

# Metering Valves

15M Series: 15,000 psig (1034 bar)

30M Series: 30,000 psig (2068 bar)

60M Series: 60,000 psig (4137 bar)



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

# Contents

Features	E-70
Technical Data	E-70
Flow Data at 100°F (38°C)	E-70
Pressure vs. Temperature Curve	E-70
Standard Materials of Construction	E-71
Ordering Information and Dimensions	E-72
Ordering Number Description	E-72

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

## Features

- Precisely tapered valve stem accurately controls flow for gases and liquids
- The design of Barrel and Thimble micrometer permits repeatable settings
  - Each division of barrel equals to 0.025"
  - Thimble is divided into 25 divisions, each division of thimble equals to 0.001" stem travel
  - One revolution equals to valve stem 0.025" travel
- Valve body made of high tensile 316 stainless steel for maximum wear and corrosion resistance
- Packing located under stem threads
- Reliable locking device for packing gland
- Not intended as shut-off valves. Install a correlated shutoff valve when shut-off is required
- Minimum flow rate set at "0" position, and operation below "0" position not allowed

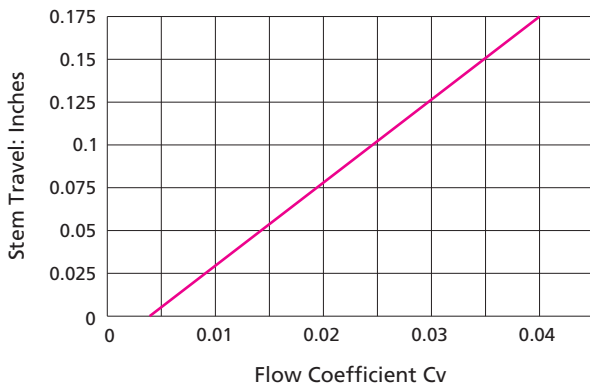
## Technical Data

Series	Tube O.D. in.	Connection	Orifice in. (mm)	Cv	Working Pressure psig (bar)
15M	1/8	DFF2	0.062 (1.57)	0.04	15,000 (1034)
15M	1/4	DFF4	0.062 (1.57)	0.04	15,000 (1034)
30M	1/4	HF4	0.062 (1.57)	0.04	30,000 (2068)
60M	1/4	HF4	0.062 (1.57)	0.04	60,000 (4137)
60M	3/8	HF6	0.062 (1.57)	0.04	60,000 (4137)

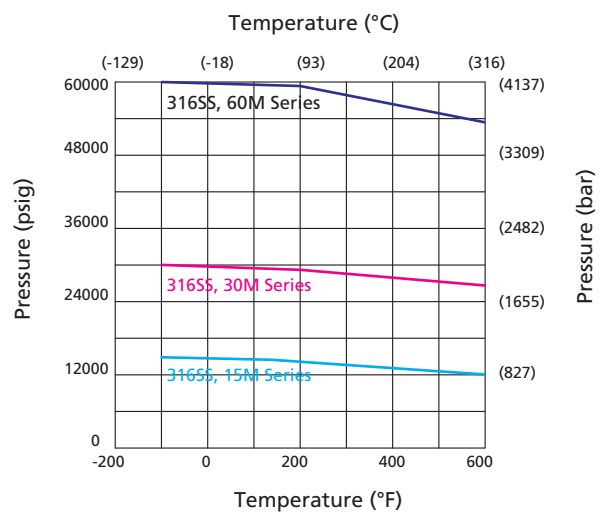
### Packing Options:

Nylon is the standard packing material for 60M series, PTFE for other series. RPTFE is available for all series.  
 Nylon: 40°F~230°F (4.4°C~110°C).  
 PTFE: -100°F~450°F (-73°C~232°C).  
 RPTFE glass: -100°F~600°F (-73°C~316°C).  
 Graphite: 0°F~800°F (-17.8°C~427°C).

