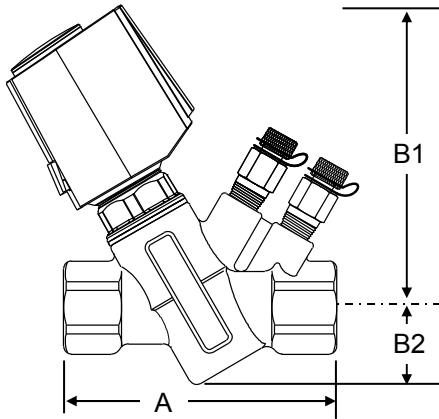


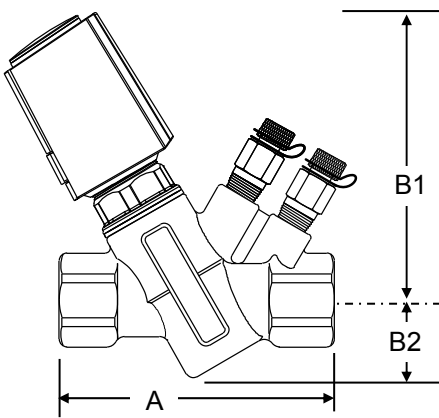
**PRESSURE INDEPENDENT CONTROL VALVE**

**SPECIFICATIONS:**

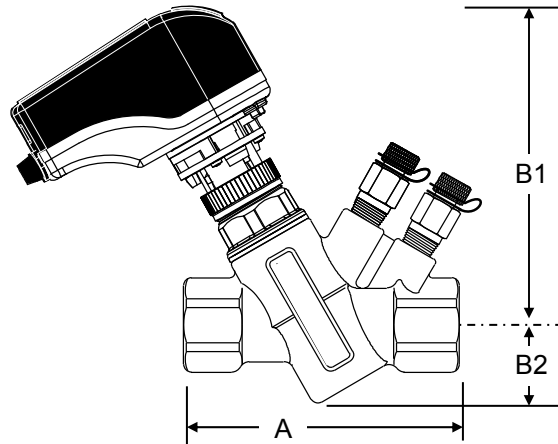
**PSI / Temperature Rating:** 360 PSI / 248° F<sup>1</sup>  
**Actuator Ambient Temp.:** 34° F to 122° F  
**Flow Insert:** Glass reinforced PSU/POM/PPS  
**Diaphragm:** 3/4": EPDM; 1-1/2" and 2": Hydrogenated acrylonitrile-butadiene-rubber  
**Body Material:** Forged brass  
**End Connections:** Female NPT  
**O-Rings:** EPDM  
**Body Tappings:** P/T Test Valves on AB Valve Housing  
**Shut Off Leakage:** IEC 60534-4 – Class IV  
**Maximum Close Off:** 58 PSI  
**Assembly:** Valve comes fully assembled. Actuator is mounted in the field.



AB Valve 1/2" (Shown with FT.0.2 actuator)



AB Valve 1/2" (Shown with FT.03/.04 actuator)



AB Valve 1/2" (Shown with FN.0X actuator)

**DIMENSIONS & WEIGHTS (NOMINAL)**

SIZE	MODEL NO.	HOUSING	A	B1	B2 w/ FT.0.2	B2 w/ FT0.3/4	B2 w/ FN/H.0.x	B2 w/ FN/H.1.x	Cv <sup>2</sup>	WEIGHT <sup>3</sup> (LBS.)
1/2"	PNL_AE	A	3.15	1.22	4.65	4.57	5.12	5.71	3.0	1.2
3/4"	PNL_AF									
1/2"	PNL_BE	AB	3.23	1.22	4.65	4.57	5.12	5.71	3.0	1.4
3/4"	PNL_BF		3.70							
1"	PNL_BG		4.02							
1"L	PNL_B2		5.04	1.85	5.43	5.40	6.02	6.50	14.5	4.1
1-1/4"	PNL_BP		7.52	3.95	N/A	N/A	7.57	8.16	39.6	10.1
1-1/2"	PNL_BQ									
2"	PNL_BR									

**NOTES**

<sup>1</sup> Temperature rating is defined due to no external spindle condensation.  
<sup>2</sup> Cvs are based on housing without cartridge. To calculate pressure drop use the formula  $\Delta P = (GPM/CV)^2$  and add the pressure drop to the cartridge PSID range.  
<sup>3</sup> Weight is valve only. Add Actuator weight on page 2 to get total weight.

