

Ultra High Pressure Valve Assembly

Type HP-40 (40,000 psia)

DESCRIPTION

The HP-40 is an ultra high pressure control valve using a tri-axially forged stainless steel body along with a solid Stellite innervalve assembly. The HP-40 can be used for both flow control as well as a Class IV shutoff valve. The versatility of the HP-40 creates a singular solution for your high pressure applications.

APPLICATION

The HP-40 valve is used in industrial applications, research and process pilot plants on liquids and gases. The main use is in high-pressure chemical injection, which is used in the production of high-pressure low density polyethylene (HPLDPE).

MATERIALS

Body	Tri-axially forged 316 stainless steel	
Innervalve	Stellite [®] 6B (plug and seat)	
Packing	Standard is Glass filled PTFE/PFA CV rings or Torlon®/PFA CV rings	
Actuator	Painted carbon steel, nickel plated carbon steel and stainless steel	

ACTUATOR CHOICES

Standard	Air-to-open, fail close Air-to-close, fail open	
Effective Area 35 square inches		
Standard Signals	ndard Signals 3-15#, 3-27#, 6-30#, 22-45#*	
Optional Signals	With positioner, 3-9#, 9-15#	
Accessories	Filter regulator, gauges, I/P, limit switches, handwheel on standard unit, solenoids	

*Positioner Required

OPTIONAL FEATURES

• Stainless steel actuator and hardware for explosion-proof requirements.



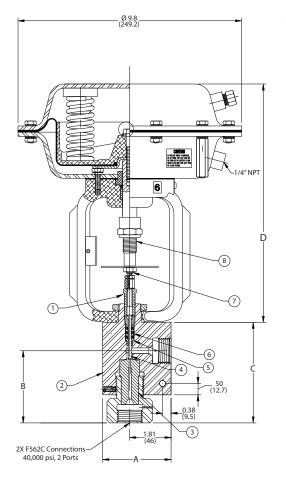
STANDARD FEATURES

- Wide range of interchangeable trims
- Choice of linear or quick opening trims
- ANSI Class III shutoff for sizes P-1 through P-6
- ANSI Class IV shutoff for sizes K through O
- Solid Stellite[®] innervalve
- 9/16 in. high-pressure cone and collar fittings (F562C)
- Pressure rating of 40,000 psia (2758 bar) @ 100° F (38° C)



Product Data Sheet

DIMENSIONS



Items in Drawing

1	2	3	4
Packing set	Adapter	Seat	Innervalve
5	6	7	8
Body & Bonnet	Packing gland	Stem connector	Stem

Dimensions in Inches (mm)

PS	Α	В	С	D	Stroke
1/4 inch	3.00	3.17	4.42	10.47	7/16 in.
1/4 11/01	(76.2)	(80.6)	(112.3)	(266)	///OIII.

TRIM CHART

Trim Size Max. Cv		Orifice Dia. in. (mm)	Orifice Area (sq. in.)	
I *	0.08	0.1000 (2.54)	0.0079	
J*	0.05	0.1000 (2.54)	0.0079	
К	0.03	0.0860 (2.18)	0.0058	
L	0.02	0.0860 (2.18)	0.0058	
М	0.01	0.0860 (2.18)	0.0058	
Ν	0.006	0.0860 (2.18)	0.0058	
0	0.003	0.0860 (2.18)	0.0058	
P-1	0.002	0.0625 (1.59)	0.0031	
P-2	0.0013	0.0625 (1.59)	0.0031	
P-3	0.001	0.0625 (1.59)	0.0031	
P-4	0.0006	0.0625 (1.59)	0.0031	
P-5	0.0004	0.0625 (1.59)	0.0031	
P-6	0.00027	0.0625 (1.59)	0.0031	

* Special order

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