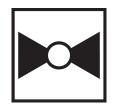


Carbon Steel Body, Hardened Chrome Plated, Stainless Steel Ball and Stem





2-year warranty



#### **Technical data**

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Valve Size	1.5" [40]
Fluid	chilled or hot water, up to 60% glycol, steam
Fluid Temp Range (water)	-22380°F [-30193°C]
Fluid Temp Range (steam)	-22380°F [-30193°C]
Body Pressure Rating	ANSI Class 300
Close-off pressure ∆ps	250 psi
Flow characteristic	equal percentage
Rangeability Sv	300:1
Maximum differential pressure (water)	150 psi
Max Differential Pressure (Steam)	100 psi
Close-Off Pressure (Steam)	150 psi
Flow Pattern	2-way
Leakage rate	ANSI Class IV
Controllable flow range	75°
Cv	55
Maximum Inlet Pressure (Steam)	150 psi
Valve body	WCC grade carbon steel

#### Materials

Body finish	matt black body finish
Stem	stainless steel
Stem seal	PTFE V-ring
Seat	PTFE
Pipe connection	NPT female ends
Ball	stainless steel
Non-Spring	SY1
	AMB(X)
	PRB(X)
Spring	NF

PKRB(X)

# Suitable actuators

Product	features

**Product features** Fast quarter turn open or closed operation, stainless-steel ball and stem, positive isolation, two-piece body construction

**Application** Water-side control of air handling apparatus in ventilation and air-conditioning system.

Water/Steam control in heating system.

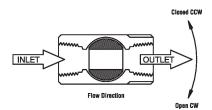
300:1 rangeability.

Electronic fail-safe

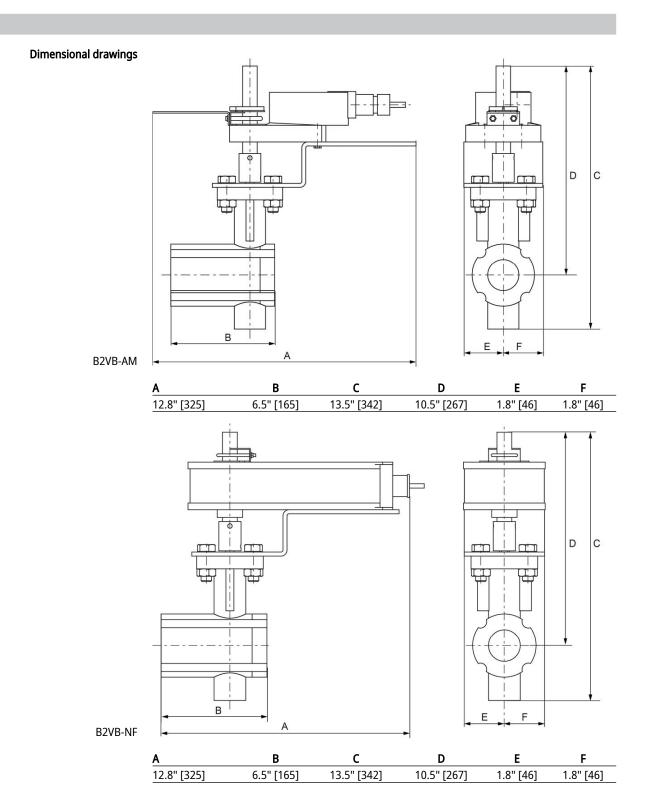
The dimensions and drilling of end flanges conform to the American cast iron flange standard, Class 150 (ANSI B16.1).



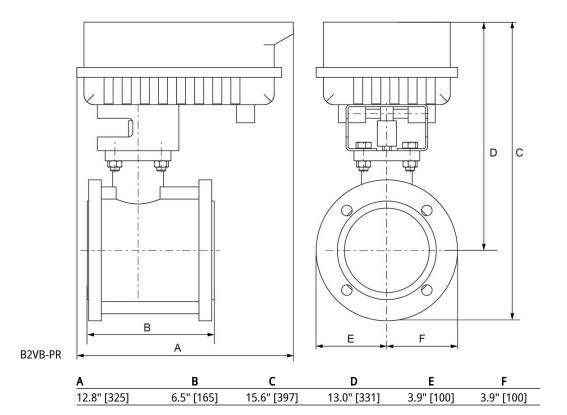
### Flow/Mounting details



# **Dimensions**









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, 1 x 10° / 1 x 090° (default setting 85°)
	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	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
	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. 100% RH
	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.

#### Accessories

Mechanical accessories	Description	Туре
	Hand crank for PR, PKR, PM	ZG-HND PR

#### **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.



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.

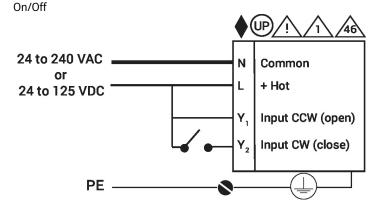


Actuators may be controlled in parallel. Current draw and input impedance must be observed.

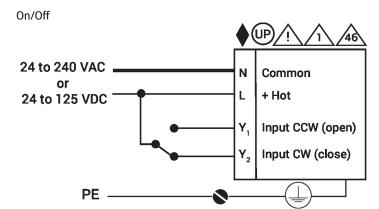
### Warning! Live electrical components!

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.

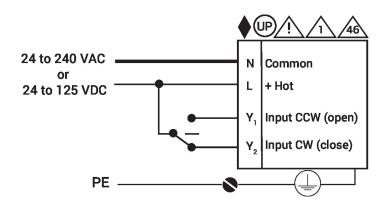
# Wiring diagrams

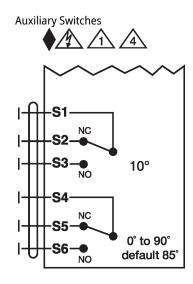






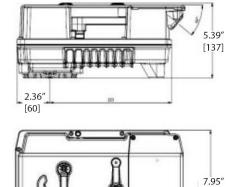
Floating Point





## **Dimensions**

## **Dimensional drawings**



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