B6400S-186, 2-Way, Characterized Control Valve

Stainless Steel Ball and Stem

Application

This valve is typically used in air handling units on heating or cooling coils, and fan coil unit heating or cooling coils. Some other common applications include Unit Ventilators, VAV box re-heat coils and bypass loops. This valve is suitable for use in a hydronic system with variable or constant flow.

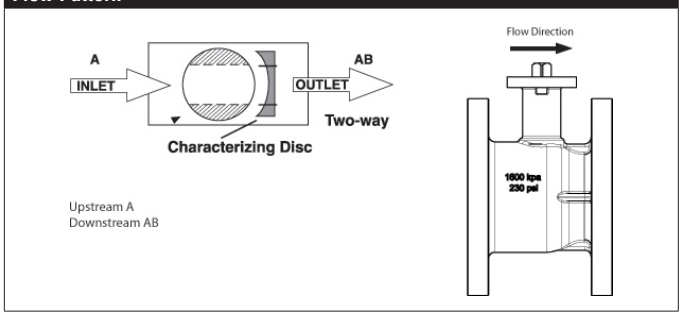
Suitable Actuators

	Non-Spring	US only
B6400S-186	GRB(X)	GKRB(X)

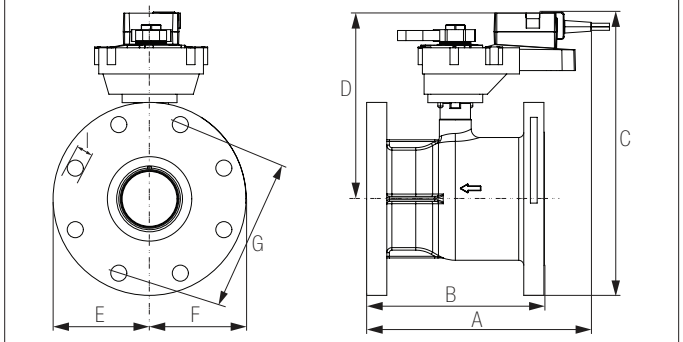
Technical Data

Service	chilled, hot water, up to 60% glycol
Flow Characteristic	equal percentage
Controllable Flow Range	75°
Valve Size	4 " [100]
End Fitting	pattern to mate with ANSI 125 flange
Body	cast iron - GG25
Ball	stainless steel
Stem	stainless steel
Stem Packing	EPDM (lubricated)
Seat	Teflon® PTFE
Seat O-ring	EPDM (lubricated)
Characterized Disc	stainless steel
Body Pressure Rating	ANSI Class 125, standard class B
ANSI Class	125
Number of Bolt Holes	8
Media Temperature Range (Water)	0°F to 250°F [-18°C to 120°C]
Max Differential Pressure (Water)	50 psi (345 kPa)
Close-Off Pressure	100 psi
Cv	186
Weight	50 lb [22.7 kg]
Leakage	0% for A to AB
Servicing	maintenance free

Flow Pattern



Dimensions (Inches [mm])



GRB, GRX

A	B	C	D	E	F	G	I
11.3" [287]	8.3" [210]	12.8" [325]	8.7" [221]	4.48" [114]		7.5" [191]	0.75" [19]

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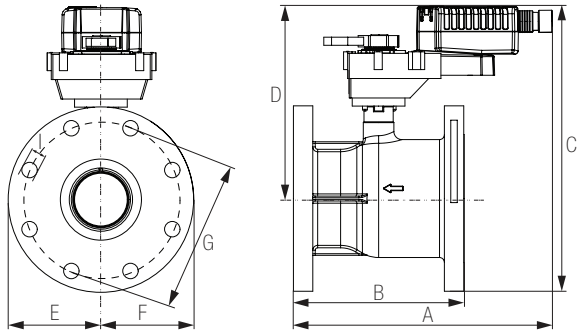
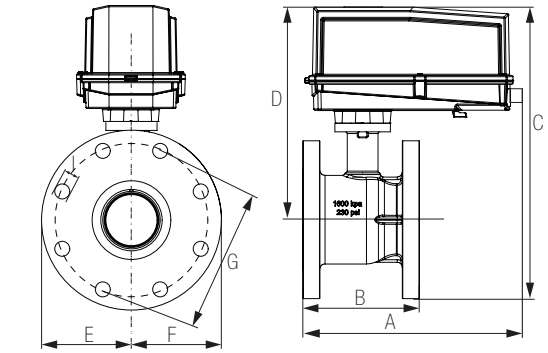
Dimensions (Inches [mm])



GKRB, GKRX

A	B	C	D	E	F	G	I
11.3” [287]	8.3” [210]	12.9” [328]	9.7” [246]	4.48” [114]		7.5” [191]	0.75” [19]

