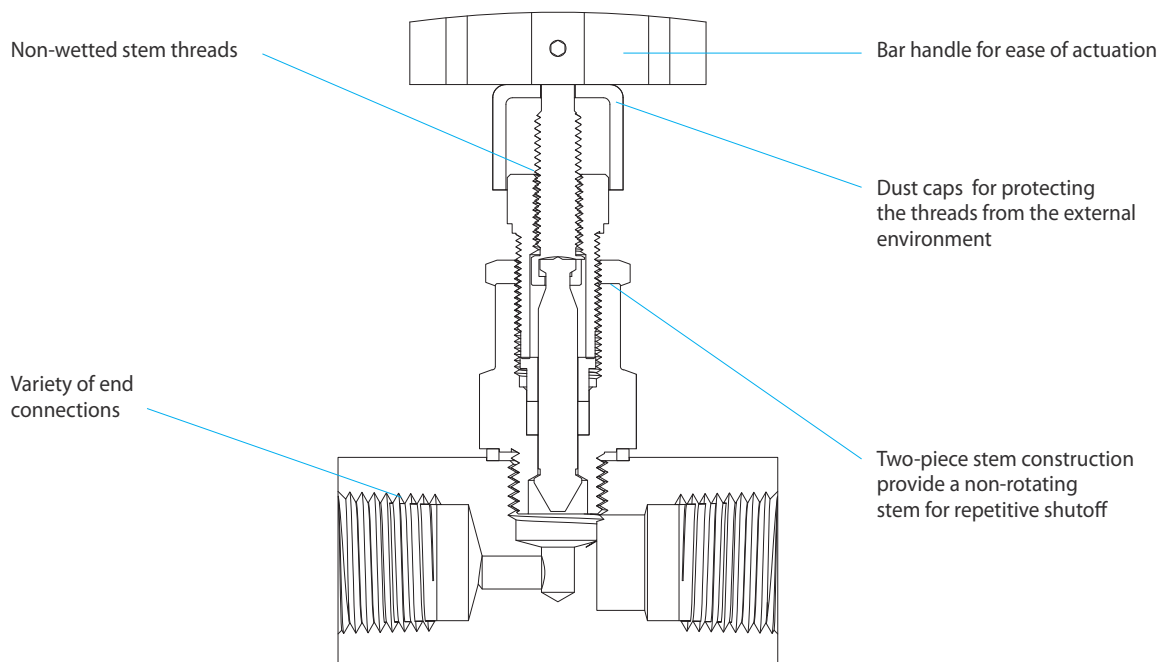


Features

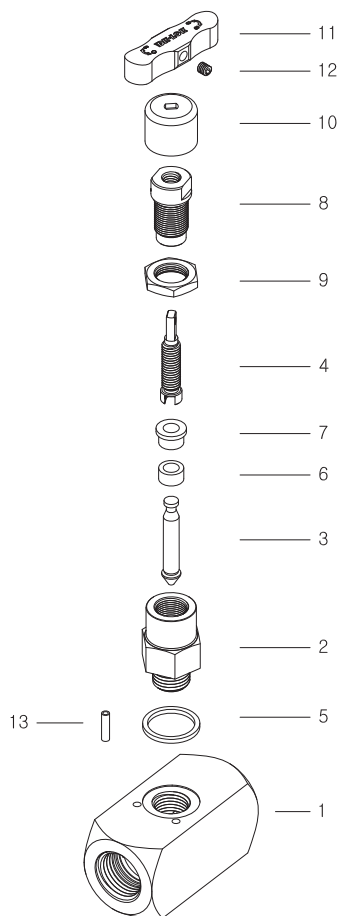


- Compact and sturdy design.
- Sintered molded handle for the user of the handle operational convenience.
- Stainless steel spring pin in order to prevent the loosening of bonnet.
- The fluid is not in contact with the threaded stem.
- VG16 series Isolates and vents the system media in instrument air, nitrogen header, lube oil, and general utility service applications in the oil and gas, chemical, petrochemical, and other general industrial markets.



Design

- Straight and angle patterns.
- Standard PTFE packing, and optional Graphite packing for higher temperature service.
- Broad choices of end connections include reliable NPT & ISO Male & Female pipe threads.

