

Pressure up to 3,000 psig (207bar)

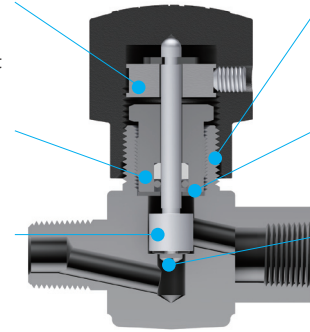
### Features

- Compact and sturdy design
- Preventing influx of contaminants when operating the valve is protected by applying the handle
- The size of the orifice provided 0.145 in. (3.7 mm) and 0.216 in. (5.5 mm).
- DK-Lok Tube Fitting, male NPT, female NPT, and others are available.

Improving the flow control function in a suitably adjustment the vertical movement of the stem

No adjustment is needed in this O-ring stem seals

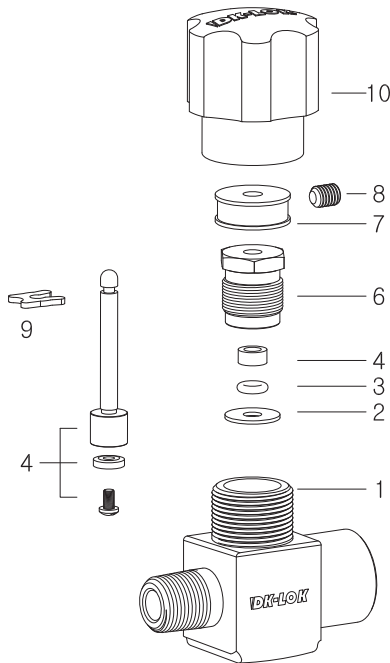
Provide a non-rotating stem repeatedly blocking



Extends the life of the screw to not expose the system fluid to open and close the thread

Securely seal the stem head backs contacts in the fully open state

Easy maintenance and possible replacement of the stem tip



### Material of Construction

Component	Wetted parts are listed in blue.		
	SS316	Alloy400	Brass
	Material Grade/ASTM Standard		
1. Body	SS316/A182	Alloy400/B564	Brass C377/B283
2. Washer	PTFE coated SS316/A276	PTFE coated Alloy400/B164	Mo coated Brass C360/B16
3. O-ring	FKM		
4. Back-up ring	PTFE/D1710		
5. Stem	SS316/A276	Alloy400/B164	SS316/A276
Stem tip	PCTFE/D1430		
Screw	SS316/A276	Alloy400/B164	SS316/A276
6. Packing bolt	Mo coated SS316/A276	Mo coated Alloy400/B164	Mo coated Brass C360/B16
7. Handle spool	Aluminum 6061/B211		
8. Set screw	Stainless Steel 304		
9. Retainer	Zinc plated steel		
10. Handle	Aluminum 6061/B211 with block anodizing		

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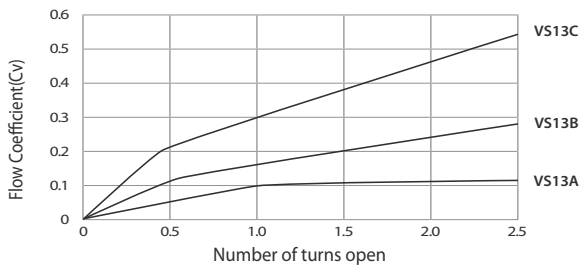
Apply only the proper torque to require a shutoff in order to prevent leakage, maintaining the proper performance, and increase the lifetime of the valve.

### Pressure-Temperature Ratings

ASME Class	1250		1500		N/A	
Material Group	2.2		3.4		N/A	
Material Name	SS316		Alloy400		Brass	
Stem tip Material	PCTFE	PEEK	PCTFE	PEEK	PCTFE	PEEK
Temperature, °F(°C)	Working Pressure, psig(bar)					
-20(-28) to 100(38)	3000(207)	3000(207)	3000(207)	3000(207)	3000(207)	3000(207)
150(65)	2790(192)	2790(192)	2815(194)	2815(194)	2675(184)	2675(184)
200(93)	2580(178)	2580(178)	2630(181)	2630(181)	2350(162)	2350(162)
250(121)	-	2455(169)	-	2540(175)	-	2200(152)
300(149)	-	2330(160)	-	2450(169)	-	2050(141)
350(177)	-	2236(154)	-	2408(166)	-	1220(84.1)
400(204)	-	2141(148)	-	2365(163)	-	390(26.9)
450(232)	-	2067(143)	-	2365(163)	-	-

• Buna N, EPDM, and silicon O-ring is max. 250°F(121°C). • Buna C O-ring is -65°F(-53°C) to 250°F(121°C)

## 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 0.1SCCM.

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.

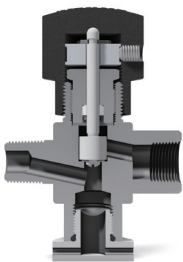
Every valve is cleaned and packaged in accordance with DK-Lok cleaning standard DC-01.

## Ordering Information and Table of Dimensions

Valve Basic Ordering Number	End Connections		Orifice, mm(in.)	Cv	Dimensions, mm(in.)					
	Inlet	Outlet			A	B	D	E	F	L
VS13A-	D2T	1/8" DK-Lok	1/8" DK-Lok	2.4(0.093)	0.12	27.9(1.10)	28.5(1.12)	8.50(0.33)	48.5(1.91)	55.8(2.20)
	D4T	1/4" DK-Lok	1/4" DK-Lok			28.7(1.13)				
	D6M	6mm DK-Lok	6mm DK-Lok			28.7(1.13)				
VS13B-	M4N	1/4" Male NPT	1/4" Male NPT	3.7(0.145)	0.27	25.0(0.98)	28.5(1.12)	10.6(0.42)	48.5(1.91)	50.0(1.97)
	MD4N4T	1/4" Male NPT	1/4" DK-Lok			25.0(0.98) 28.7(1.13)				
	MD4N6M	1/4" Male NPT	6mm DK-Lok			25.0(0.98) 28.7(1.13)				
VS13C-	D6T	3/8" DK-Lok	3/8" DK-Lok	5.5(0.217)	0.53	32.8(1.29)	31.8(1.25)	14.5(0.57)	51.9(2.04)	56.6(2.58)
	F4N	1/4" Female NPT	1/4" Female NPT			27.8(1.09)				
	M6N	3/8" Male NPT	3/8" Male NPT			28.4(1.12)				
	MD4N6T	1/4" Male NPT	3/8" DK-Lok			28.4(1.12) 32.8(1.29)				
	MF8N4N	1/2" Male NPT	1/4" Female NPT			28.4(1.12) 27.8(1.09)				

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

## Option



Rupture disc prevent overpressure of sample cylinder or other pot by ejecting the cylinder fluid to atmosphere.

Ordering Number	Nominal Burst Pressure at 70°F(20°C)
RD1	2850 psig ± 150 psig 196 bar ± 10.3 bar
RD2	1900 psig ± 100 psig 130 bar ± 6.8 bar

## Sour Gas Valves

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

VS13B-MF4N-

-A	-PK	-BC	-RD1	-S
Valve Pattern Designator	Stem tip Material Designator	O-ring Material Designator	Rupture Disc Designator	Valve Material Designator
Nil : In-line A : Angle	Nil : PCTFE PK : PEEK	Nil : FKM BC : Buna C N : NBR EP : EPDM SI : Silicon	RD1 : 2850 psig RD2 : 1900 psig	S : SS316 M : Alloy400 B : Brass

## 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.