

## Description

The VCP-558 Series Butterfly control valves are 2-way, straight through flow, for high capacity control in low-pressure hot water, chilled water, or steam applications. The metal-seated butterfly valve requires less actuator operating torque and should only be used where 1-3% leakage, in the closed position, is acceptable.

These valves are set for 60° rotation for optimum flow characteristics. The valves come assembled in the normally closed position. The unique universal system of brackets and linkages allow for easy field changes to normally open.

## Features

- ◆ Utilize pneumatic control actuators
- ◆ Self-adjusting packing, Stainless steel stems
- ◆ Unique brackets and linkage allow easy field changes

## Accessories

Consult with factory when service conditions are higher than 50 psi and when optional valve materials or construction are required.

## Specifications

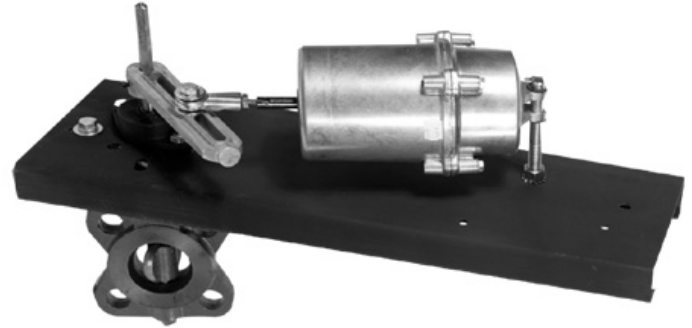
**Valve Size** 2" to 12"  
**Body Type** ANSI 125 & 150 wafer style flange mating. All have 4 alignment holes.

**Flow Characteristics** Linear

**Maximum Differential Pressure**  
 50 psi for water  
 (35 psi for steam)

### Cv Rating @ 60° Rotation

2" = 49	2-1/2" = 84
3" = 132	4" = 257
5" = 429	6" = 632
8" = 1125	10" = 1759
12" = 2533	



MCP-5140 Actuator shown

## Temperature Limits

Medium*	25° to 280° F (-4° to 138° C)
Ambient	-20° to 180° F (-29° to 82° C)
Shipping	-40° to 180° F (-40° to 82° C)

\* Freeze protection required for mediums below 32° F ( 0°C).

## Pressure Drop (PSI) @ 60° Rotation

2" = 3.8; 2-1/2" = 2.5;  
 3" = 2.2; 4" & 5" = 2.1;  
 6" = 2.0; 8" = 1.9; 10" = 2.0;  
 12" = 1.9

## Material

Body	Cast Iron
Disc	Cast Iron
Seat	Swing through
Shaft	416 Stainless Steel
Bushing	Graphite Bronze
Packing	Graphite Teflon
Packing Nut	Brass

## Models

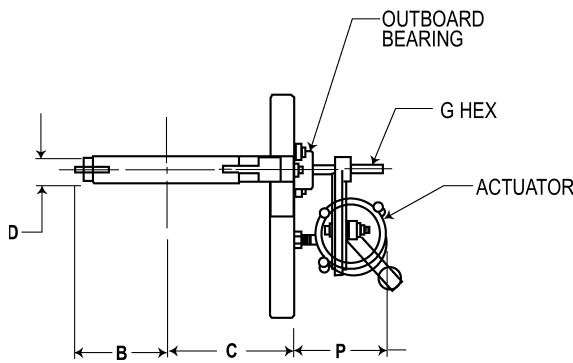
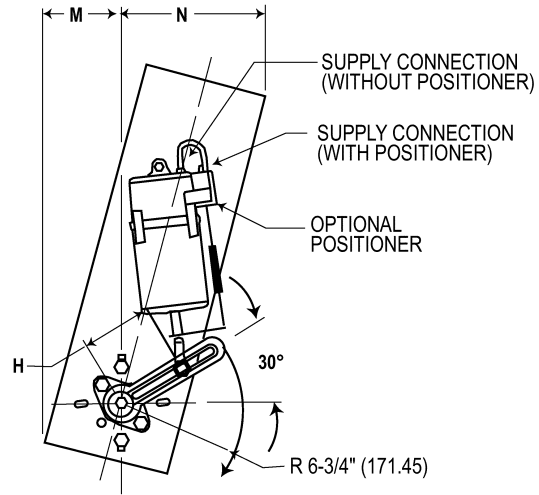
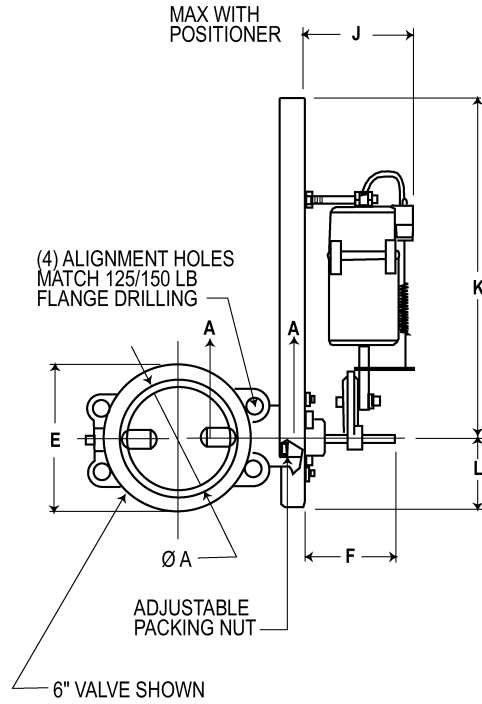
Using the table (below) choose the "X", "Y" and "ZZZ" values that correspond to your application.

