

B2...VS Series, 2-Way, Ball Valve Bronze Body, Stainless Steel Ball and Stem



- Live-load packing set
- Stainless steel ball & stem
- Blow-out proof stem design

Application

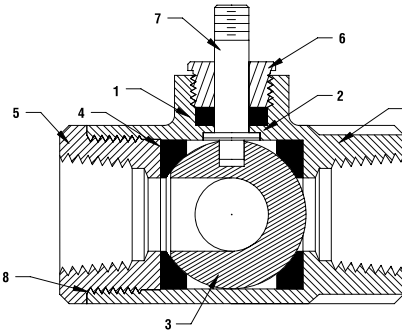
This valve is typically used in air handling units on heating or cooling coils, and fan coil unit heating or cooling coils. Some other common applications include Unit Ventilators, VAV Box re-heat coils and bypass loops. This valve is suitable for use in a hydronic system with variable flow.

This valve is designed with MFT functionality which facilitates the use of various control input.

- Up to 35 psi steam
- 1/2" - 600 PSIG WOG, Cold Non-Shock.
- Federal Specification: WW-V-35C, Type II
Composition: BZ
Style: 3

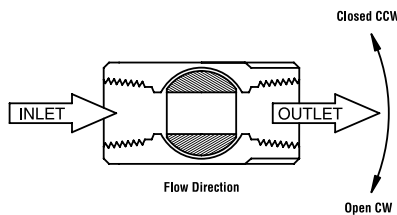
Technical Data	
Media	chilled or hot water, glycol, 35# steam
Flow characteristic	modified equal percentage
Action	90° rotation valve open CW, valve closed CCW
Sizes	1/2", 3/4", 1", 1 1/4", 1 1/2", 2", 2 1/2", 3"
Type of end fitting	SAE NPT (female connections)
Materials:	
1 Stem Packing	Reinforced PTFE
2 Stem Bearing	Reinforced PTFE
3 Ball	316 Stainless Steel
4 Seat (x2)	Reinforced PTFE w/ Durafill
5 Retainer	B16 (3/4" - 1") Brass B584 (1 1/4" - 3") Brass
6 Gland	B16 Brass
7 Stem	316 Stainless Steel
8 Jam Nut	Stainless Steel
9 Body Seal	PTFE (1-1/4" to 3")
10 Body	B584-C84400 Bronze

Cv	Valve Nominal Size		Type	Suitable Return Actuators	
	Inches	DN [mm]	2-way NPT	Spring	Non-Spring
1	1/2	15	B2050VS-01	LF Series	LM Series
2	1/2	15	B2050VS-02		
4	1/2	15	B2050VS-04		
15	1/2	15	B2050VS-15	NF	NM
30	3/4	20	B2075VS-30		
51	3/4	20	B2075VS-51		
43	1	25	B2100VS-43	AF Series	AM Series
68	1	25	B2100VS-68		
48	1 1/4	32	B2125VS-48		
84	1 1/2	40	B2150VS-84		
177	1 1/2	40	B2150VS-177	GM Series	SY Series
108	2	50	B2200VS-108		
389	2	50	B2200VS-389		
503	2 1/2	65	B2250VS-503		
370	3	80	B2300VS-370		

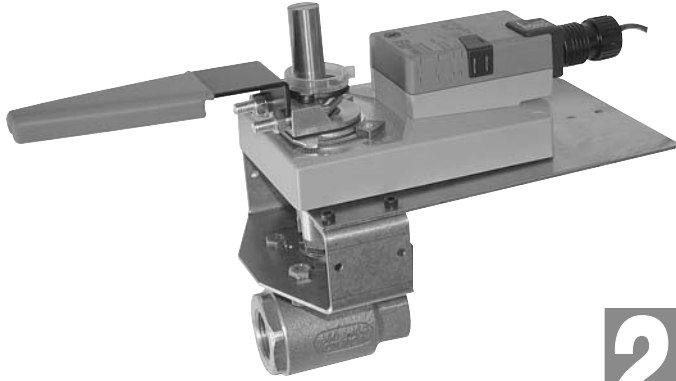


Pressure rating	600 psig WOG
Media temp. range	-22°F to 280°F (-30°C to 138°C)
Close-off pressure	600 psig @ 100°F
Maximum differential pressure (ΔP)	<600 psig

Flow Patterns



IM40006 - 05/10 - Subject to change. © Belimo Aircontrols (USA), Inc.