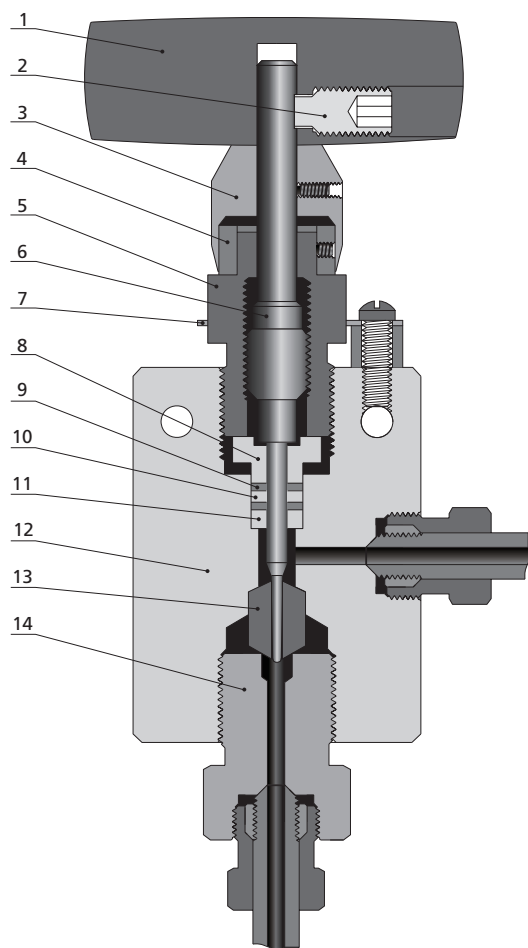
## Flow Data at 100°F (38°C)



## Pressure vs. Temperature Curve



## Standard Materials of Construction

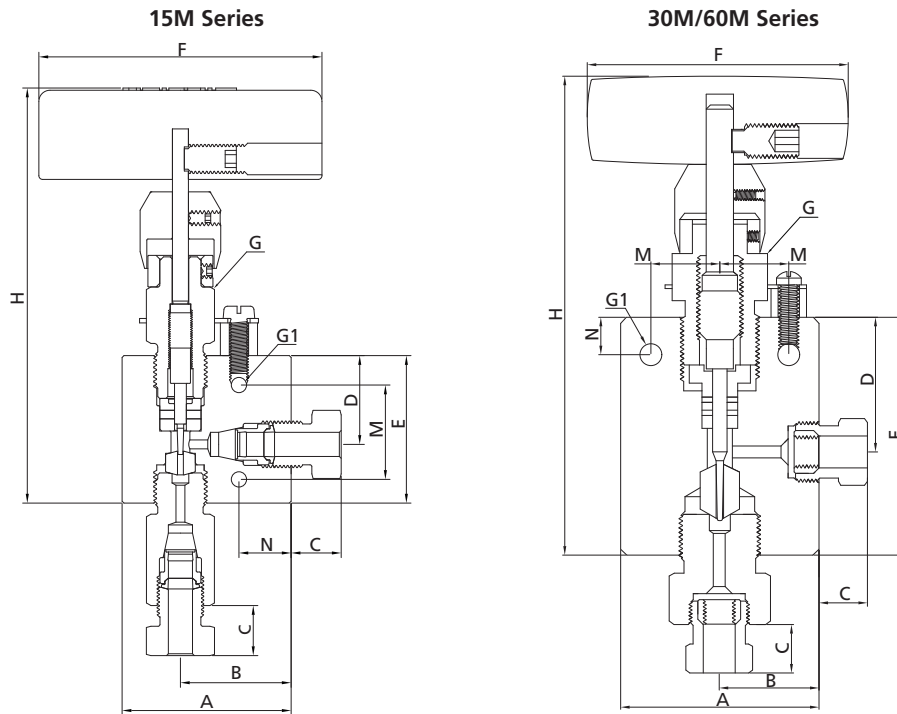


Item	Component	Material Grade
1	Handle	Stainless steel
2	Handle Screw	Stainless steel
3	Thimble	304 SS
4	Barrel	304 SS
5	Packing Gland	C63000
6	<i>Stem</i>	<i>316 (For 15M Series), S17400 (For 30M, 60M Series)</i>
7	Locking Plate	304 SS
8	Packing Ring	<i>316 (For 15M, 30M Series), S17400 (For 60M Series)</i>
9	<i>Packing</i>	<i>PTFE/RPTFE/Nylon/Graphite</i>
10	<i>Retaining Ring</i>	<i>PEEK (60M Series Only)</i>
11	<i>Packing Washer</i>	<i>316 (For 15M Series), S17400 (For 30M, 60M Series)</i>
12	<i>Body</i>	<i>316 SS</i>
13	<i>Seat</i>	<i>316 SS</i>
14	<i>Seat Gland</i>	<i>316 SS</i>
	Lubricant	Molybdenum Disulfide/Fluorinated-based

