Valves

Pressure Rating up to 3,000 psig (206 bar)

Features

Quarter-turn operation



- · Unique forward flow throttling
- · Low torque operation
- Unidirectional flow

Materials of Construction

	Valve Body Materials						
Component	Stainless Steel	Brass					
	Grade/ASTM Specification						
1. Body	SS316/ A479 or A276	Brass / B16					
2. Plug	PTFE-coated SS316/ A479 or A276	PTFE-coated Brass / B16					
3. O-ring	PTFE-coated FKM						
4. Handle	Nylon						
5. Pin	SS316/A276						
6. Snap ring	Stainless Steel						

- Wetted parts and lubricants listed in blue
- · Lubricant is silicone-based

Technical Data

C!	Valve	Pressure	Rating	Temperature	Plug Orifice mm (in.)	
Series	Material	psig	bar	Rating		
V23A	SS316		206		4.4 (.17)	
V23A	Brass	3,000		-10 to 400 °F	4.4 (.17)	
V23B	SS316			(-23 to 204 °C)	7.2 (.28)	
	Brass	2,000	137		7.2 (.20)	

- Differential pressure is limited to maximum 150 psig (10.3bar) when reverse flow occurs.
- Throttling reverse flow may damage O-ring.

Operation

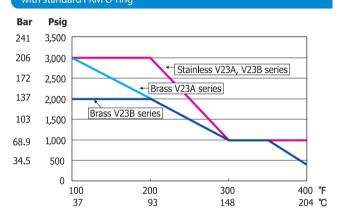
- DK-Lok plug valves provide positive shut-off, high flow capacity, and quick quarter-turn operation.
- DK-Lok plug valve provides flow throttling capability.





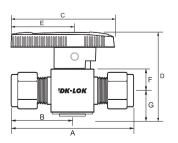


Pressure - Temperature Curves with standard FKM O-ring



Ordering Information and Dimensions





Basic Ordering Number		End Connections		Dimensions mm (inches)							
		Inlet Outlet H		Α	В	С	D	Е	F	G	Н
	D-2T-	1/8 in. DK-Lok		50.5 (1.99)							
	D-4T-	1/4 in.	55.1 (2.17)								
	D-6T-	3/8 in.	58.2 (2.29)								
	D-6M-	6mm	DK-Lok	55.1 (2.17)							
	M-2N-	1/8 in. N	1ale NPT	38.9 (1.53)	19.8	47.8	38.6	29.0	9.4	11.7	19.1
V23A	M-4N-	1/4 in. N	Nale NPT	48.3 (1.90)							
	MD-4N4T-	1/4 in. Male NPT	1/4 in. DK-Lok	51.7 (2.03)	(0.78)	(1.88)	(1.52)	(1.14)	(0.37)	(0.46)	(0.75)
	MF-4N-	1/4 in. Male NPT	1/4 in. female NPT	50.8 (2.00)							
	F-2N-	1/8 in. Fe	male NPT	45.2 (1.78)							
	F-4N-	1/4 in. Fe	male NPT	53.1 (2.09)							
	F-4R-	1/4 in. Femal	e ISO Tapered	56.1 (2.21)							
	D-6T-	3/8 in.	DK-Lok	67.6 (2.66)							
	D-8T-	1/2 in.	DK-Lok	73.2 (2.88)							
	D-8M-	8mm	DK-Lok	67.6 (2.66)							
	D-10M-	10mm DK-Lok		68.1 (2.68)	29.0	63.2	54.1	38.1	14.2	16.8	28.4
V23B-	D-12M-	12mm DK-Lok		75.2 (2.96)							
	M-8N-	1/2 in. Male NPT		67.1 (2.64)	(1.14)	(2.49)	(2.13)	(1.50)	(0.56)	(0.66)	(1.12)
	F-6N-	3/8 in. Female NPT		60.5 (2.38)							
	F-8N-	1/2 in. Fe	73.2 (2.88)								
	F-8R-	1/2 in. Femal	e ISO Tapered	79.8 (3.14)							

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





















Temperature Range

-20 to 400 °F (-28 to 204 °C)

-68 to 221 °F (-20 to 105 °C)

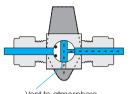
-49 to 275 °F (-45 to 135 °C)

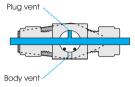
Factory Test

• Every V23 series plug valve is factory tested for shutoff at 600psig (41.3 bar).

Optional Downstream Vent

Vent to atmosphere when valve is closed valve open





Vent to atmosphere
Optional vented plug and valve body provides system pressure release to atmosphere when valve is closed.

- This option reduces the maximum operation pressure to 150 psig (10.3 bar).
- To order, use designator VH. See how to order.

