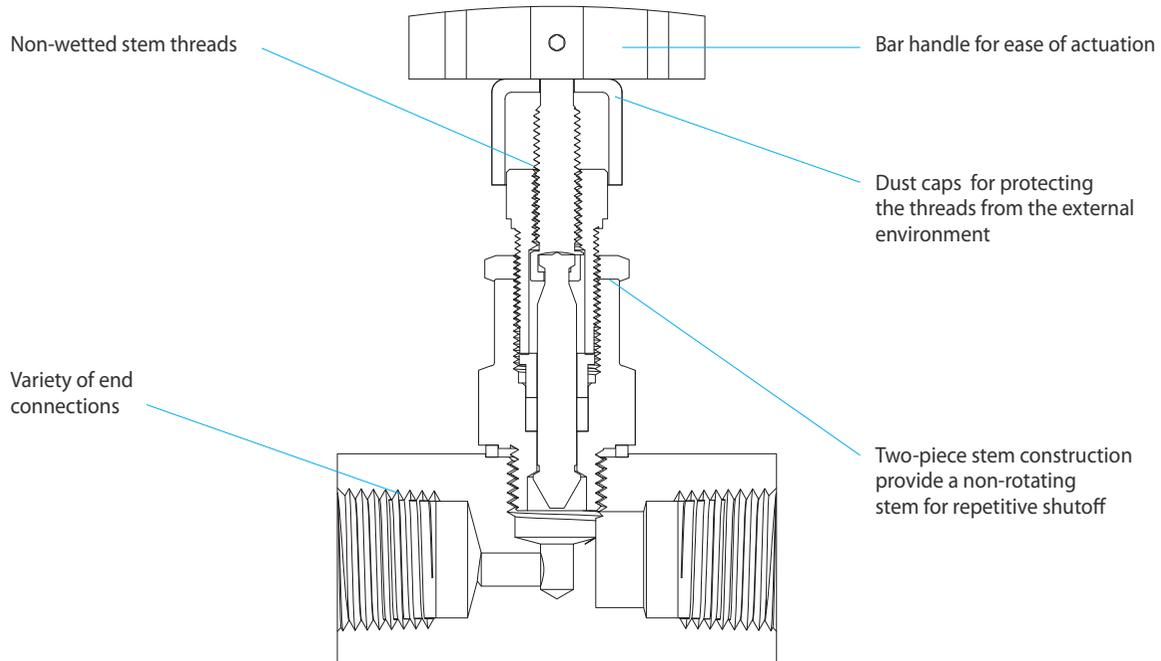


Features



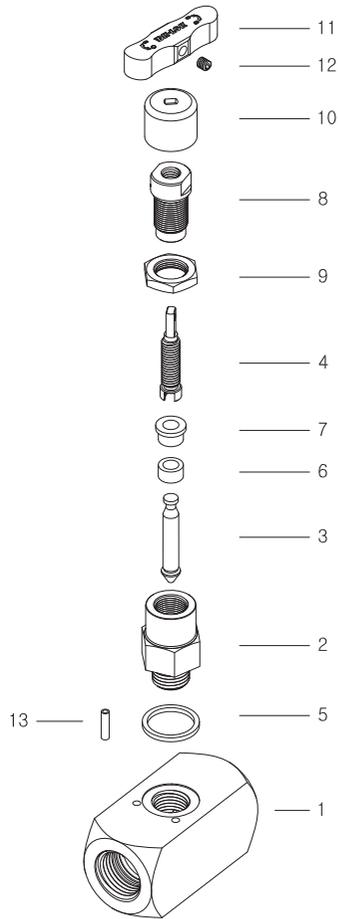
- Compact and sturdy design.
- Sintered molded handle for the user of the handle operational convenience.
- Stainless steel spring pin in order to prevent the loosening of bonnet.
- The fluid is not in contact with the threaded stem.
- VG16 series Isolates and vents the system media in instrument air, 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