**FLOW RATES (+/-10%)**

GPM				SETTING
1/2"-1"		1"L-1-1/4"	1-1/2"-2"	
2.3-29 PSID	4.4-58 PSID	2.3-58 PSID	2.3-58 PSID	
-	0.282	3.81	8.36	1.0
0.163	0.624	4.46	10.0	1.1
0.370	0.920	5.10	11.7	1.2
0.510	1.18	5.72	13.3	1.3
0.664	1.41	6.32	15.0	1.4
0.792	1.61	6.90	16.7	1.5
0.902	1.80	7.47	18.3	1.6
1.03	1.96	8.02	20.0	1.7
1.14	2.12	8.56	21.6	1.8
1.24	2.27	9.08	23.2	1.9
1.33	2.42	9.59	24.8	2.0
1.41	2.56	10.1	26.4	2.1
1.49	2.69	10.6	28.0	2.2
1.55	2.82	11.0	29.6	2.3
1.63	2.95	11.5	31.2	2.4
1.68	3.08	11.9	32.7	2.5
1.73	3.21	12.4	34.2	2.6
1.79	3.33	12.8	35.7	2.7
1.82	3.45	13.2	37.2	2.8
1.88	3.56	13.6	38.6	2.9
1.93	3.68	14.0	40.0	3.0
1.98	3.79	14.4	41.4	3.1
2.02	3.89	14.7	42.8	3.2
2.06	3.99	15.1	44.1	3.3
2.10	4.08	15.5	45.4	3.4
2.14	4.17	15.8	46.6	3.5
2.17	4.25	16.1	47.8	3.6
2.21	4.32	16.5	49.0	3.7
2.25	4.39	16.8	50.2	3.8
2.28	4.46	17.1	51.3	3.9
2.31	4.51	17.4	52.3	4.0
2.34	4.57	17.7	53.3	4.1
2.37	4.61	18.1	54.3	4.2
2.39	4.66	18.4	55.2	4.3
2.42	4.70	18.7	56.0	4.4
2.43	4.73	19.0	56.8	4.5
2.46	4.77	19.2	57.6	4.6
2.48	4.80	19.5	58.3	4.7
2.50	4.83	19.8	58.9	4.8
2.51	4.86	20.1	59.5	4.9
2.53	4.89	20.4	60.0	5.0

**ACTUATORS**

ACTUATOR	FT.0.2	FT.0.3	FT.0.4	FN.0.2	FN.0.3	FN.0.4
Valve	1/2"-1"	1/2"-1"	1/2"-1"	1/2"-1-1/4"	1/2"-1-1/4"	1/2"-1-1/4"
Supply Voltage	24Vac -10%/+20% 50/60 Hz	230Vac +/-10% 50/60 Hz	24Vac/dc - 10%/+20% 50/60 Hz	24Vac/dc +/-10% 50/60 Hz	110/230Vac +/-10% 50/60 Hz	24Vac/dc +/-10% 50/60 Hz
Power Consumption	1.2 watt	1.2 watt	1.2 watt	5VA	5VA	5VA
Type	Thermal	Thermal	Thermal	Electrical	Electrical	Electrical
Control Signal	Modulating: 0-10 Vdc	On/Off	On/Off	Analog 0(2)-10Vdc	Digital (2 position / 3-point floating)	Digital (2 position / 3-point floating)
Feedback	No	No	No	Yes 0(2)-10Vdc	No	No
Failsafe	Yes (Normally Closed)	Yes (Normally Closed)	Yes (Normally Closed)	No	No	No
Operation Time	Approx. 3.5 min	Approx. 4.5 min	Approx. 4.5 min	Approx. 85 sec	Approx. 85 sec	Approx. 85 sec
Protection	IP54, Class III	IP54, Class II	IP54, Class III	IP54, Class II	IP54, Class II	IP54, Class II
Cable	Plug-in, 39"	Fixed, 39"	Fixed, 39"	Fixed, 39"	Fixed, 39"	Fixed, 39"
Weight (LBS) <sup>4</sup>	0.26	0.24	0.24	0.55	0.55	0.55

