





5-year warranty



Technical data

Functiona	

Valve Size	6" [150]
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 ∆ps	200 psi
Servicing	maintenance-free
Rangeability Sv	10:1 (for 3070° range)
Flow Pattern	3-way Mixing/Diverting
Leakage rate	0%
Controllable flow range	90° rotation
Cv	1579
ANSI Class	Consistent with 125
Body pressure rating note	232 psi CWP
Maximum Velocity	12 FPS
Lug threads	3/4-10 UNC
Valve body	Ductile cast iron ASTM A536
Body finish	epoxy powder coating (blue RAL 5002)
Seat	EPDM
End fitting	for use with ANSI class 125/150 flanges

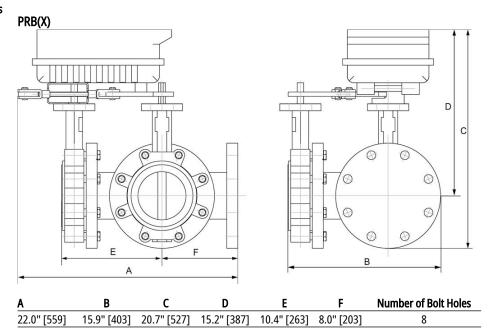
Materials

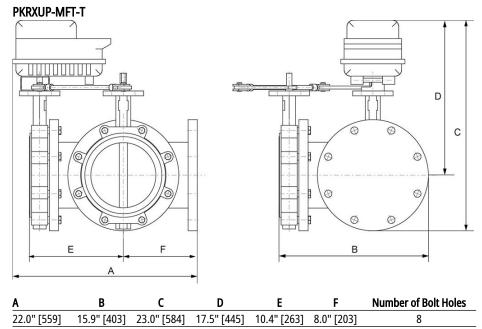
Valve body	Ductile cast iron ASTM A536
Body finish	epoxy powder coating (blue RAL 5002)
Seat	EPDM
End fitting	for use with ANSI class 125/150 flanges
Bearing	RPTFE
Disc	304 stainless steel
Gear operator materials	Gears - hardened steel
Non-Spring	PRB(X)
Electronic fail-safe	PKRB(X)

Suitable actuators

Dimensions

Dimensional drawings







Modulating, Non Fail-Safe, 24...240 V, NEMA 4X with BACnet

Technical data sheet PRXUP-MFT-T







_		
100	nnical	l data
ICL	hnical	uata

Flactrical dat	•

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
Communicative control	BACnet MS/TP Modbus RTII

Functional data

	3
Communicative control	BACnet MS/TP Modbus RTU MP-Bus
Operating range Y	210 V
Operating range Y note	420 mA
Input Impedance	100 k Ω for 210 V (0.1 mA), 500 Ω for 420 mA, 1500 Ω for On/Off
Operating range Y variable	Start point 0.530 V End point 2.532 V
Options positioning signal	variable (VDC, on/off, floating point)
Position feedback U	210 V
Position Feedback	210 V, Max. 0.5 mA, VDC variable
Position feedback U note	Max. 0.5 mA
Position feedback U variable	VDC variable
Direction of motion motor	reversible with app
Manual override	7 mm hex crank, supplied
Angle of rotation	90°
Running Time (Motor)	default 35 s, variable 30120 s
Running time motor variable	30120 s
Noise level, motor	68 dB(A)
Position indication	top mounted domed indicator
Passive sensor inputs	2x (Pt1000, Ni1000, NTC10k2)
Degree of protection IEC/EN	IP66/67

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]



	rechnical data sneet	PRXUP-MF1-1
	Storage temperature	-40176°F [-4080°C]
	Ambient humidity	max. 95% r.H., non-condensing
	Servicing	maintenance-free
Weight	Weight	13 lb [5.8 kg]
/laterials	Housing material	Die cast aluminium and plastic casing

Product features

Application

Material

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.

Accessories

Gateways	Description	Туре
	Gateway MP to BACnet MS/TP	UK24BAC
	Gateway MP to LonWorks	UK24LON
	Gateway MP to Modbus RTU	UK24MOD
Service tools	Description	Туре
	Connection cable 10 ft [3 m], A: RJ11 6/4 ZTH EU, B: 3-pin Weidmüller and supply connection	ZK4-GEN
	Service Tool, with ZIP-USB function, for parametrisable and communicative Belimo actuators, VAV controller and HVAC performance devices	ZTH US

Electrical installation



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

(UP) Universal Power Supply (UP) models can be supplied with 24 V up to 240 V.

Disconnect power.

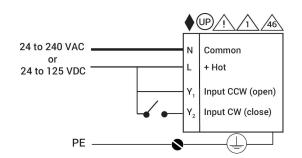
Provide overload protection and disconnect as required.

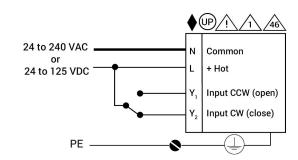
 Λ Two built-in auxiliary switches (2x SPDT), for end position indication, interlock control, fan startup, etc. 5 Only connect common to negative (-) leg of control circuits.

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

Warning! Live Electrical Components!

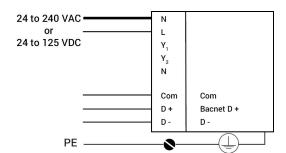
During installation, testing, servicing and troubleshooting of this product, it may be necessary to work with live electrical components. Have a qualified licensed electrician or other individual who has been properly trained in handling live electrical components perform these tasks. Failure to follow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



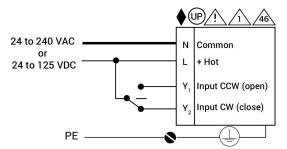




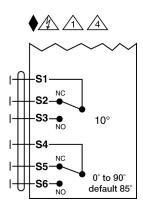
On/Off



BACnet

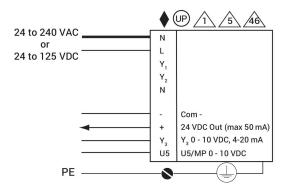


Floating Point

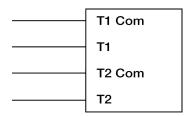


Auxiliary Switches

On/Off



Modulating



Temperature Sensors