Flow Data

Basic Ordering Number		End Connections			Pressure Drop to Atmosphere, psi (bar)						
		Inlet	Outlet	Cv	Air	Flow, std ft3/min (L/r	min)	Wate	er Flow, US gal/min(L	/min)	
					@ 70 °F (21 °C)						
					1 (0.068)	5 (0.34)	10 (0.68)	1 (0.068)	5 (0.34)	10 (0.68)	
	D-2T-	1/8 in. DK-Lok		0.1	0.3 (8.4)	0.8 (22)	1.1 (31)	0.1 (0.37)	0.2 (0.75)	0.3 (1.1)	
	D-4T-	1/4 in. DK-Lok		1.6	6.0 (169)	13 (368)	18 (509)	1.6 (6.0)	3.6 (13.6)	5.1 (19.3)	
	D-6T-	3/8 in. DK-Lok		1.1	4.1 (116)	8.9 (252)	12.4 (351)	1.1 (4.1)	2.5 (9.4)	3.5 (13.2)	
V23A-	D-6M-	6mm l	DK-Lok	1.6	6.0 (169)	13 (368)	18 (509)	1.6 (6.0)	3.6 (13.6)	5.1 (19.3)	
	M-2N-	1/8 in. N	ale NPT		3.7 (104)	8.1 (229)	11.3 (320)	10(27)	2.2 (8.3)	3.2 (12.1)	
	M-4N-	1/4 in. N	Nale NPT	1.0	3.7 (104)	0.1 (229)	11.3 (320)	1.0 (3.7)	2.2 (0.3)	3.2 (12.1)	
	MD-4N4T-	1/4 in. Male NPT	1/4 in. DK-Lok	0.9	3.3 (93)	7.3 (206)	10.1 (286)	0.9 (3.4)	2.0 (7.5)	2.8 (10.8)	
	MF-4N-	1/4 in. Male NPT	1/4 in. female NPT	1.0	3.7 (104)	8.1 (229)	11.3 (320)	1.0 (3.7)	2.2 (8.3)	3.2 (12.1)	
	F-2N-	1/8 in. Female NPT		1.2	4.4 (124)	9.7 (274)	13.5 (382)	1.2 (4.5)	2.7 (10.2)	3.8 (14.3)	
	F-4N-	1/4 in. Fe	1/4 in. Female NPT 1/4 in. Female ISO Tapered 0.9		0.9 3.3 (93)	7.3 (206)	10.1 (286)	0.9 (3.4)	2.0 (7.5)	2.8 (10.8)	
	F-4R-	1/4 in. Femal									
V23B-	D-6T-	3/8 in. DK-Lok		6.4	23.9 (676)	52.0 (1470)	72.3 (2040)	6.4 (24.2)	14.3 (54.1)	20.2 (76.4)	
	D-8T-	1/2 in. DK-Lok		4.4	16.4 (464)	35.7 (1010)	49.7 (1400)	4.4 (16.6)	9.8 (37.0)	13.9 (52.6)	
	D-8M-	8mm DK-Lok		6.4	23.9 (676)	52.0 (1470)	72.3 (2040)	6.4 (24.2)	14.3 (54.1)	20,2 (76,4)	
	D-10M-	10mm	DK-Lok	0.4	23.9 (676)	32.0 (1470)	72.3 (2040)	0.4 (24.2)	14.5 (54.1)	20.2 (70.4)	
	D-12M-	12mm DK-Lok		4.8	17.9 (506)	39.0 (1100)	54.2 (1530)	4.8 (18.1)	10.7 (40.4)	15.2 (57.5)	
	M-8N-	1/2 in. Male NPT		2.4	9.0 (254)	19.5 (552)	27.1 (767)	2.4 (9.0)	5.4 (20.4)	7.6 (28.7)	
	F-6N-	3/8 in. Fe	3/8 in. Female NPT		16.0 (453)	34.9 (988)	48.6 (1370)	4.3 (16.2)	9.6 (36.3)	13.6 (51.4)	
	F-8N-	1/2 in. Female NPT 1/2 in. Female ISO Tapered		2.7	10.1 (286)	21.9 (620)	30.5 (863)	2.7 (10.2)	6.0 (22.7)	8.5 (32.1)	
	F-8R-			2./		21.5 (020)					

Optional O-ring material

O-ring material

Standard PTFE-coated FKM

PTFE-coated Buna-N

PTFE-coated EPDM

fluid compatibility and system temperatures.

PTFE-coated FKM is standard. Choose optional O-ring material for

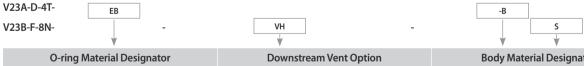
O-ring Designator

EB

EE

How to Order

Select the desired valve basic ordering number, options and body material.



O-ring Material Designator	Downstream Vent Option	Body Material Designator
Nil : PTFE-coated Viton EB : PTFE-coated Buna-N EE : PTFE-coated EPDM	Nil : no vent VH : Vent	S : SS316 B : Brass

We reserve the right to change the specifications stated in this catalog for our continuing program of improvement.

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.