

V46A series Hex. Body Needle Valves

No.V46A-3 July 2013

Pressure rating up to 10,000 psig

Features

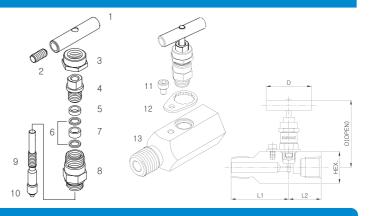
- · Packing bolt permits packing adjustment externally.
- Chevron PTFE packing design provides far improved sealing integrity.
- Packing below stem threads is to isolate threads from system fluid and lubricant washout.
- Non-rotating stem tip at closure for long-life and leak-tight shutoff.
- Lock plate ensures the valve fastened to the body.
- NACE MR0175/ISO 15156-3 applicable

Pressure-Temperature Ratings

Body Material	Packing material	Temperature Rating	Pressure Rating @ 38 °C (100 °F)	Pressure Rating @ Max. Temp.		
Stainless steel	PTFE	- 54 to 232 °C (-65 to 450 °F)	689 bar	285 bar @ 232 °C 4,130 psig @ 450 °F		
Stainless steel	Grafoil	Grafoil -54 to 648 °C (10,000 psig) (10,000 psig)		118 bar @ 648 °C 1,715 psig @ 1,200 °F		
Carbon steel	PTFE	- 29 to 176 °C (-20 to 350 °F)	689 bar	360 bar @ 176 °C		
Carbon steer	Grafoil	- 29 to 176 °C (-20 to 350 °F)	(10,000 psig)	(5,230 psig @ 350 °F)		

Materials of Construction

	Valve Body Materials			
Component	Stainless steel	Carbon steel		
	Grade/ASTM specification			
1. Handle	Stainless steel	Carbon steel		
2. Set screw		Carbon steel		
3. Cap nut	CC216/A276 A470	C C+ 1/11C C 40E4		
4. Packing bolt	SS316/A276 or A479	C.Steel/JIS G4051		
5. Gland		SS316/A276 or A479		
6. Packing supports	Standard chevron PTFE packing. Optional Grafoil			
7. Packing		SS316/A276 or A479 C.Steel/JIS G4051		
8. Bonnet	SS316/A276 or A479			
9. Stem		SS316/A276 or A479		
10. stem disc	SS630	/A564		
11. Lock bolt	Ctainle	ss steel		
12. Lock plate	Stainle			
13. Body	SS316/A276 or A479	C.Steel/ JIS G4051, White zinc galvanized.		
Wetted components listed	Grafoil : TM UCAR			



Ordering Information and Dimensions

Basic Ordering No.		End Connection		Orifice	Cv	C.	Dimensions, in.(mm)				
		Inlet	Outlet	in. (mm)	m) CV	L	L1	L2	Hex	D	0
V46A-	D-4T-	1/4 🛭	K-Lok		0.37	3.21 (81.5)	1.59 (40.4)	1.62 (41.1)	1.25		
	D-6T-	3/8 🛭	K-Lok		0.64	3.33 (84.5)	1.65 (41.9)	1.68 (42.6)		1.77	2.64
	D-8T-	1/2 🛭	K-Lok		0.83	3.54 (90.0)	1.76 (44.7)	1.78 (45.3)			
	F-4N-	1/4 Fen	nale NPT	0.185							
	F-6N-	3/8 Fen	3/8 Female NPT			3.0 ((76.2)	1.75 (44.4)		(31.75)	(45)	(67.2)
	F-8N-	1/2 Fen	nale NPT		0.83			1.25 (31.8)			
	MF-8N-	1/2 Male NPT	1/2 Female NPT			3.5 (88.9)	2.25 (57.1)				
	MF-12N8N-	1/2 Male NPT	1/2 Female NPT				2.25 (57.1)				

Dimensions shown are for reference only and subject to change.

How to order

- To complete ordering number, add material designator S for stainless steel or C for carbon steel. Example V46A-F8N-S
- To order optional Grafoil packing, insert **GF** to the ordering number. Example V46A-F8N-**GF**-S
- To order NACE applicable valve, insert SG to the ordering number. Example V46A-F8N-GF-SG-S

Factory test, cleaning and packaging

- Every valve is factory tested with nitrogen @ 69 bar (1,000 psig) for leakage at the seat to a maximum allowable leak rate of 0.1 SCCM.
- Stem packing is tested for no detectable leakage.
- Every valve is cleaned and packaged in accordance with DK-Lok Corporation cleaning standard DC-01. Optional DC-11 cleaning for oxygen application is available on request.

Packing adjustment and Actuation Torque

- Extreme or rapid temperature cycle while valve in service may require packing adjustment.
- Valves that have not been actuated for a period of time may have a higher initial actuation torque.

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.



