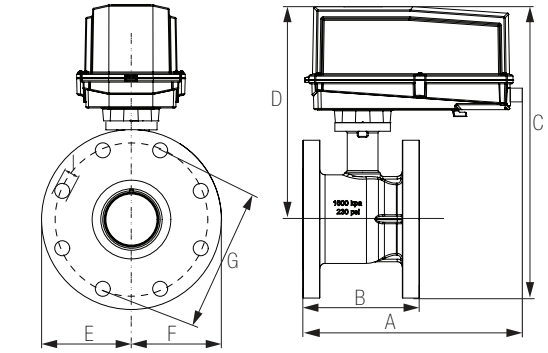
Dimensions (Inches [mm])



GRX, GKRX

A	B	C	D	E	F	G	I
15” [381]	8.3” [210]	16.35” [415]	12.64” [321]	4.48” [114]		7.5” [191]	0.75” [19]

Dimensions (Inches [mm])



GRX, GKRX

A	B	C	D	E	F	G	I
15” [381]	8.3” [210]	16.35” [415]	12.64” [321]	4.48” [114]		7.5” [191]	0.75” [19]

GKRX24-3 N4

NEMA 4, On/Off, Floating Point, Electronic Fail-Safe, 24 V

Technical Data	
Power Supply	24 VAC, ±20%, 50/60 Hz
Power Consumption Running	12 W
Power Consumption Holding	3 W
Transformer Sizing	21 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	on/off, floating point
Input Impedance	100 kΩ
Angle of Rotation	Max. 95°, adjustable with mechanical stop
Direction of Rotation (Motor)	reversible with built-in switch
Direction of Rotation (Fail-Safe)	reversible with switch
Position Indication	reflective visual indicator (snap on)
Manual Override	under cover
Running Time (Motor)	150 sec constant, independent of load
Running Time (Fail-Safe)	<35 sec
Bridge Time	2 sec delay before fail-safe activates
Pre-charging Time	5 to 20 seconds
Ambient Humidity	5 to 100% RH (UL Type 4)
Ambient Temperature Range	-22...122 °F [-30...50 °C]
Storage Temperature Range	-40...176 °F [-40...80 °C]
Housing	IP66, NEMA 4, UL Enclosure Type 4
Housing Material	polycarbonate
Agency Listings†	cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1, CSA C22.2 No 24-93, CE acc. to 89/336/EC
Noise Level (Motor)	<45 dB (A)
Noise Level (Fail-Safe)	<45 dB (A)
Servicing	maintenance free
Quality Standard	ISO 9001
Weight	8.95lb [4.05kg]

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

Wiring Diagrams

INSTALLATION NOTES

1 Provide overload protection and disconnect as required.

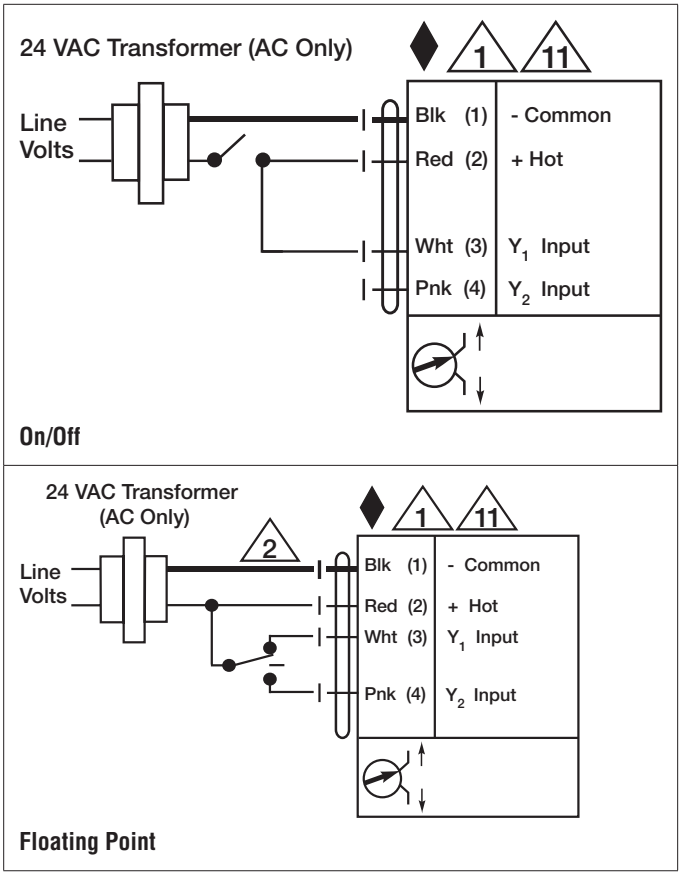
2 Actuators may be connected in parallel. Power consumption and input impedance must be observed.

11 Actuators may be connected in parallel if not mechanically linked. Power consumption and input impedance must be observed.

◆ 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.



On/Off

Floating Point