P6500S-407, 5", Electronic Pressure Independent Valve Stainless Steel Ball, ANSI 125 Flange

BELIMO



Technical Data Service	shilled or bet water up to COO/ silved as		
Service	chilled or hot water, up to 60% glycol max (open loop/steam not allowed)		
Flow Characteristic	equal percentage or linear		
Valve Size	5 " [125]		
End Fitting	pattern to mate with ANSI 125 flange		
Body	cast iron - GG25		
Sensor Housing	ductile iron - GGG50		
Ball	stainless steel		
Stem	stainless steel		
Seat	Teflon® PTFE		
Seat O-ring	Viton		
Characterized Disc	stainless steel		
Packing	2 EPDM O-rings, lubricated		
Body Pressure Rating	ANSI Class 125, standard class B		
ANSI Class	125		
Media Temperature Range (Water)	14°F to 250°F [-10°C to 120°C]		
Differential Pressure Range	5 to 50 psid, 1 to 50 psid (with flow		
	reduction. See chart.), or 8 to 50 psid (with flow increase. See chart.)		
Close-Off Pressure	100 psi		
Inlet Length to Meet Specified Measurement Accuracy	5X nominal pipe size (NPS)		
Ambient Humidity	<95% RH non-condensing		
Flow Measurement Tolerance	±2%*		
Flow Control Tolerance	±5%		
Flow Measurement Repeatability	±0.5%		
Sensor Technology	electromagnetic		
Rangeability	40:1		
Power Supply for the Flow Sensor	sensor is powered by the actuator		
Weight	117.3 lb [53.2 kg]		
GPM	407		
Leakage	0%		

^{*}All flow tolerances are at 68°F (20°C) & water.

Application

Water-side control of heating and cooling systems for AHUs and water coils. Equal Percentage/ Linear: heating and cooling applications.

Operation

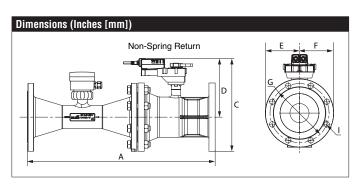
The Electronic Pressure Independent Control Valve is a two-way valve that maintains constant flow regardless of pressure variations in the system.

Product Features

Provides constant flow regardless of pressure variations in the system. Maximizes chiller P, preventing energizing additional chillers due to low T. Simplified valve sizing and selection, no Cv calculations required.

Suitable Actuators

	Non-Spring	Electronic Fail-Safe
P6500S-407	GRB(X)	GKRB(X)



Α	С	D	Е	F	G	I
25.18"	14.42"	9.42"	5" [127]	8.5" [216]	0.88" [22]
[640]	[366]	[239]				

GRX24-PI

Modulating, Non-Spring Return, 24 V, Multi-Function Technology®



Technical Data	
Power Supply	24 VAC, ±20%, 50/60 Hz, 24 VDC, ±10%
Power Consumption Running	9.5 W
Transformer Sizing	13 VA (class 2 power source)
Electrical Connection	3ft [1m], 18 GA plenum cable with 1/2"
	conduit connector
Overload Protection	electronic thoughout 0° to 90° rotation
Operating Range Y	2 to 10 VDC (default) VDC variable
Input Impedance	100 kΩ (0.1 mA), 500 Ω
Feedback Output U	default DC 210 V, VDC variable
Angle of Rotation	90°
Torque motor	360 in-lbs [40 Nm]
Direction of Rotation (Motor)	reversible with pc tool
Direction of Rotation (Fail-Safe)	reversible with switch
Position Indication	integrated into handle
Manual Override	external push button
Running Time (Motor)	90 sec
Ambient Humidity	5 to 95% RH non condensing (EN 60730-1)
Ambient Temperature Range	14122 °F [-1050 °C]
Storage Temperature Range	-40176 °F [-4080 °C]
Housing	IP54, NEMA 2, UL Enclosure Type 2
Housing Material	UL94-5VA
Agency Listings†	cULus acc. to UL60730-1A/-2-14, CAN/CSA
	E60730-1:02, CE acc. to 2004/108/EC and
Nichard and Abdata	2006/95/EC
Noise Level (Motor)	<45 dB (A)
Servicing	maintenance free
Quality Standard	ISO 9001
Weight	4.85 lb [2.2 kg]

In cases where the valve body is electrically isolated from the water pipe, an earth ground should be installed in order for the sensor to work properly. Earth ground can be connected directly on the sensor body. A connection point is provided on the flange of the sensor body.

†Rated Impulse Voltage 800V, Type of action 1.AA, Control Pollution Degree 3

> INSTALLATION NOTES



Provide overload protection and disconnect as required.



Actuators may be connected in parallel. Power consumption and input impedance must be observed.



Actuators may also be powered by 24 VDC.



Actuators with plenum cable do not have numbers; use color codes



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



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.

