

# High Pressure and Severe Service Valve

## Type HP-15

### DESCRIPTION

The Type HP-15 is a high-pressure control valve using a 17-4ph stainless steel body along with a solid Stellite® innervalue assembly.

### APPLICATIONS

The Type HP-15 valve is used in industrial applications research, and process pilot plants on liquids and gases. The main use is in high-pressure chemical injection used in offshore oil production rigs.

### MATERIALS

<b>Body</b>	17-4 PH
<b>Innervalue</b>	Stellite 6B (plug and seat)
<b>Packing</b>	Standard is teflon CV rings
<b>Actuator</b>	
Standard	Painted carbon steel
Optional	Stainless steel

### ACTUATOR CHOICES

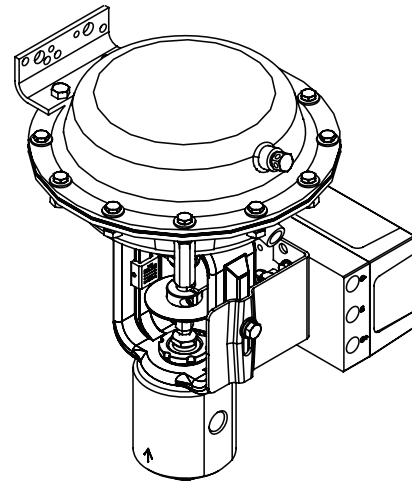
<b>Standard</b>	Air-to-open, fail close Air-to-close, fail open
<b>Effective Area</b>	35 square inches
<b>Standard Signals</b>	3-15#, 3-27#, 6-30#
<b>Optional Signals</b>	With positioner, 3-9#, 9-15#
<b>Accessories</b>	Filter regulator, gauges, I/P, limit switches, handwheel on standard unit, solenoids

### STANDARD FEATURES

- 1/4 in. (6 mm) and 1/2 in. (12 mm) sizes
- Wide range of interchangeable trims
- Choice of linear or quick opening trims
- ANSI Class III shutoff for sizes P-1...P-9
- ANSI Class IV shutoff for sizes K...O
- Solid Stellite innervalue
- High pressure Autoclave fittings
- Pressure rating of 15,000 psi (1034 bar) @ 100° F (38° C)

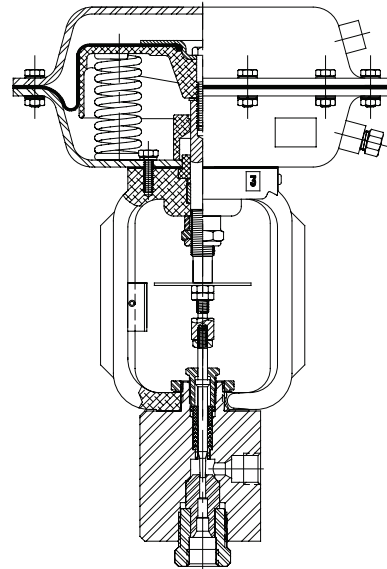
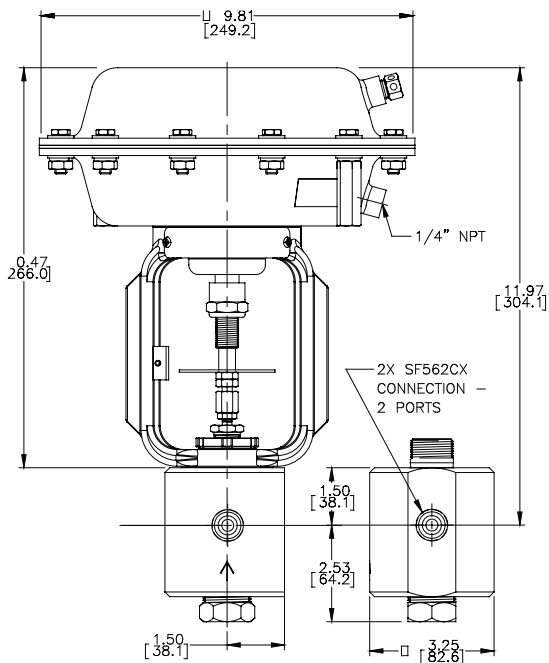


