

# V46A series Hex. Body Needle Valves

No.V46A-3 July 2013

Pressure rating up to 10,000 psig

### **Features**

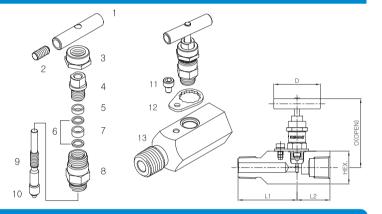
- Packing bolt permits packing adjustment externally.
- Chevron PTFE packing design provides far improved sealing integrity.
- Packing below stem threads is to isolate threads from system fluid and lubricant washout.
- Non-rotating stem tip at closure for long-life and leak-tight shutoff.
- Lock plate 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		
	Grafoil	-54 to 648 °C (-65 to 1,200 °F)	(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		
	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 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 Grafo				
7. Packing		SS316/A276 or A479			
8. Bonnet	SS316/A276 or A479	C.Steel/JIS G4051			
9. Stem		SS316/A276 or A479			
10. stem disc	SS630/A564				
11. Lock bolt	Ctainle	ainless steel			
12. Lock plate	Stairile				
13. Body	SS316/A276 or A479	C.Steel/ JIS G4051, White zinc galvanized.			
Wetted components liste	Grafoil : TM UCAR				



### **Ordering Information and Dimensions**

Basic Ordering No.		End Connection		Orifice	Cv	Dimensions, in.(mm)					
		Inlet	Outlet	in. (mm)	CV	L	L1	L2	Hex	D	0
V46A-	D-4T-	1/4 D	K-Lok		0.37	3.21 (81.5)	1.59 (40.4)	1.62 (41.1)			
	D-6T-	3/8 D	K-Lok		0.64	3.33 (84.5)	1.65 (41.9)	1.68 (42.6)			
	D-8T-	1/2 D	K-Lok		0.83	3.54 (90.0)	1.76 (44.7)	1.78 (45.3)			
	F-4N-	1/4 Fem	1/4 Female NPT						1.25	1.77	2.64
	F-6N-	3/8 Fem	nale NPT	(4.7)		3.0 ((76.2)	1.75 (44.4)		(31.75)	(45)	(67.2)
	F-8N-	1/2 Female 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.

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