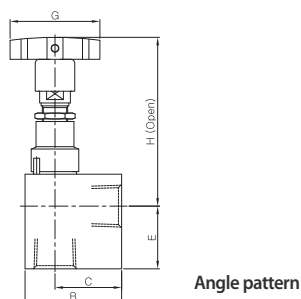
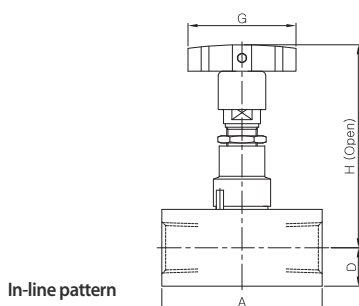
Material of Construction


Component	Valve Body Materials	
	Stainless Steel	Carbon Steel
	Material Grade/ASTM Specification	
1. Body	SS316 / A276	Zinc plated carbon steel/AISI 1018
2. Bonnet	SS316 / A276	
3. Stem	SS316 / A276	
4. Stem disc	S17400 SS / A564 Condition H1150D	
5. Bonnet seal ring	SS316 / A276	
6. Packing	Carbon/glass-filled PTFE or graphite	
7. Gland	SS316 / A276	
8. Packing Bolt	SS316 / A276	
9. Lock nut	SS316 / A276	
10. Cap	SS316 / A276	
11. Handle	Stainless steel	
12. Set screw	Stainless steel	
13. Spring pin	Stainless steel	

Wetted parts are listed in blue.

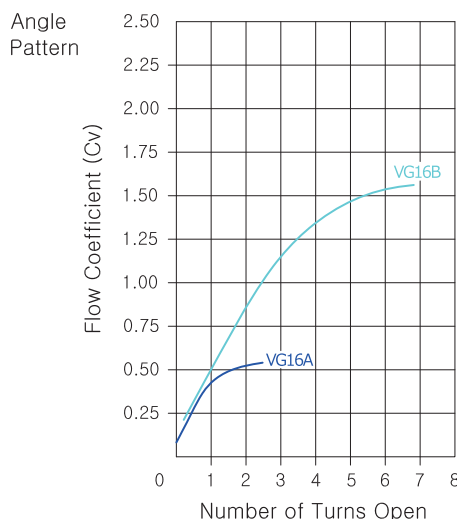
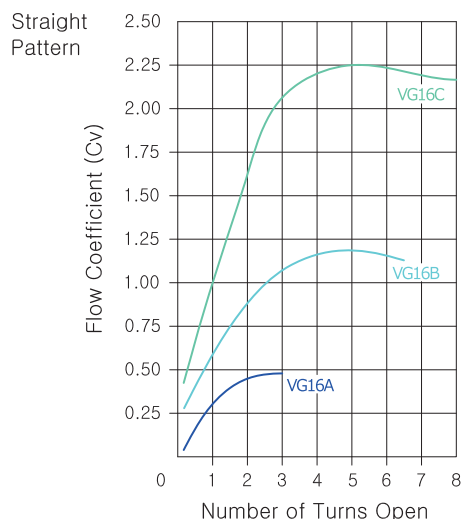
Pressure-Temperature Ratings

Temperature, °F(°C)	Packing Material	
	PTFE	Graphite
	Working Pressure, psig(bar)	
-20 (-28) to 0 (-17)	-	6000 (413)
0 (-17) to 100 (37)	6000 (413)	6000 (413)
200 (93)	5160 (355)	5160 (355)
300 (148)	4680 (322)	4680 (322)
400 (204)	4260 (293)	4260 (293)
450 (232)	4110 (283)	4110 (283)
500 (260)	-	3960 (272)
600 (315)	-	3780 (260)
650 (343)	-	3660 (252)

