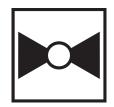






5-year warranty



# Technical data

| E. | nctio  | nal | data |  |
|----|--------|-----|------|--|
| HI | Inctic | mai | пата |  |

| Valve Size                | 10" [250]                                   |  |  |  |
|---------------------------|---|--|--|--|
| Fluid                     | chilled or hot water, up to 60% glycol      |  |  |  |
| Fluid Temp Range (water)  | -22250°F [-30120°C]                         |  |  |  |
| Body Pressure Rating      | ANSI Class Consistent with 125, 232 psi CWP |  |  |  |
| Close-off pressure Δps    | 200 psi                                     |  |  |  |
| Servicing                 | maintenance-free                            |  |  |  |
| Rangeability Sv           | 10:1  |  |  |  |
| Flow Pattern              | 2-way                                       |  |  |  |
| Leakage rate              | 0%  |  |  |  |
| Controllable flow range   | 90° rotation                                |  |  |  |
| Cv                        | 5340  |  |  |  |
| ANSI Class                | Consistent with 125                         |  |  |  |
| Body pressure rating note | 232 psi CWP                                 |  |  |  |
| Maximum Velocity          | 12 FPS                                      |  |  |  |
| Lug threads               | 7/8-9 UNC                                   |  |  |  |
| Valve body                | Ductile cast iron ASTM A536                 |  |  |  |

### Materials

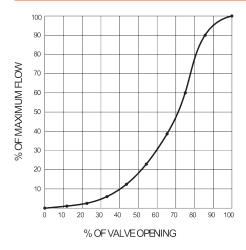
| Valve body  | Ductile cast iron ASTM A536 |  |  |
|---|-----------------------------|--|--|
| Body finish   | polyester powder coated     |  |  |
| Seat  | EPDM                        |  |  |
| Pipe connection for use with ANSI class 125/150 flang |                             |  |  |
| Bearing   | Steel, PTFE, Bronze         |  |  |
| Disc  | 304 stainless steel         |  |  |
| Gear operator materials                               | Gears - hardened steel      |  |  |
| Non-Spring  | PRB(X)                      |  |  |
| Flectronic fail-safe                                  | PKRR(X)                     |  |  |

# Suitable actuators

|      |     | _     |      |
|------|-----|-------|------|
| Prod | uct | f⊵atı | IFAC |

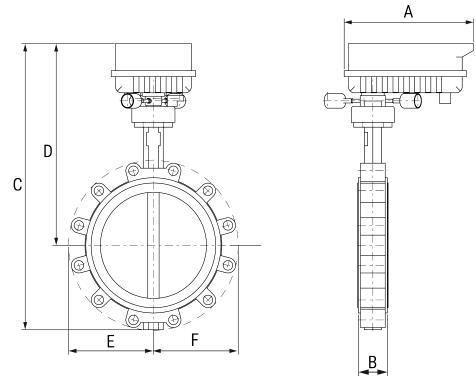


# Flow/Mounting details



### **Dimensions**

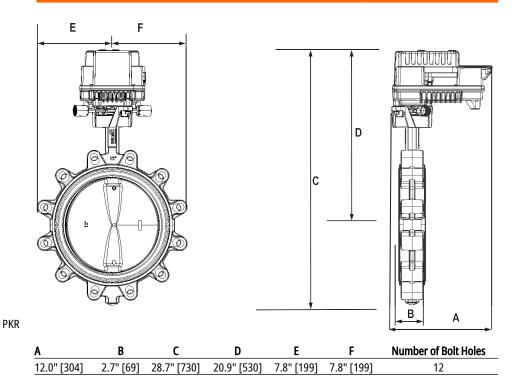
### **Dimensional drawings**



PRB(X)

| Α           | В         | C           | D           | E          | F          | <b>Number of Bolt Holes</b> |
|-------------|-----------|-------------|-------------|------------|------------|-----------------------------|
| 12.0" [304] | 2.7" [69] | 26.4" [671] | 18.6" [473] | 7.8" [199] | 7.8" [199] | 12                          |







On/Off, Floating Point, Non-Spring Return, 24...240 V, NEMA4X for the 10" L-Series BFV

