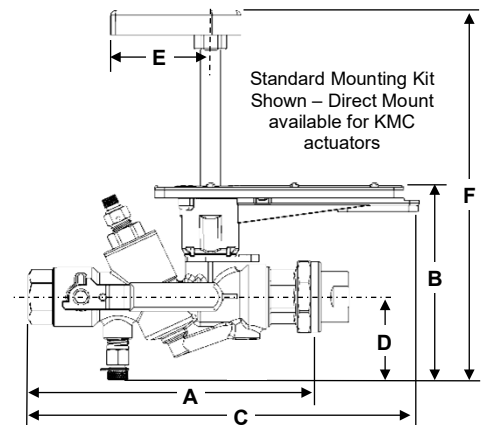




The PIC-V is available with fixed x fixed ends or fixed x union ends. (fixed x fixed shown in color image. Fixed x union shown in dimensional drawing)

**SPECIFICATIONS**

- Static Pressure/Temp Service:** 360 PSI / -4°F to 250°F (600 WOG)  
Chilled water, hot water, up to 50% Glycol
- Flow Optimizer:** Glass Filled Polymer
- Body Material:** Forged DZR Brass
- End Connections:** Brass
- Stem:** Brass
- Stem Seals:** EPDM O-Rings
- Ball Valve:** Stainless Steel
- Stem:** Brass (Optional: Stainless Steel)
- Field Repairable Stem:** Dual Teflon seals and EPDM O-ring
- Ball Seals:** Teflon Seals with EPDM O-Rings
- Angle of Rotation:** 0-90°
- Accessories:** Combination P/T Test Valve and Manual Air Vent (CPTA) Standard
- Leakage Rate:** ANSI Class IV, .01% of Cv



**DIMENSIONS & WEIGHTS (NOMINAL)**

All dimensions are for planning purposes only and may change without notice.

SIZE	A <sup>1</sup>		UNION CONNECTION <sup>2</sup>			B	C <sup>1</sup>	D	E	F <sup>3</sup>	DEPTH (NOT SHOWN)	WEIGHT
	Fixed/Fixed	Fixed/Union	FNPT	MNPT	SWT							
1/2"	6.7	7.9	1.0	1.0	0.7	5.3	9.6	2.5	2.0	9.9	4.1	3.3
3/4"	6.7	7.9	1.0	1.0	0.9		9.6					
1"	6.9	8.0	N/A <sup>4</sup>	1.4	1.3		9.7					
1"L	10.4	10.6	1.7	1.7	1.7	6.0	12.3	2.7	2.0	10.7	5.0	7.8
1-1/4"	9.8	10.3	1.7	1.7	1.7		12.0					
1-1/2"	9.6	10.2	1.7	1.7	1.4		11.9					
1-1/2"L	11.9	12.6	1.6	1.6	1.7	7.1	14.0	3.5	2.0	11.8	6.0	15.2
2"	11.8	12.5	N/A <sup>4</sup>	1.6	1.6		13.9					
2-1/2"	12.8	N/A	N/A	N/A	N/A	6.6	14.0	3.1	2.0	11.4	5.0	16.0
3"	13.0	N/A	N/A	N/A	N/A		14.3					

**NOTES:**

- <sup>1</sup> Length measured with fixed end FNPT; SWT end connection may be longer.
- <sup>2</sup> For overall length, add union connection length to Fixed x Union body length.
- <sup>3</sup> Height is measured with 5.3" long shaft. If Neptronic, KMC Controls, or Siemens actuators are used deduct 1.3" from the height.
- <sup>4</sup> Tailpiece is not available for this size. Male tailpiece used with coupling.

**HIGH LIMIT FLOW RATES (+/-5%)**

To correctly size your valve, select a high limit flow rate that is equal to or greater than the required flow rate.