*Wetted components listed in italics.*

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

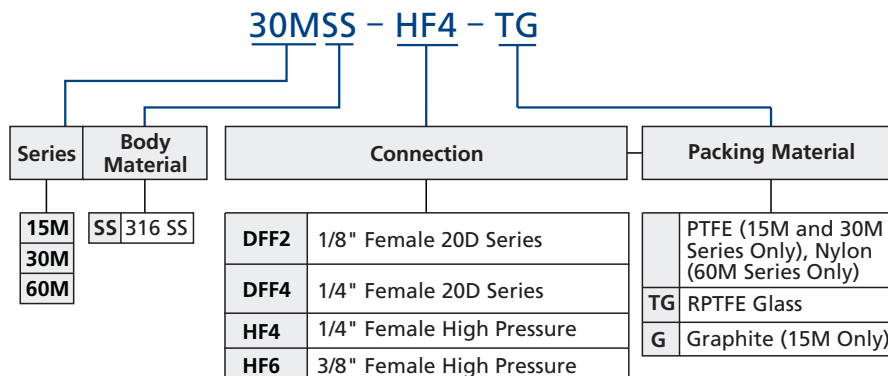
## Ordering Information and Dimensions



Ordering Number	Connection	Orifice in. (mm)	Dimensions, in. (mm)											
			A	B	C	D	E	F	G	G1	H	M	N	Thickness
15MSS-DFF2	DFF2	0.062 (1.57)	1.79 (45.5)	1.17 (29.8)	0.44 (11.2)	0.94 (23.8)	1.56 (39.6)	3.00 (76.2)	0.87 (22.1)	0.16 (4.1)	4.40 (111.7)	1.00 (25.4)	0.55 (14.1)	0.75 (19.1)
15MSS-DFF4	DFF4	0.062 (1.57)	1.79 (45.5)	1.17 (29.8)	0.53 (13.5)	0.94 (23.8)	1.56 (39.6)	3.00 (76.2)	0.87 (22.1)	0.16 (4.1)	4.40 (111.7)	1.00 (25.4)	0.55 (14.1)	0.75 (19.1)
30MSS-HF4	HF4	0.062 (1.57)	2.00 (50.8)	1.00 (25.4)	0.47 (11.9)	1.12 (28.5)	2.00 (50.8)	3.00 (76.2)	0.97 (24.6)	0.22 (5.6)	4.90 (124.5)	0.69 (17.3)	0.50 (12.7)	1.00 (25.4)
60MSS-HF4	HF4	0.062 (1.57)	2.00 (50.8)	1.00 (25.4)	0.47 (11.9)	1.31 (33.3)	2.63 (66.8)	3.00 (76.2)	0.97 (24.6)	0.22 (5.6)	5.54 (140.7)	0.69 (17.3)	0.50 (12.7)	1.00 (25.4)
60MSS-HF6	HF6	0.062 (1.57)	2.00 (50.8)	1.00 (25.4)	0.61 (15.6)	1.31 (33.3)	2.63 (66.8)	3.00 (76.2)	0.97 (24.6)	0.22 (5.6)	5.54 (140.7)	0.69 (17.3)	0.50 (12.7)	1.00 (25.4)

- NOTES: 1. G is the drill dimension of packing bolt 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 when stem is in fully open position.  
 5. All dimensions are for reference only and are subject to change. For dimensions not shown above, please contact the FITOK Group or our authorized distributors.

## Ordering Number Description



NOTE: "Ordering Number Description" is a reference to understand the combination rules of FITOK product part number. Not all combinations are available.