# **Technical data sheet**









#### **Technical data**

| Electrical data | Nominal voltage                     | AC 24240 V / DC 24125 V  |  |  |
|-----------------|-------------------------------------|--|--|--|
|                 | Nominal voltage frequency           | 50/60 Hz   |  |  |
|                 | Power consumption in operation      | 20 W   |  |  |
|                 | Power consumption in rest position  | 6 W  |  |  |
|                 | Transformer sizing                  | 20 VA @ AC/DC 24 V (class 2 power source), 23 VA @ AC/DC 120 V, 52 VA @ AC 230 V             |  |  |
|                 | Auxiliary switch                    | 2 x SPDT, 3 A resistive (0.5 A inductive) @ AC 250 V, one set at 10°, one adjustable 090°    |  |  |
|                 | Switching capacity auxiliary switch | 3 A resistive (0.5 A inductive) @ AC 250 V   |  |  |
|                 | Electrical Connection               | Terminal blocks, (PE) Ground-Screw   |  |  |
|                 | Overload Protection                 | electronic thoughout 090° rotation   |  |  |
| Functional data | Input Impedance                     | 1000 Ω   |  |  |
|                 | Direction of motion motor           | reversible with app  |  |  |
|                 | Manual override                     | 7 mm hex crank, supplied   |  |  |
|                 | Angle of rotation                   | 90°  |  |  |
|                 | Running Time (Motor)                | 35 s   |  |  |
|                 | Noise level, motor                  | 68 dB(A)   |  |  |
|                 | Position indication                 | integral pointer   |  |  |
| Safety data     | Degree of protection IEC/EN         | IP66/67  |  |  |
|                 | Degree of protection NEMA/UL        | NEMA 4X UL Enclosure Type 4X   |  |  |
|                 | Agency Listing                      | cULus acc. to UL60730-1A/-2-14, CAN/CSA<br>E60730-1:02, CE acc. to 2014/30/EU and 2014/35/EU |  |  |
|                 | Quality Standard                    | ISO 9001   |  |  |
|                 | Ambient temperature                 | -22122°F [-3050°C]   |  |  |
|                 | Storage temperature                 | -40176°F [-4080°C]   |  |  |
|                 | Ambient humidity                    | max. 95% r.H., non-condensing  |  |  |
|                 | Servicing                           | maintenance-free   |  |  |
| Weight          | Weight                              | 13 lb [5.9 kg]   |  |  |
| Materials       | Housing material                    | die cast aluminium polycarbonate cover   |  |  |
|                 |                                     |  |  |  |

### **Product features**

#### **Application**

PR Series valve actuators are designed with an integrated linkage and visual position indicators. For outdoor applications, the installed valve must be mounted with the actuator at or above horizontal. For indoor applications the actuator can be in any location including directly under the valve.



#### Operation

The PR series actuator provides 90° of rotation and a visual indicator shows the position of the valve. The PR Series actuator uses a low power consumption brushless DC motor and is electronically protected against overload. A universal power supply is furnished to connect supply voltage in the range of AC 24...240 V and DC 24...125 V. Included is a smart heater with thermostat to eliminate condensation. Two auxiliary switches are provided; one set at 10° open and the other is field adjustable. Running time is field adjustable from 30...120 seconds by using the Near Field Communication (NFC) app and a smart phone.

†Use 60°C/75°C copper wire size range 12...28 AWG, stranded or solid. Use flexible metal conduit. Push the listed conduit fitting device over the actuator's cable to butt against the enclosure. Screw in conduit connector. Jacket the actuators input wiring with listed flexible conduit. Properly terminate the conduit in a suitable junction box. Rated impulse Voltage 4000 V. Type of action 1. Control pollution degree 3.

#### **Electrical installation**

•

Meets cULus requirements without the need of an electrical ground connection.

UP) Universal Power Supply (UP) models can be supplied with 24 VAC up to 240 VAC, or 24 VDC up to 125 VDC.

A Disconnect power.

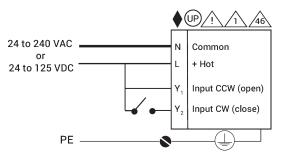
Provide overload protection and disconnect as required.

Two built-in auxiliary switches (2x SPDT), for end position indication, interlock control, fan startup, etc.

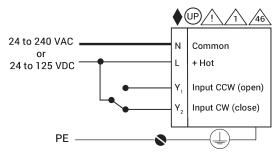
Actuators may be controlled in parallel. Current draw and input impedance must be observed.

#### Warning! Live Electrical Components!

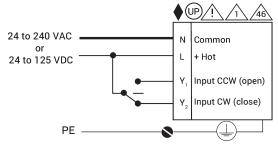
During installation, testing, servicing and troubleshooting of this product, it may be necessary to work with live electrical components. Have a qualified licensed electrician or other individual who has been properly trained in handling live electrical components perform these tasks. Failure to follow all electrical safety precautions when exposed to live electrical components could result in death or serious injury.



On/Off

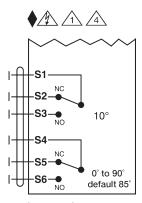


On/Off



Floating Point





**Auxiliary Switches**