Ordering Information and Table of Dimensions


Valve Basic		End Connections		Orifice	Cv	DIMENSION, mm(in.)								
Ordering Number		Inlet	Outlet	mm(in.)		G	D	H	A	E	B	C		
VG16A	F-4N	1/4" Female NPT		5.0(0.20)	0.45	45(1.77)	12.7(0.50)	81.2(3.20)	54.1(2.13)	-	-	-		
	F-4N-A				-		-		21.6(0.85)	38.1(1.50)	25.4(1.00)			
	F-6N	3/8" Female NPT			0.45		12.7(0.50)		81.2(3.20)	57.2(2.25)	-	-	-	
	F-6N-A				-		-	27.9(1.10)		44.5(1.75)	31.8(1.25)			
	F-8N	1/2" Female NPT			0.45		16.0(0.63)	84.6(3.33)	66.8(2.63)	-	-	-		
	F-8N-A				-		-		31.2(1.23)	51.0(2.00)	33.3(1.31)			
	MF-4N	1/4" Male NPT	1/4" Female NPT	0.45	12.7(0.50)		81.2(3.20)	60.5(2.38)	-	-	-			
	MF-6N	3/8" Male NPT	3/8" Female NPT		16.0(0.63)		84.6(3.33)	70.0(2.76)						
	MF-8N	1/2" Male NPT	1/2" Female NPT		12.7(0.50)		81.2(3.20)	57.2(2.25)						
	SW-4P	1/4" Pipe Socket weld			16.0(0.63)		84.6(3.33)							
	SW-6P	3/8" Pipe Socket weld			19.1(0.75)		87.6(3.45)	63.5(2.50)						
	SW-8P	1/2" Pipe Socket weld			12.7(0.50)		81.2(3.20)	50.8(2.00)						
	SW-4T	1/4" Tube Socket weld						57.2(2.25)						
	SW-6T	3/8" Tube Socket weld						60.5(2.38)						
	SW-8T	1/2" Tube Socket weld						51.0(2.00)						
	SW-6M	6mm Tube Socket weld						57.2(2.25)						
	SW-8M	8mm Tube Socket weld						70.0(2.76)						
	SW-10M	10mm Tube Socket weld						76.2(3.00)						
	SW-12M	12mm Tube Socket weld						88.9(3.50)						
VG16B	F-8N	1/2" Female NPT		8.0(0.31)	1.20	64(2.52)	16.0(0.63)	98.3(3.87)	70.0(2.76)	-	-	-		
	F-8N-A				1.60		-		-	31.2(1.23)	51.0(2.00)	35.1(1.38)		
	F-12N	3/4" Female NPT			1.20		19.1(0.75)	101(3.98)	76.2(3.00)	-	-	-		
	F-12N-A				1.60		-		-	40.6(1.60)	63.5(2.50)	38.1(1.50)		
	F-16N	1" Female NPT			1.20		25.4(1.00)	108(4.25)	88.9(3.50)	-	-	-		
	F-16N-A				1.60		-		-	40.6(1.60)	70.0(2.76)	44.5(1.75)		
	MF-8N	1/2" Male NPT	1/2" Female NPT	1.20	16.0(0.63)		98.3(3.87)	76.2(3.00)	-	-	-			
	MF-12N	3/4" Male NPT	3/4" Female NPT		19.1(0.75)		101(3.98)	79.6(3.13)						
	MF-16N	1" Male NPT	1" Female NPT		25.4(1.00)		108(4.25)	88.9(3.50)						
	SW-8P	1/2" Pipe Socket weld			19.1(0.75)		101(3.98)	66.8(2.63)						
	SW-12P	3/4" Pipe Socket weld			22.4(0.88)		105(4.13)	82.6(3.25)						
	SW-16P	1" Pipe Socket weld			25.4(1.00)		108(4.25)	88.9(3.50)						
	SW-8T	1/2" Tube Socket weld			16.0(0.63)		98.3(3.87)	66.8(2.63)						
	SW-12T	3/4" Tube Socket weld												
	SW-16T	1" Tube Socket weld			19.1(0.75)		101(3.98)	66.8(2.63)						
	SW-12M	12mm Tube Socket weld			16.0(0.63)		98.3(3.87)	66.8(2.63)						
	SW-14M	14mm Tube Socket weld												
	SW-16M	16mm Tube Socket weld												
	VG16C	F-12N	3/4" Female NPT		11.0(0.43)		2.25	64(2.52)	22.4(0.88)	133(5.24)	82.6(3.25)	-	-	-
F-16N		25.4(1.00)				136(5.35)			102(4.02)					
MF-12N		3/4" Male NPT	3/4" Female NPT	22.4(0.88)		133(5.24)			88.9(3.50)					
MF-16N		1" Male NPT	1" Female NPT	25.4(1.00)		136(5.35)			102(4.02)					
SW-12P		3/4" Pipe Socket weld		22.4(0.88)		133(5.24)			88.9(3.50)					
SW-16P		1" Pipe Socket weld		25.4(1.00)		136(5.35)								
SW-12T		3/4" Tube Socket weld		22.4(0.88)		133(5.24)			82.6(3.25)					
SW-16T		1" Tube Socket weld							95.3(3.75)					
SW-14M		14mm Tube Socket weld							88.9(3.50)					
SW-16M		16mm Tube Socket weld							82.6(3.25)					
SW-18M		18mm Tube Socket weld												
SW-25M		25mm Tube Socket weld												

All dimensions shown are for reference only and are subject to change. Dimensions with DK-Lok nuts are in finger-tight position.

Flow Data @ 100°F(38°C)

Factory Test and Cleaning

Every valve is tested with the nitrogen gas @ 1,000 psig (68.9 bar) for leakage at the seat to a maximum allowable leak rate of 0.1 SCCM.

The packing is tested for no detectable leakage. Optional hydrostatic shell test with additional cost is performed with pure water at 1.5 times the working pressure.

Every valve is cleaned and packaged in accordance with DK-Lok cleaning standard DC-01.

Sour Gas Service

Valves for use in sour gas are available. Valve wetted components are selected to the requirements of NACE MR0175 for sulfide stress cracking resistant materials. To order, insert -SG in the basic ordering number.

How to order

VG16A-MF4N-

-A

-GF

-S

Valve Pattern Designator	Packing Material Designator	Valve Material Designator
Nil : In-line A : Angle	Nil : PTFE GF : Graphite	S : SS316 C : Carbon Steel

Safe Valve Selection

The selection of a valve for any application or system design must be considered to ensure safe performance. Valve function, valve rating, material compatibility, proper installation, operation and maintenance remain the sole responsibility of the system designer and the user. DK-Lok accepts no liability for any improper selection, installation, operation or maintenance.