B6400VB-350, 4”, V Ball Control Valve

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

Product Features

Fast quarter turn open or closed operation, Stainless steel ball and stem, Positive shut-off, Two piece body construction

Application

Water-side control of air handling apparatus in ventilation and air-conditioning system.
Water/Steam control in heating systems.
300:1 rangeability.

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

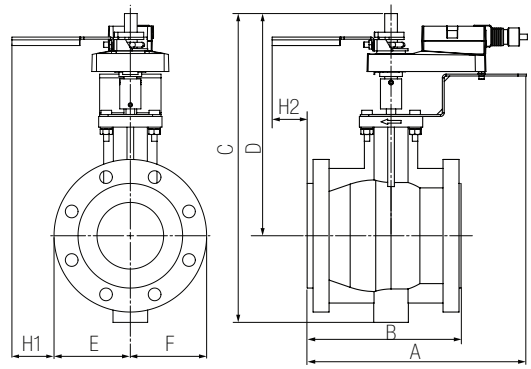
Suitable Actuators

	Non-Spring	Electronic Fail-Safe
B6400VB-350	SY2, GMB(X)	GKB(X)

Technical Data

Service	chilled or hot water, up to 60% glycol, steam
Flow Characteristic	equal percentage
Controllable Flow Range	75°
Size [mm]	4” [100]
End Fitting	NPT female ends (1”to 2”); ISO flange (3”to 6”)
Body	WCC Grade Carbon steel
Ball	stainless steel
Stem	stainless steel
Stem Packing	spring loaded Teflon® V-ring
Ball Seat	Teflon®
Body Pressure Rating [psi]	ASME/ANSI Class 150
Max Inlet Pressure (Steam)	200 psi
Media Temperature Range (Water)	-22°F to 380°F [-30°C to 193°C]
Media Temperature Range (Steam)	-22°F to 380°F [-30°C to 193°C]
Maximum Differential Pressure (Steam)	100 psi
Max Differential Pressure (Water)	150 psi
Maximum Differential Pressure Steam (Rotary Actuator)	100 psi
Close-Off Pressure	150 psi
Close-Off Pressure (Steam)	200 psi
Rangeability	300:1
Cv	350
Weight	57.3 lb [26 kg]
Leakage	ANSI Class IV
Servicing	Repack/Rebuild kits available

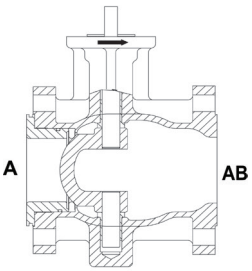
Dimensions (Inches [mm])



GMB, GMX

A	B	C	D	E	F	H1	H2
12.6” [320]	9” [229]	18.23” [463]	13.13” [334]	4.5” [114]		0.75” [20]	0.5” [15]

Flow Pattern



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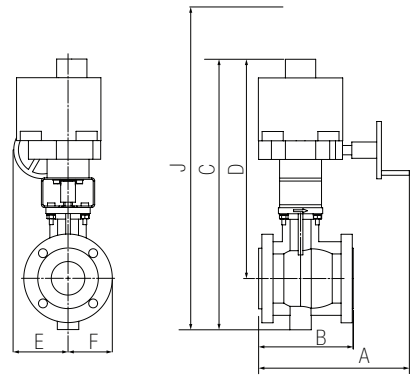
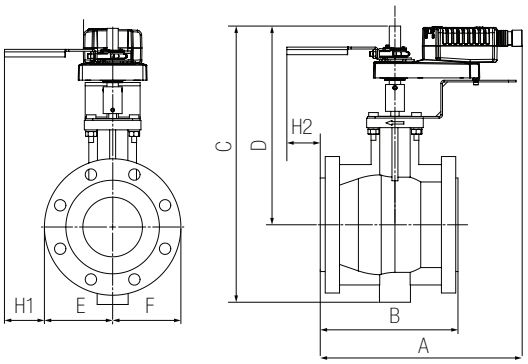


SY2

A	B	C	D	E	F	J
14.37” [365]	9” [229]	24.71” [628]	19.61” [498]	5.15” [131]	4.5” [114]	32.21” [818]

Dimensions (Inches [mm])

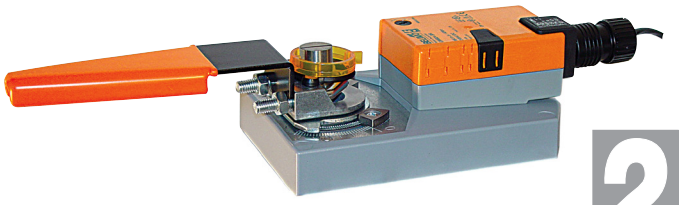


GKB, GKX

A	B	C	D	E	F	H1	H2
13.16” [334]	9” [229]	18.23” [463]	13.13” [334]	4.5” [114]	4.5” [114]	1.18” [30]	0.5” [15]

