F6200LU Technical Data Sheet
Resilient Seat, 304 Stainless Steel Disc

5-year warranty

Application
Valve is designed for use in ANSI flanged piping systems to meet the needs of bi-directional high flow HVAC hydronic applications with 0% leakage. Typical applications include cooling tower bypass, primary flow change-over systems, and large air-handler coil control. Valve face-to-face dimensions comply with API 609 & MSS-SP-67, Completely assembled and tested, ready for installation.

Jobsite Note
Valve assembly should be stored in a weather protected area prior to installation. Reference the butterfly valve installation instruction for additional information.

Flow/Cv								
Cv 10°	Cv 20°	Cv 30°	Cv 40°	Cv 50°	Cv 60°	Cv 70°	Cv 80°	Cv 90°
2	89	188	408	727	1202	1903	2854	3136

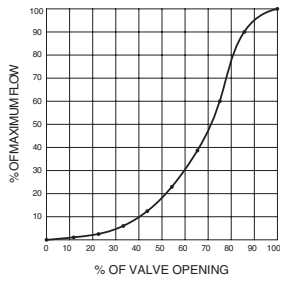
Suitable Actuators

	Non-Spring
F6200LU	PRB(X)

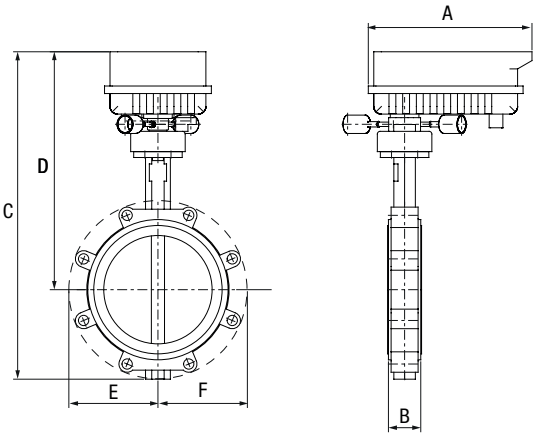
Technical Data	
Fluid	chilled or hot water, up to 60% glycol
Flow characteristic	modified equal percentage
Controllable flow range	90° rotation
Valve Size [mm]	8" [200]
Pipe connection	for use with ANSI class 125/150 flanges
Housing	Ductile cast iron ASTM A536
Body finish	polyester powder coated
Stem	420 stainless steel
Seat	EPDM
Bearing	Steel, PTFE, Bronze
Disc	304 stainless steel
Body Pressure Rating	ANSI Class Consistent with 125, 232 psi CWP
ANSI Class	Consistent with 125
Number of Bolt Holes	8
Lug threads	3/4-10 UNC
Close-off pressure Δps	50 psi
Rangeability Sv	10:1
Maximum Velocity	12 FPS
Cv	3136
Weight	37 lb [17 kg]
Fluid Temp Range (water)	-22...250°F [-30...120°C]
Leakage rate	0%
Servicing	maintenance-free

When installing in victaulic piping systems, use victaulic 41 series flange nipples. 741 flanges not recommended without the use of adapter rings. L-Series butterfly valves are designed to be installed between ANSI 125/150 flat-faced, raised face, slip-on or weld-neck flanges. Do NOT use flange gaskets on L-Series butterfly valves.

Flow/Mounting Details



Dimensions (Inches [mm])



PRB(X)

A	B	C	D	E	F
12.0" [304]	2.4" [60]	23.9" [607]	17.4" [441]	6.5" [165]	

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PRBUP-MFT-T-200 Technical Data Sheet