SIZE	MODEL NO.	PSID RANGE	HEAD LOSS IN FEET <sup>5</sup>	CLOSE-OFF PSID	GPM
1/2", 3/4", 1"	PICV0	3-35	6.9	100	1.0, 2.0, 3.0, 4.0, 5.0, 6.0, 7.0
3/4", 1"		6-35	13.8		8.0, 9.0, 10.0, 11.0, 15.0
1"L, 1-1/4", 1-1/2"	PICV1	4-50	9.2		10, 15, 20
		5-50	11.5		25,30
1-1/4", 1-1/2"	PICV2	6.5-50	14.9		35
1-1/2"L, 2", 2-1/2",3"		4-58	9.2		25, 30, 35
		6-58	13.8		40, 45, 50
		7-58	16.1		55, 60, 65, 70, 75, 80, 85
		11-58	25.3		95
		2", 2-1/2",3"			

**MODEL NUMBER SELECTION**

P I C V

Select a Housing Size: 0=1/2"-1",  
1=1"L-1-1/2", 2=1-1/2"L-3"

Select Ball and Stem Package (P=SS  
Ball/Brass Stem, S=SS Ball and Stem)

Valve	FIXED END OR UNION END <sup>6</sup>		UNION END ONLY <sup>6</sup>
	Female Threaded	Female Sweat	Male Threaded
PICV0	1/2"=E, 3/4"=F, 1"=G <sup>7</sup>	3/8"=K <sup>8</sup> , 1/2"=L, 3/4"=M, 1"=N	1/2"=H, 3/4"=I, 1"=J
PICV1	1"=G, 1-1/4"=P, 1-1/2"=Q	1"=N, 1-1/4"=K, 1-1/2"=W	1/2"=H, 3/4"=I, 1"=J, 1-1/4"=S, 1-1/2"=T
PICV2	1-1/4"=P <sup>8</sup> , 1-1/2"=Q, 2"=R <sup>7</sup> , 2-1/2"=S <sup>9</sup> , 3"=T	1-1/4"=K <sup>8</sup> , 1-1/2"=W <sup>10</sup> , 2"=Y	1"=J, 1-1/4"=S, 1-1/2"=T, 2"=U

**For fixed end by fixed end fill in 2<sup>nd</sup> digit with an "X"**

Extension Kit (0=No,  
1=1-1/2", 2=2")

T= Optional  
3" x 3"  
Aluminum  
Hanging ID Tag

Insert Actuator Model Number. If Actuator is supplied by others, insert "1" for Neptronic, "2" for Johnson Controls, "3" for Schneider Electric, "4" for Honeywell, "5" for Siemens, "6" for Belimo, "7" for KMC Controls, "K" for No Mount. Add "V" to KMC model number for direct mount option.

**NOTES:**

- <sup>5</sup> Head loss in feet is required for pump head calculations. (1 PSI = 2.307 feet of water).
- <sup>6</sup> Select the fixed end first and the union end second.
- <sup>7</sup> Tailpiece not available for this size. Male tailpiece used with coupling.
- <sup>8</sup> Fixed end not available for this size. Union tailpiece only.
- <sup>9</sup> 2-1/2" and 3" is available only with fixed ends.
- <sup>10</sup> Sweat Fixed end not available for this size.

**ACTUATOR SELECTION**



The Griswold Controls Universal Mounting Plate on all 1/2" to 3" valves is compatible with the following actuators besides the actuators detailed in the following tables. Direct Mount Option available on KMC Actuators Only. Contact the factory if you have a different model number not listed below.<sup>11</sup>

- Honeywell:** ML6161D2006, ML6174D2009, ML7161A2008, ML7174A2001, ML6185A1000, ML6185C1008, ML8185A1008, ML8185C1006, ML7285A1007, ML7285C1005, MN6105, MN7510, MN7520, MN6110
- Schneider Electric:** MF40-6083, MA40-7043, MA40-7043-501, MA40-7040, MA40-7040-501, MF40-7043, MF40-7043-501, MS40-7043, MS40-7043-501
- Johnson Controls:** M9106-AGA2, M9106-AGC2, M9106-GGA2, M9106-GGC2, M9206-AGA2, M9206-AGC2, M9206-GGA2, M9206-GGC2, M9104-AGA-2S, M9208-GGA-2, M9208-GGA-3
- Belimo:** LM24, LM24S, LF24, LF24S, LF120, LF120S, LF24-3, LF24-3S, LM24SR, LF24SR, LF24SRS, LMB24-SR-T, LMB24-3-T
- Neptronic:** BBT-24, BBT-1000, BBT-1060, BBT-1021, BBT-1080, BBTHV-1100, BBTHV-1160, BBTHV-1120, BBTHV-1180, BBM2000A, BBM2060A