GMB24-3-X1

On/Off, Floating Point, Non-Spring Return, 24 V



2 YEAR WARRANTY

Technical Data	
Power Supply	24 VAC ± 20%, 50/60 Hz, 24 VDC ± 10%
Power Consumption Running	4 W
Power Consumption Holding	2 W
Transformer Sizing	6 VA (class 2 power source)
Shaft Diameter	1/2" to 1.05" round, centers on 1/2" and 3/4" with insert, 1.05" without insert
Electrical Connection	3 ft, 18 GA plenum rated cable with 1/2" conduit connector protected NEMA 2 (IP54)
Overload Protection	electronic throughout 0° to 95° rotation
Input Impedance	600 Ω
Angle of Rotation	max. 95°, adjustable with mechanical stop
Torque	360 in-lbs [40 Nm] minimum
Direction of Rotation (Motor)	reversible with built-in switch
Position Indication	reflective visual indicator (snap on)
Manual Override	external push button
Running Time (Motor)	150 sec constant, independent of load
Humidity	5 to 95% RH non-condensing
Ambient Temperature Range	-22°F to 122°F [-30°C to 50°C]
Storage Temperature Range	-40°F to 176°F [-40°C to 80°C]
Housing	NEMA 2, IP54, UL enclosure type 2
Agency Listings†	cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02, CE acc. to 2004/108/EC and 2006/95/EC
Noise Level (Motor)	<45 dB (A)
Servicing	maintenance free
Quality Standard	ISO 9001
Weight	4 lb [1.8 kg]

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

Wiring Diagrams

INSTALLATION NOTES

A Actuators with appliance cables are numbered.

1 Provide overload protection and disconnect as required.

3 Actuators may also be powered by 24 VDC.

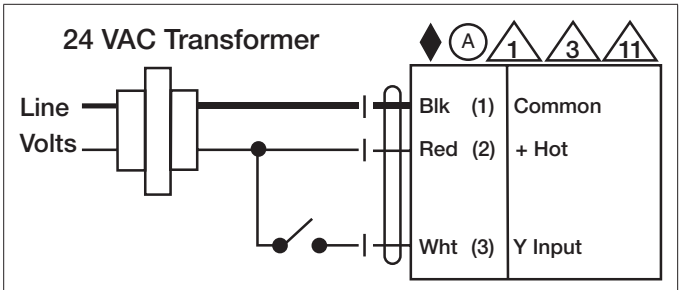
6 Actuators Hot wire must be connected to the control board common. Only connect common to neg. (-) leg of control circuits. Terminal models (-T) have no-feedback.

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

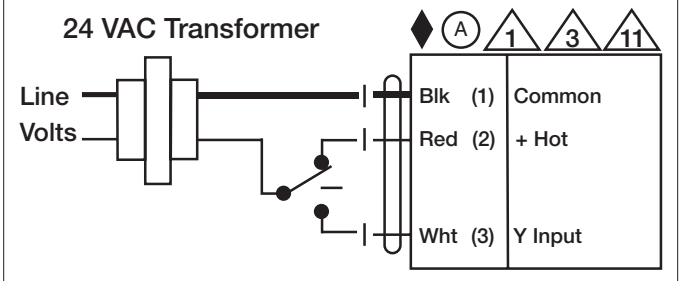
◆ Meets cULus requirements without the need of an electrical ground connection.

! WARNING! LIVE ELECTRICAL COMPONENTS!

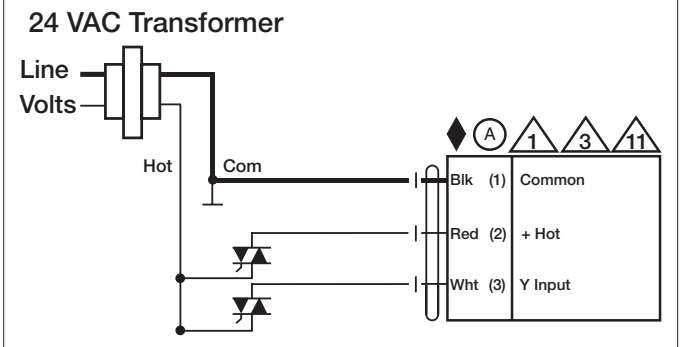
During installation, testing, servicing and troubleshooting of this product, it may be necessary to work with live electrical components. Have a qualified licensed electrician or other individual who has been properly trained in handling live electrical components perform these tasks. Failure to follow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



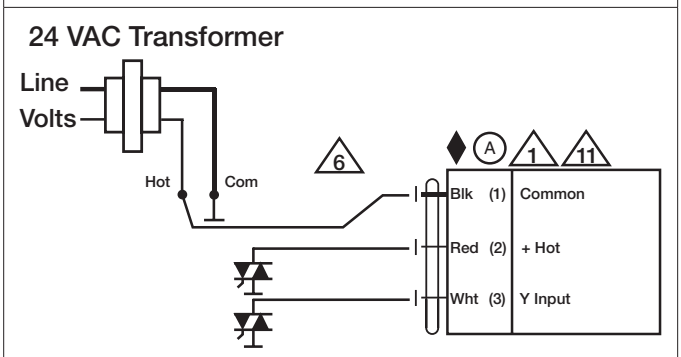
On/Off



Floating Point



Floating Point - Triac Source



Floating Point - Triac Sink