### VCP-558-X-Y-ZZZ

X		Y		ZZZ	
Size	Value for "X"	Actuator Qty. & Size	Value for "Y"	Actuator (Choose one)	Value for "ZZZ"
2"	1	One (1) 4" Actuator	1	MCP-1140 Plastic housing without positioner	4PO
2-1/2"	2				
3"	3			MCP-1140 Plastic housing with positioner	4PP
4"	4				
5"	5			MCP-5140 Metal housing without positioner	4MO
6"	6				
8"	7	MCP-5140 Metal housing with positioner	4MP		
10"	8	Two (2) 4" Actuators	2	MCP-1140 Plastic housing without positioner	4PO
				MCP-1140 Plastic housing with positioner	4PP
12"	9			MCP-5140 Metal housing without positioner	4MO
				MCP-5140 with positioner Metal housing with positioner	4MP
10"	8	One (1) 6" Actuator	1	MCP-1160 Plastic housing without positioner	6PO
				MCP-1160 with positioner Plastic housing with positioner	6PP
12"	9			MCP-5160 Metal housing without positioner	6MO
				MCP-5160 with positioner Metal housing with positioner	6MP

# Details

Dimensions in inches (mm) and weight in pounds (kg)



**NOTE:** Valve dimensional drawings are shown with the MCP-5140 series actuator. The 2" through 8" valves utilize a single MCP-1140 or 5140 series actuator. The 10" and 12" valves utilize a single MCP-1160 or 5160 series actuator. The 10" and 12" valves can also utilize dual MCP-1140 or 5140 series actuators. Consult with KMC Technical Service for dimensional drawings if required for dual MCP-1140 or 5140 series actuators.

Models	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Weight
VCP-558114ZZ	2" (50.8)	2-3/4" (69.85)	5-3/8" (135.53)	1-1/2" (38.1)	3-7/8" (98.43)	5-1/8" (130.18)	13/32" (10.32)	4" (101.6)	7" (177.8)	19-9/16" (496)	4-1/8" (105)	4-7/16" (112.7)	8-1/2" (215.9)	5-1/2" (139.7)	19 lbs. (8.62)
VCP-558214ZZ	2-1/2" (63.5)	3" (76.2)	5-5/8" (142.88)	1-1/2" (38.1)	4-5/8" (117.4-8)	5-1/8" (130.18)	13/32" (10.32)	4" (101.6)	7" (177.8)	19-9/16" (496)	4-1/8" (105)	4-7/16" (112.7)	8-1/2" (215.9)	5-1/2" (139.7)	20 lbs. (9.07)
VCP-558314ZZ	3" (76.2)	3-1/8" (79.38)	5-7/8" (149.23)	1-1/2" (38.1)	5-1/4" (133.3-5)	5-1/8" (130.18)	13/32" (10.32)	4" (101.6)	7" (177.8)	19-9/16" (496)	4-1/8" (105)	4-7/16" (112.7)	8-1/2" (215.9)	5-1/2" (139.7)	21 lbs. (9.52)
VCP-558414ZZ	4" (101.6)	4-1/4" (107.9-6)	6-3/8" (161.93)	1-1/2" (38.1)	6-3/8" (161.9-3)	5-1/8" (130.18)	13/32" (10.32)	4" (101.6)	7" (177.8)	19-9/16" (496)	4-1/8" (105)	4-7/16" (112.7)	8-1/2" (215.9)	5-1/2" (139.7)	22 lbs. (9.97)
VCP-558514ZZ	5" (127)	4-7/8" (123.8-3)	6-7/8" (174.63)	1-1/2" (38.1)	7-1/2" (190.5)	5-1/4" (133.35)	13/32" (10.32)	4" (101.6)	7" (177.8)	19-9/16" (496)	4-1/8" (105)	4-7/16" (112.7)	8-1/2" (215.9)	5-1/2" (139.7)	31 lbs. (14.06)
VCP-558614ZZ	6" (152.4)	5-3/8" (136.5-3)	7-3/8" (187.33)	1-1/2" (38.1)	8-1/2" (215.9)	5-1/4" (133.35)	13/32" (10.32)	4" (101.6)	7" (177.8)	19-9/16" (496)	4-1/8" (105)	4-7/16" (112.7)	8-1/2" (215.9)	5-1/2" (139.7)	33 lbs. (14.97)
VCP-558714ZZ	8" (203.2)	6-1/2" (165.1)	9-5/8" (244.48)	1-7/8" (47.63)	10-3/4" (273.0-5)	5-3/4" (146.05)	5/8" (15.88)	4" (101.6)	7" (177.8)	19-9/16" (496)	4-1/8" (105)	4-7/16" (112.7)	8-1/2" (215.9)	5-1/2" (139.7)	48 lbs. (21.77)
VCP-558816ZZ	10" (254)	8" (203.2)	10-5/8" (269.88)	1-7/8" (47.63)	13" (330.2)	5-3/4" (146.05)	5/8" (15.88)	6" (152.4)	8" (203.2)	22-3/4" (577.85)	4" (101.6)	3-3/4" (95.25)	12-1/4" (311.5)	8" (203.2)	66 lbs. (29.94)
VCP-558916ZZ	12" (304.8)	9-1/2" (241.3)	11-5/8" (295.28)	1-7/8" (47.63)	15-1/4" (387.3-5)	5-3/4" (146.05)	5/8" (15.88)	6" (152.4)	8" (203.2)	22-3/4" (577.85)	4" (101.6)	3-3/4" (95.25)	12-1/4" (311.5)	8" (203.2)	76 lbs. (34.47)

**KMC Controls, Inc.**  
19476 Industrial Drive  
New Paris, IN 46553  
574.831.5250  
[www.kmcccontrols.com](http://www.kmcccontrols.com)