

### Description

The KMC VCP-42 Series are 2-way, normally closed, valves designed to control hot or chilled water, or low pressure steam.

These single-seat valves are available in 1/2" to 2" with Cv ratings of 4.6 to 46. Optional 5 psi and 10 psi positive positioners are also available.

The VCP-42 Series feature equal percentage flow characteristics, self-adjusting packing and stainless steel stems. Their construction make them ideal for many applications. These valves meet ANSI Class 4 specifications.



### Features

- ◆ Equal percentage flow
- ◆ 1/2" to 2" sizes and Cv ranges of 4.6 to 46.4
- ◆ Self adjusting packing and stainless steel stems
- ◆ Meet ANSI Class 4 specifications

### Accessories/Repair Parts

CMC-1002	Replacement Positive Positioner
HPO-5001	5 psi (gold) positioner feedback spring
HPO-5003	10 psi (green) positioner feedback spring
HPO-5010	Positioner feedback arm for the 43.4 sq.in. actuator
HPO-5013	Replacement packing kit
HPO-5110	11.4 sq. in. neoprene diaphragm kit
HPO-5111	11.4 sq.in. silicone diaphragm kit
HPO-5113	43.4 sq.in. silicone diaphragm only
HPO-5115	43.4 sq.in. diaphragm only

Consult factory for stem-plug-disc assembly part number.

### Model

Choose the components that fit your application. Complete the corresponding blank in the model number.

VCP-42 XX 02 Y Z

#### "Z" Spring Range

- 0: Positioner Top\*
- 1: 3 to 8 psi (21 to 55 kPa)
- 2: 8 to 13 psi (55 to 91 kPa)
- 3: 3 to 13 psi (21 to 90 kPa)

#### "Y" Actuator Size

- 4: 11.4" Silicone Top
- 5: 11.4" Neoprene Top
- 6: 43.4" Neoprene Top

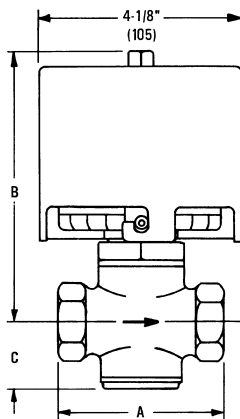
#### "XX" Size/Cv Range

- 31: 1/2" / 4.6
- 32: 3/4" / 6.9
- 33: 1" / 11.6
- 34: 1-1/4" / 18.5
- 35: 1-1/2" / 29.0
- 36: 2" / 46.4

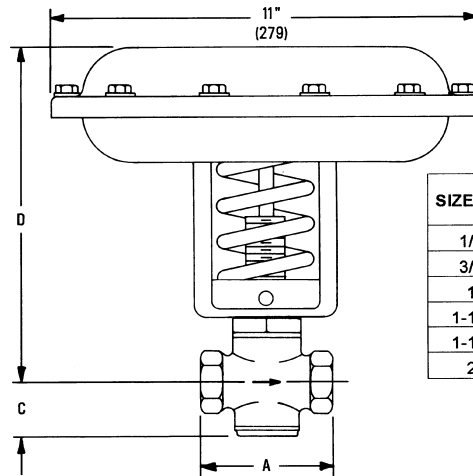
\* Positioner top contains an 8 to 13 psi internal spring.

## Details

All dimensions in inches (mm).



VCP-42 Series with 11.4 Sq. In. Actuator <sup>▲</sup>



VCP-42 Series with 43.4 Sq. In. Actuator <sup>▲</sup>

SIZE NPT	DIMENSIONS IN INCHES (mm)			
	A	B	C	D
1/2"	3.35 (85)	5.86 (149)	1.5 (38)	8.69 (221)
3/4"	3.35 (85)	5.86 (149)	1.5 (38)	8.69 (221)
1"	4.13 (105)	6.05 (154)	1.77 (45)	8.89 (226)
1-1/4"	4.72 (112)	6.17 (157)	1.89 (48)	9.01 (229)
1-1/2"	5.71 (145)	6.45 (164)	2.24 (57)	9.28 (236)
2"	6.5 (165)	6.8 (173)	2.64 (67)	9.64 (245)

MAX CLOSE-OFF RATINGS IN PSI**							
SIZE NPT	Cv	11.4 SQ. IN. ACTUATOR			43.4 SQ. IN. ACTUATOR		
		3-8 & 3-13 PSI RANGE	8-13 PSI RANGE	WEIGHT POUNDS	3-8 & 3-13 PSI RANGE	8-13 PSI RANGE	WEIGHT POUNDS
		0 PSI *		(kg)	0 PSI *		(kg)
1/2"	4.6	52.5	140.0	5.3 (2.4)	210.0	250.0	16.3 (7.4)
3/4"	6.9	52.5	140.0	5.4 (2.4)	210.0	250.0	16.4 (7.4)
1"	11.6	31.5	84.0	6.5 (2.9)	127.5	250.0	17.5 (7.9)
1-1/4"	18.5	21.0	56.0	7.4 (3.3)	85.5	228.0	18.4 (8.3)
1-1/2"	29.0	13.5	36.0	9.5 (4.3)	55.5	146.7	20.5 (9.3)
2"	46.4	9.0	24.0	11.9 (5.4)	36.0	96.0	22.9 (10.4)

\* Pressure applied to actuator \*\* Not to exceed body rating

## Specifications

<b>Action</b>	Normally Closed	<b>Air Connections</b>	1/8" FPT for 11.4 sq.in. actuator
<b>Rangeability</b>	30 to 1		1/4" FPT for 43.4 sq.in. actuator
<b>Nominal Body Rating</b>	250 psi (1724 kPa)	<b>Air Pressure</b>	25 psi (172 kPa) maximum
<b>Body Type</b>	Single seated, screw female connections	<b>Actuator Size</b>	11.4 sq. in.; 43.4 sq.in. pneumatic, direct action
<b>Steam Rating</b>	15.3 psig (105 kPa)	<b>Temperature Limits</b>	
<b>Material</b>	Bronze body and seat; 303 Stainless Steel Stem; Brass plug with EPM disc; V-ring type self adjusting EPM packing; Neoprene or silicone diaphragm; Steel top, epoxy coated; Alloy steel spring.	Medium	32° to 250° F (0° to 121° C)
		Ambient	35° to 175° F (1.7° to 79° C)
		Shipping	-40° to 180° F (-40° to 82° C)

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