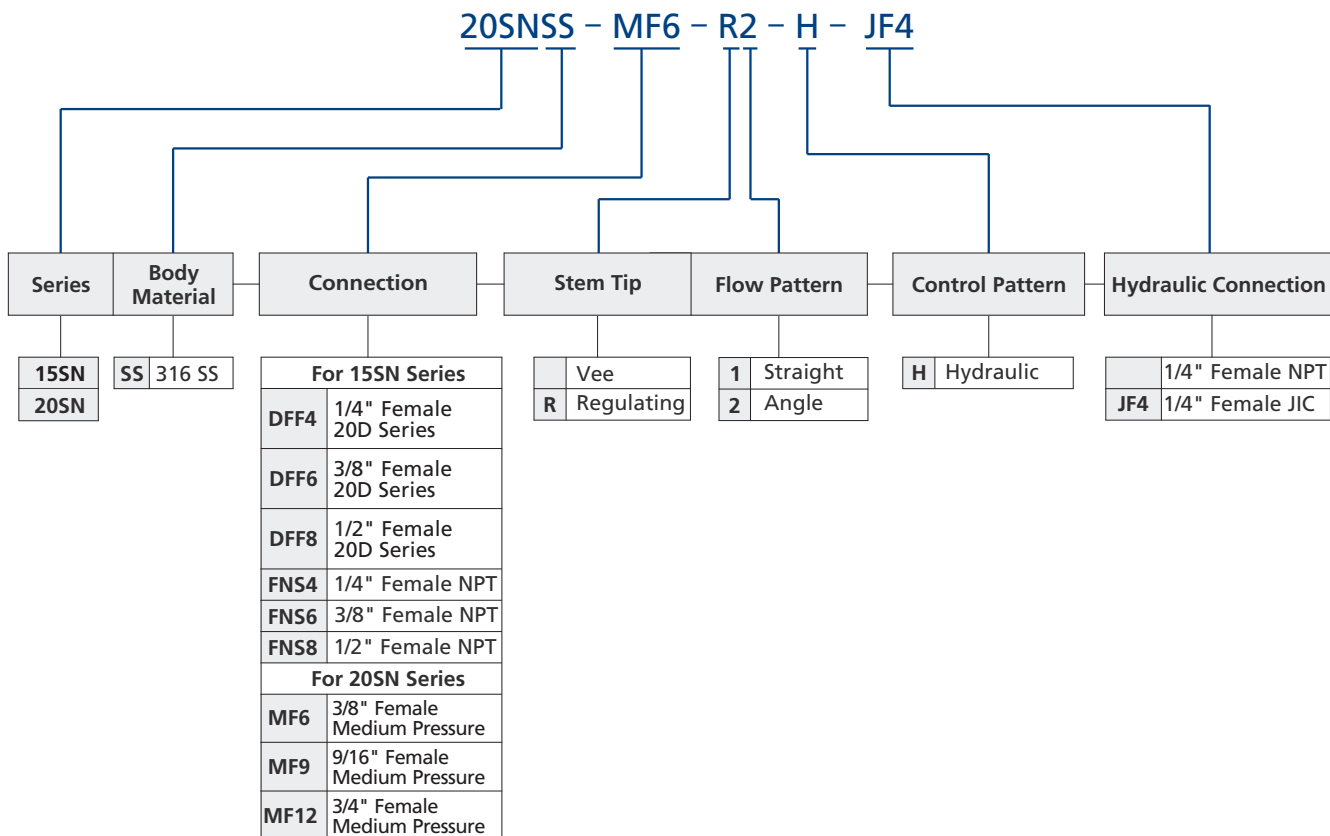
Subsea Valves

Tools and Installation Instructions

Technical Information

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## Ordering Number Description



- NOTES: 1. For more details regarding 20D Series and Medium Pressure connections, please see **Connection Information** on I-02.  
 2. "Ordering Number Description" is a reference to understand the combination rules of FITOK product part number.  
 Not all combinations are available.