*Shown with optional stainless steel actuator*

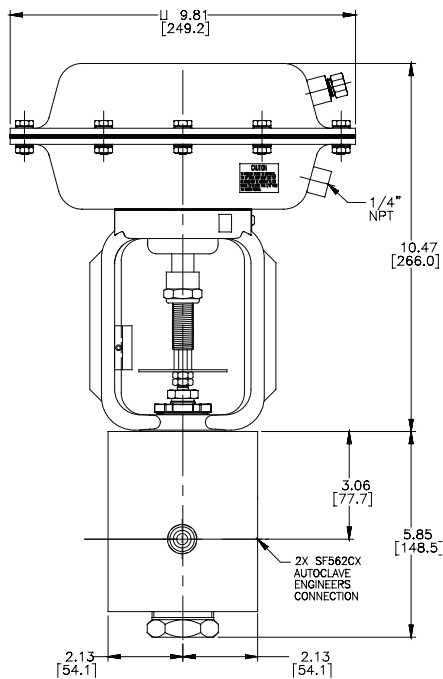


*Shown with optional side-mounted positioner*

### DIMENSIONS FOR 1/4 IN. (6 MM) VALVE



### DIMENSIONS FOR 1/2 IN. (12 MM) VALVE



### TRIM CHART

Valve Size	Trim Size	Max. Cv	Stem Dia. in. (mm)	Orifice Dia. in. (mm)	Orifice Area in. <sup>2</sup> (mm <sup>2</sup> )	Nominal Rangeability	
						Linear	Equal %
1/2 in. (12.7 mm)	A	2.5	0.312 (7.9)	0.375 (9.5)	0.110 (71.0)	40:1	50:1
	B	2.0	0.312 (7.9)	0.375 (9.5)	0.110 (71.0)	40:1	50:1
	C	1.25	0.312 (7.9)	0.281 (7.1)	0.062 (40.0)	40:1	50:1
	D	0.80	0.312 (7.9)	0.250 (6.4)	0.049 (31.6)	40:1	50:1
	E	0.50	0.312 (7.9)	0.250 (6.4)	0.049 (31.6)	40:1	50:1
1/4 in. (6.5 mm)	F	0.32	0.188 (4.8)	0.156 (4.0)	0.019 (12.3)	30:1	40:1
	G	0.20	0.188 (4.8)	0.156 (4.0)	0.019 (12.3)	30:1	40:1
	H	0.13	0.188 (4.8)	0.156 (4.0)	0.019 (12.3)	30:1	40:1
	I	0.08	0.188 (4.8)	0.156 (4.0)	0.019 (12.3)	30:1	40:1
	J	0.05	0.188 (4.8)	0.156 (4.0)	0.019 (12.3)	30:1	40:1
	K	0.03	0.188 (4.8)	0.086 (2.2)	0.005 (3.2)	25:1	—
	L	0.02	0.188 (4.8)	0.086 (2.2)	0.005 (3.2)	25:1	—
	M	0.01	0.188 (4.8)	0.086 (2.2)	0.005 (3.2)	25:1	—
	N	0.006	0.188 (4.8)	0.086 (2.2)	0.005 (3.2)	25:1	—
	O	0.003	0.188 (4.8)	0.086 (2.2)	0.005 (3.2)	25:1	—
	P-1	0.002	0.188 (4.8)	0.063 (1.6)	0.003 (1.9)	15:1	—
	P-2	0.0013	0.188 (4.8)	0.063 (1.6)	0.003 (1.9)	15:1	—
	P-3	0.001	0.188 (4.8)	0.063 (1.6)	0.003 (1.9)	15:1	—
	P-4	0.0006	0.188 (4.8)	0.063 (1.6)	0.003 (1.9)	15:1	—
	P-5	0.0004	0.188 (4.8)	0.063 (1.6)	0.003 (1.9)	15:1	—
	P-6	0.00027	0.188 (4.8)	0.063 (1.6)	0.003 (1.9)	15:1	—
	P-7	0.00018	0.188 (4.8)	0.063 (1.6)	0.003 (1.9)	15:1	—
	P-8	0.00012	0.188 (4.8)	0.063 (1.6)	0.003 (1.9)	15:1	—
	P-9	0.00008	0.188 (4.8)	0.063 (1.6)	0.003 (1.9)	15:1	—

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