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

5-year warranty

Technical Data	
Power Supply	24...240 VAC, -20% / +10%, 50/60 Hz, 24...125 VDC, -20% / +10%
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
Electrical Connection	Terminal blocks, (PE) Ground-Screw
Overload Protection	electronic thoughout 0...90° rotation
Operating Range	2...10 V (default), 4...20 mA, variable (VDC, on/off, floating point)
Operating range Y variable	Start point 0.5...30 V End point 2.5...32 V
Input Impedance	100 kΩ for 2...10 V (0.1 mA), 500 Ω for 4...20 mA, 1500 Ω for On/Off
Position Feedback	2...10 V, Max. 0.5 mA, VDC variable
Angle of rotation	90°
Torque motor	1400 in-lb [160 Nm]
Direction of motion motor	reversible with app
Position indication	top mounted domed indicator
Manual override	7 mm hex crank, supplied
Running Time (Motor)	default 35 s, variable 30...120 s
Ambient humidity	max. 95% r.H., non-condensing
Ambient temperature	-22...122°F [-30...50°C]
Storage temperature	-40...176°F [-40...80°C]
Degree of Protection	IP66/67, NEMA 4X, UL Enclosure Type 4X
Housing material	Die cast aluminium and plastic casing
Agency Listing	cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02, CE acc. to 2014/30/EU and 2014/35/EU
Noise level, motor	68 dB(A)
Servicing	maintenance-free
Quality Standard	ISO 9001
Weight	13 lb [5.8 kg]
Auxiliary switch	2 x SPDT, 3 A resistive (0.5 A inductive) @ AC 250 V, one set at 10°, one adjustable 0...90°
Communication	BACnet MS/TP
Passive Sensor Inputs	2x (Pt1000, Ni1000, NTC10k2)

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.

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PRBUP-MFT-T-200 Technical Data Sheet

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

Wiring Diagrams

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 240 VDC.

Disconnect power.

1 Provide overload protection and disconnect as required.

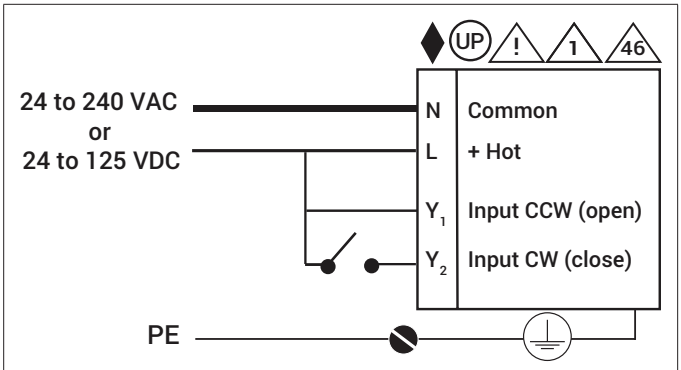
4 Two built-in auxiliary switches (2x SPDT), for end position indication, interlock control, fan startup, etc.

5 Only connect common to negative (-) leg of control circuits.

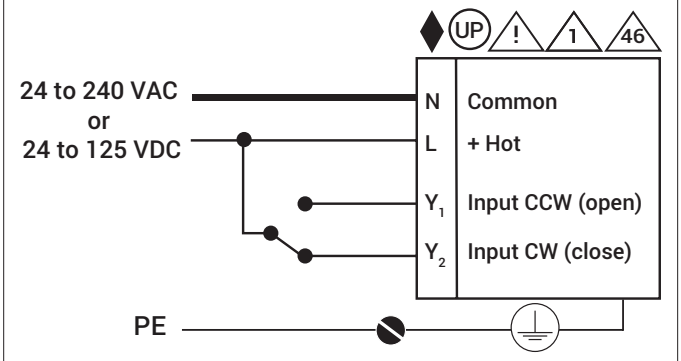
46 Actuators may be controlled in parallel. Current draw and input impedance must be observed.