**SUITABLE FOR 1/2" TO 3/4" VALVES ONLY**

<b>KMC CONTROLS<sup>12</sup></b>	<b>MEP-4201</b>	<b>MEP-4255</b>	<b>MEP-4252</b>
Power Supply	24 Vac/dc	100-240 Vac	24 Vac/dc
Torque	25 in-lb	25 in-lb	25 in-lb
Control Signal: On/Off	•	•	
Control Signal: 3 Point	•		
Control Signal:			Modulating 2-10VDC
Speed	<35 sec	<25 sec	<50 sec
Fail Safe (Capacitor)		•	•
Operating Power	6 VA	6 VA	6 VA
Mounting Components	9656-248	9656-248	9656-248
Weight	1.1 pounds	1.5 pounds	1.5 pounds
Wiring Diagram	See actuator cover for wiring diagram		

**NOTES:**

<sup>11</sup> Do not use actuators capable of torques higher than 90 in-lbs.

<sup>12</sup> Add V to KMC model number for direct mount option.

**SUITABLE FOR 1/2" TO 3" VALVES**

<b>KMC CONTROLS<sup>13</sup></b>	<b>MEP-4001</b>	<b>MEP-4002</b>	<b>MEP-4554</b>	<b>MEP-4555</b>	<b>MEP-4501</b>	<b>MEP-4552</b>	<b>MEP-4551</b>	<b>MCP-36315000</b>
Power Supply	24 Vac	24 Vac	24 Vac/dc	100-240 Vac	24 Vac	24 Vac	24 Vac	Pneumatic
Torque	40 in-lb	40 in-lb	45 in-lb	45 in-lb	40 in-lb	45 in-lb	45 in-lb	59 in-lb
Control Signal: On/Off			•	•	•			
Control Signal: 3 Point	•				•		•	
Control Signal:		Modulating 2-10VDC				Modulating 2-10VDC		8-13 psi
Speed	90 sec	90 sec	<35 sec	<25 sec	<35 sec	50 sec	90 sec	
Fail Safe (Capacitor)			•	•		•	•	
Operating Power	2 VA	4 VA	6 VA	6 VA	6 VA	6 VA	6 VA	
Mounting Components	9656-250	9656-250	9656-248	9656-248	9656-248	9656-250	9656-250	9656-852
Weight	1.1 pounds	1.1 pounds	1.5 pounds	1.5 pounds	1.1 pounds	3.0 pounds	3.0 pounds	1.5 pounds
Wiring Diagram	See actuator cover for wiring diagram							

<b>SIEMENS</b>	<b>GDE131.1P</b>	<b>GDE161.1P</b>	<b>GMA121.1P</b>	<b>GMA131.1P</b>	<b>GMA161.1P</b>
Power Supply	24Vac	24Vac	24Vac/dc	24Vac/dc	24Vac/dc
Torque	44 in-lb	44 in-lb	62 in-lb	62 in-lb	62 in-lb
Control Signal: On/Off			•		
Control Signal: 3 Point	•			•	
Control Signal: Modulating 0-10 VDC		•			•
Speed	90 sec	90 sec	90 sec	90 sec	90 sec
Fail Safe (Spring Return)			•	•	•
Operating Power	3.3 VA	3.3 VA	5 VA	5 VA	5 VA
Mounting Components	9656-250	9656-250	9656-250	9656-250	9656-250
Weight	1.1 pounds	1.1 pounds	3.0 pounds	3.0 pounds	3.0 pounds
Wiring Diagram	<p>Where 6 is CW and 7 is CCW</p>				

**NOTES:**

<sup>13</sup> Add V to KMC model number for direct mount option.