







Technical data

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Valve Size	5" [125]
Fluid	chilled or hot water, up to 60% glycol
Fluid Temp Range (water)	-22250°F [-30120°C]
Body Pressure Rating	ANSI Class Grooved AWWA, 300 psi
Close-off pressure ∆ps	200 psi
Servicing	maintenance-free
Rangeability Sv	100:1
Flow Pattern	3-way Mixing/Diverting
Leakage rate	0%
Controllable flow range	90° rotation
Cv	1200
ANSI Class	Grooved AWWA
Body pressure rating note	300 psi
Maximum Velocity	20 FPS
Valve body	Ductile cast iron ASTM A536
Body finish	black alkyd enamel
Stem seal	fiberglass with TFE lining
Seat	EPDM
End fitting	grooved ANSI/AWWA (c606)
Disc	electroless nickel coated ductile iron

PRB(X)

Suitable actuators

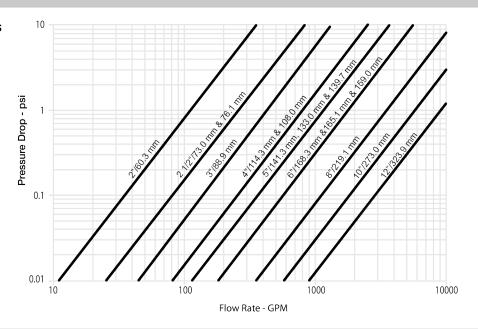
Non-Spring

Materials



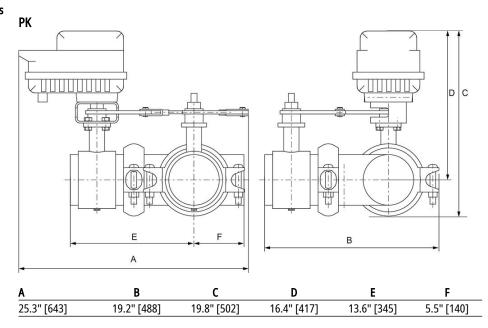
Product features

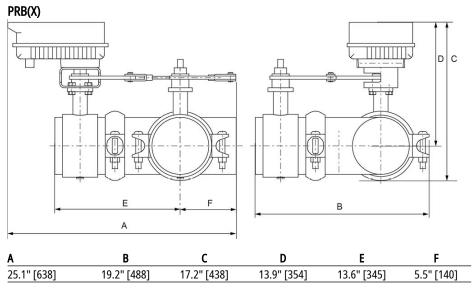
Flow/Mounting details



Dimensions

Dimensional drawings







On/Off, Floating Point, Non Fail-Safe, 24...240 V, NEMA 4X

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	top mounted domed indicator	
Safety data	Degree of protection IEC/EN	IP66/67	
	Degree of protection NEMA/UL	NEMA 4X	
	Enclosure	UL Enclosure Type 4X	
	Agency Listing	cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02, CE acc. to 2014/30/EU and 2014/35/EU	
	Quality Standard	ISO 9001	
	Ambient temperature	-22122°F [-3050°C]	
	Ambient humidity	max. 95% r.H., non-condensing	
	Servicing	maintenance-free	
Weight	Weight	13 lb [5.8 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

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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. Disconnect power.

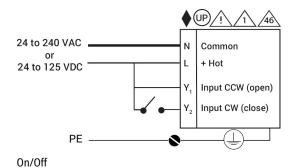
Provide overload protection and disconnect as required.

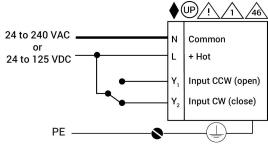
Two built-in auxiliary switches (2x SPDT), for end position indication, interlock control, fan startup, etc.

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

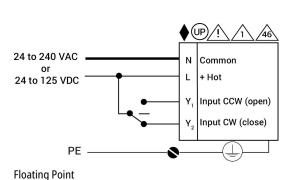
Warning! Live Electrical Components!

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.









S1

S2

NC

S3

NO

10°

S4

S6

NO

default 85°

Auxiliary Switches

www.belimo.us