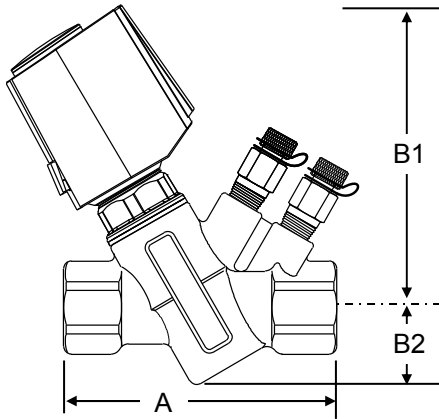


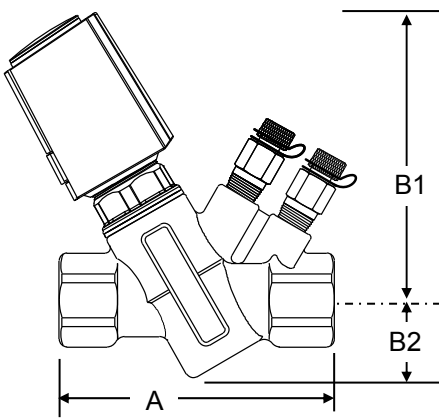
PRESSURE INDEPENDENT CONTROL VALVE

SPECIFICATIONS:

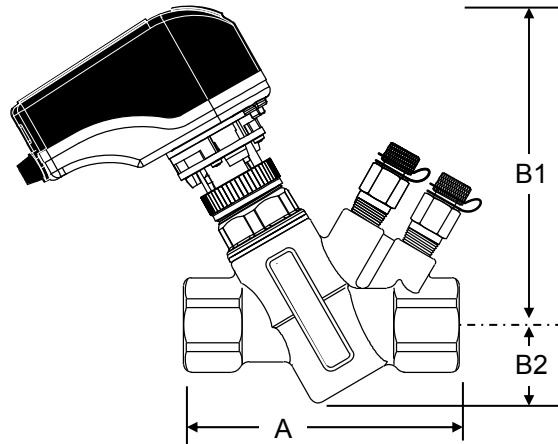
PSI / Temperature Rating: 360 PSI / 248° F¹
Actuator Ambient Temp.: 34° F to 122° F
Flow Insert: Glass reinforced PSU/POM/PPS
Diaphragm: 3/4": EPDM; 1-1/2" and 2": Hydrogenated acrylonitrile-butadiene-rubber
Body Material: Forged brass
End Connections: Female NPT
O-Rings: EPDM
Body Tappings: P/T Test 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 ² | WEIGHT ³ (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

¹ Temperature rating is defined due to no external spindle condensation.
² 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.
³ 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) ⁴ | 0.26 | 0.24 | 0.24 | 0.55 | 0.55 | 0.55 |

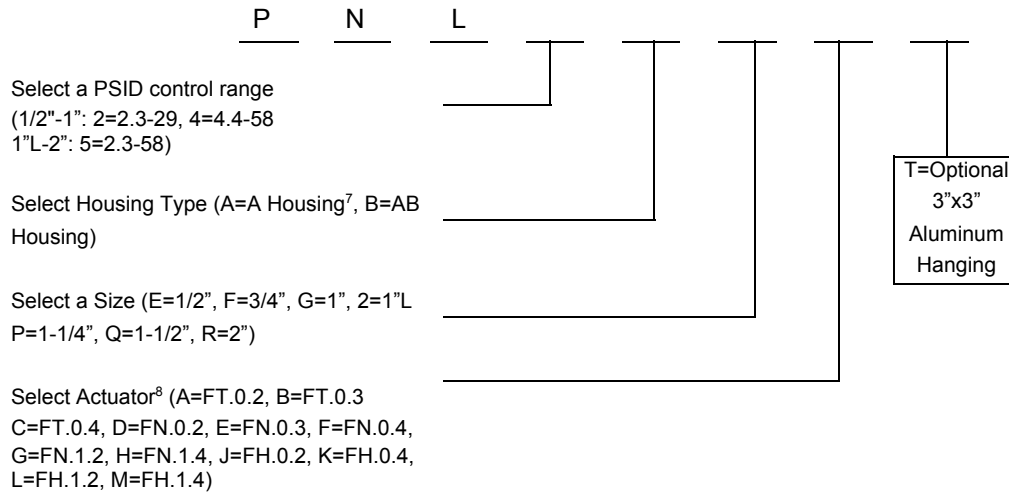
| ACTUATOR | FN.1.2 | FN.1.4 | FH.0.2 | FH.0.4 | FH.1.2 ⁵ | FH.1.4 ⁵ |
|-------------------|------------------------------|--|------------------------------|--|------------------------------|--|
| Valve | 1/2"-1-1/4" | 1/2"-1-1/4" | 1-1/2"L-2" | 1-1/2"L-2" | 1-1/2"L-2" | 1-1/2"L-2" |
| Supply Voltage | 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

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

⁵ Not available yet. Coming Summer 2016.

MODEL NUMBER SELECTION⁶



NOTES

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