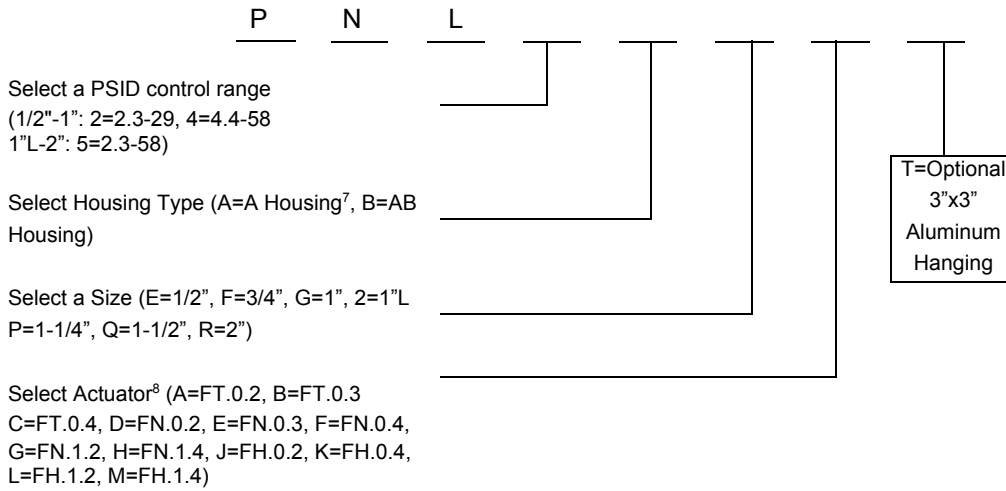
ACTUATOR	FN.1.2	FN.1.4	FH.0.2	FH.0.4	FH.1.2 <sup>5</sup>	FH.1.4 <sup>5</sup>
Valve	1/2"-1-1/4"	1/2"-1-1/4"	1-1/2"L-2"	1-1/2"L-2"	1-1/2"L-2"	1-1/2"L-2"
Supply Voltage	24Vac/dc +/-10% 50/60 Hz	24Vac/dc +/-10% 50/60 Hz	24Vac/dc +/-10% 50/60 Hz	24Vac/dc +/-10% 50/60 Hz	24Vac/dc +/-10% 50/60 Hz	24Vac/dc +/-10% 50/60 Hz
Power Consumption	6VA, 10VA peaks	6VA, 10VA peaks	7VA	7VA	9VA	9VA
Type	Electrical	Electrical	Electrical	Electrical	Electrical	Electrical
Control Signal	Analog 0(2)-10Vdc	Digital (2 position / 3-point floating)	Analog 0(2)-10Vdc	Digital (2 position / 3-point floating)	Analog 0(2)-10Vdc	Digital (2 position / 3-point floating)
Feedback	Yes 0(2)-10Vdc	No	Yes 0(2)-10Vdc	No	Yes 0(2)-10Vdc	No
Failsafe	Yes	Yes	No	No	Yes	Yes
Operation Time	Approx. 85 sec	Approx. 85 sec	Approx. 85 sec	Approx. 85 sec	Approx. 85 sec	Approx. 85 sec
Protection	IP54, Class II	IP54, Class II	IP54, Class II	IP54, Class II	IP54, Class II	IP54, Class II
Cable	Fixed, 39"	Fixed, 39"	Fixed, 39"	Fixed, 39"	Fixed, 39"	Fixed, 39"
Weight (LBS)	0.66	0.66	.55	.55	.66	.66

**NOTES**

<sup>4</sup> Weight includes actuator, adapter ring and cable. Add this weight to valve weight for total weight.

<sup>5</sup> Not available yet. Coming Summer 2016.

**MODEL NUMBER SELECTION<sup>6</sup>**



**NOTES**

<sup>6</sup> Model no. and flow rate are indicated on label affixed to body.  
<sup>7</sup> A Housing is only available in 1/2" and 3/4" size.  
<sup>8</sup> FT Actuators are not compatible with 1"L-1-1/4" valve. 1-1/2" and 2" valves require FH actuators.