! ***WARNING! LIVE ELECTRICAL COMPONENTS!***

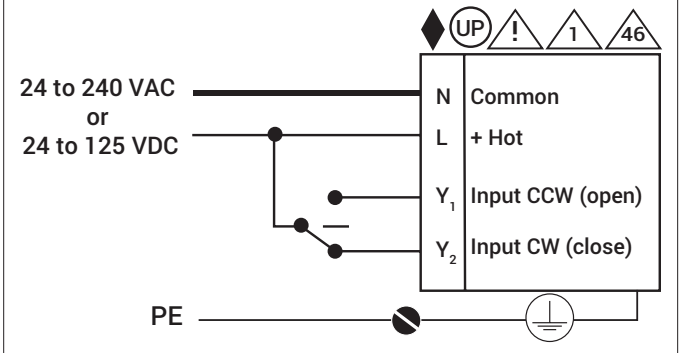
During installation, testing, servicing and troubleshooting of this product, it may be necessary to work with live electrical components. Have a qualified licensed electrician or other individual who has been properly trained in handling live electrical components perform these tasks. Failure to follow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



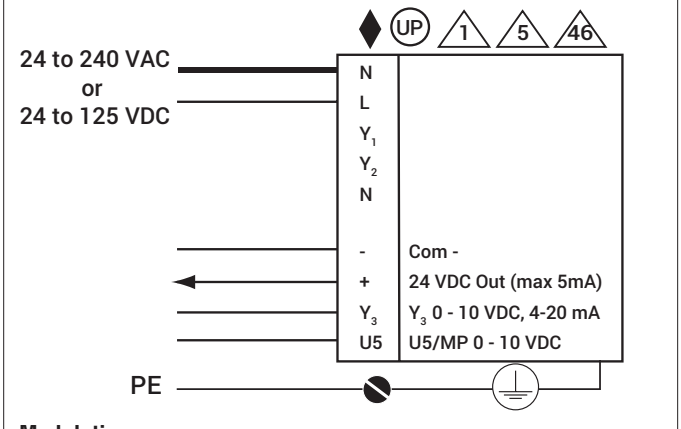
On/Off



On/Off



Floating Point



Modulating

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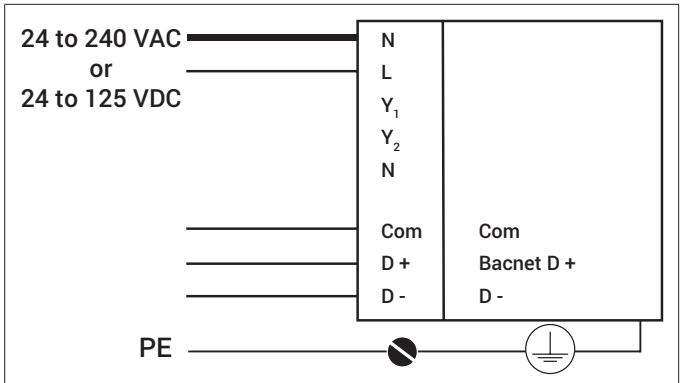
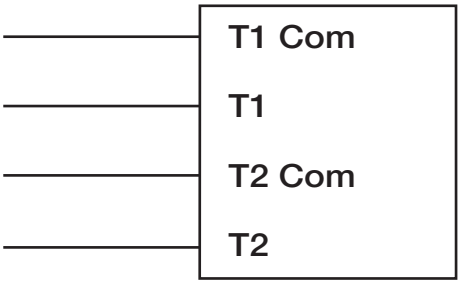
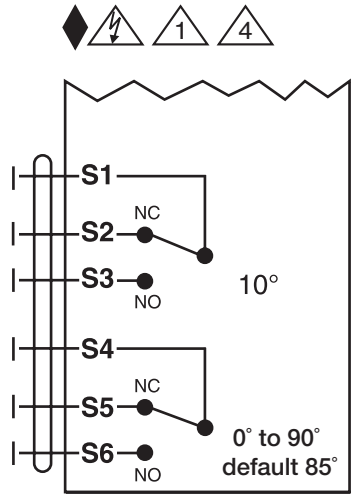
Modulating, Non Fail-Safe, 24…240 V, NEMA 4X with BACnet



BACnet



Temperature Sensors



Auxiliary Switches

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