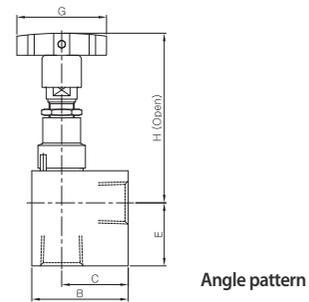
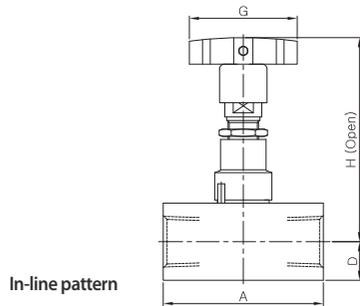
Component	Valve Body Materials	
	Stainless Steel	Carbon Steel
	Material Grade/ASTM Specification	
1. Body	SS316 / A276	Zinc plated carbon steel/AISI 1018
2. Bonnet	SS316 / A276	
3. Stem	SS316 / A276	
4. Stem disc	S17400 SS / A564 Condition H1150D	
5. Bonnet seal ring	SS316 / A276	
6. Packing	Carbon/glass-filled 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)

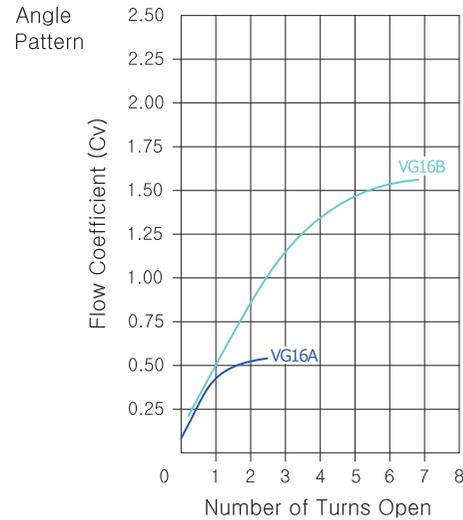
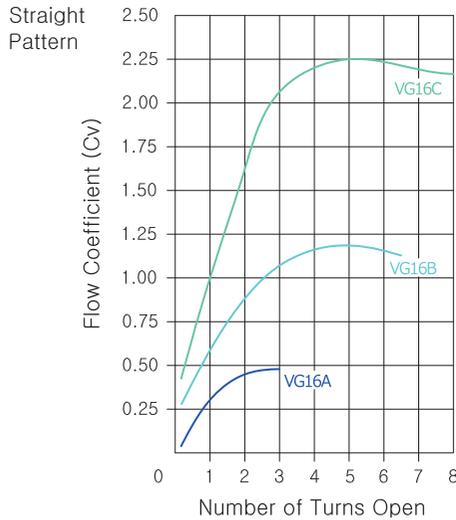
Ordering Information and Table of Dimensions



Valve Basic	End Connections		Orifice mm(in.)	Cv	DIMENSION, mm(in.)												
	Ordering Number	Inlet			Outlet	G	D	H	A	E	B	C					
VG16A	F-4N	1/4" Female NPT		0.45	45(1.77)	12.7(0.50)	81.2(3.20)	54.1(2.13)	-	-	-						
	F-4N-A			0.55		-		-	21.6(0.85)	38.1(1.50)	25.4(1.00)						
	F-6N	3/8" Female NPT		0.45		12.7(0.50)	-	57.2(2.25)	-	-	-						
	F-6N-A			0.55		-	-	-	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			0.55		-	-	-	31.2(1.23)	51.0(2.00)	33.3(1.31)						
	MF-4N	1/4" Male NPT	1/4" Female NPT	5.0(0.20)		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)	63.5(2.50)								
	SW-6P	3/8" Pipe Socket weld					19.1(0.75)	87.6(3.45)	50.8(2.00)								
	SW-8P	1/2" Pipe Socket weld					12.7(0.50)	81.2(3.20)	57.2(2.25)								
	SW-4T	1/4" Tube Socket weld					12.7(0.50)	81.2(3.20)	60.5(2.38)								
	SW-6T	3/8" Tube Socket weld					51.0(2.00)										
	SW-8T	1/2" Tube Socket weld					57.2(2.25)										
	SW-6M	6mm Tube Socket weld					60.5(2.38)										
	SW-8M	8mm Tube Socket weld					51.0(2.00)										
	SW-10M	10mm Tube Socket weld					57.2(2.25)										
SW-12M	12mm Tube Socket weld																
VG16B	F-8N	1/2" Female NPT			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	8.0(0.31)	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				19.1(0.75)		101(3.98)									
	SW-16T	1" Tube Socket weld				16.0(0.63)		98.3(3.87)									
	SW-12M	12mm Tube Socket weld															
	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	1" Female NPT							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)				82.6(3.25)			
	SW-12T	3/4" Tube Socket weld							95.3(3.75)								
	SW-16T	1" Tube Socket weld							88.9(3.50)								
	SW-14M	14mm Tube Socket weld															
	SW-16M	16mm Tube Socket weld															
	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.