MFT **2 YEAR WARRANTY**



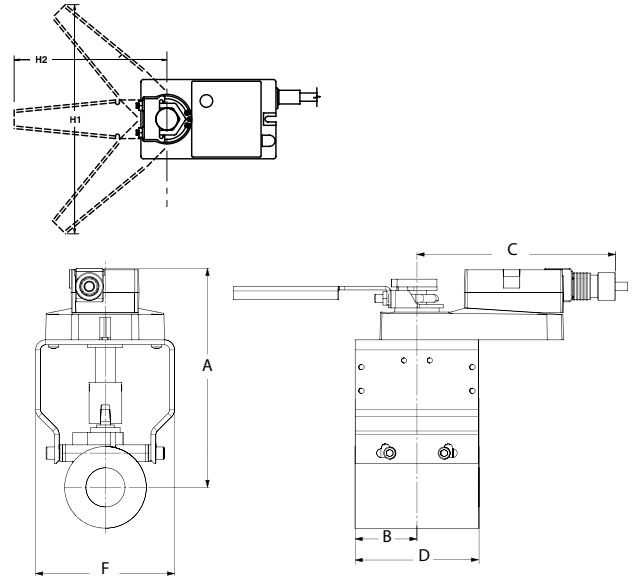
Models

GXK24-MFT-X1

Technical Data	
Control	on/off, floating point, 2 to 10 VDC
Power supply	24 VAC ± 20% 50/60 Hz 24 VDC ± 10%
Power consumption	running 4.5 W holding 3 W
Transformer sizing	7 VA (Class 2 power source)
Electrical connection	3 ft, 18 GA plenum rated cable ½" conduit connector
Overload protection	electronic throughout rotation
Angle of rotation	95°
Direction of rotation	external switch
Position indication	reflective visual indicator (snap-on)
Running time	motor 150 seconds fail-safe 35 seconds
Fail-Safe setting	0-100% at 10% intervals
Manual override	external push button
Humidity	5 to 95% RH non-condensing
Ambient temperature	-22°F to 122°F [-30°C to 50°C]
Housing	NEMA 2/IP54, Enclosure Type 2
Housing material	UL94-5V (flammability rating)
Auxiliary switch(es)	add on: 1 or 2 SPDT, 3A (0.5A inductive) @ 250V adjustable 5° to 85°
Agency listings	cULus according to UL 60730-1A/-2-14, CAN/CSA E60730-1:02, CE according to 2004/108/EC and 206/EC
Noise level	<45 dB(A)
Quality standard	ISO 9001

♦ Variable with MFT

Dimensions with 2-Way Valve



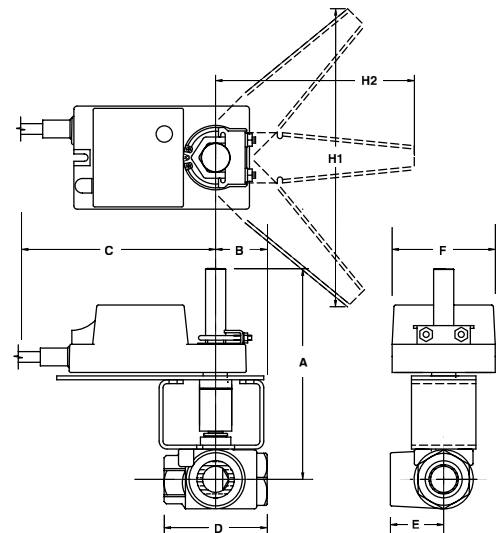
PAGE7, D005

Valve
Nominal
Size

Dimensions (Inches)

Valve Body	COP	Inches	DN [mm]	A	B	C	D	F	H1	H2
B2300VS-370	400	3	80	8.65	2.37	8.50	6.80	5.32	9.75	8.50
2*B2250VSS-503	1000	2½	65	8.65	2.37	8.50	6.80	5.32	9.75	8.50
2*B2300VSS-370	1000	3	80	8.65	2.37	8.50	6.80	5.32	9.75	8.50

Dimensions with 3-Way Valve



PAGE11

Valve
Nominal
Size

Dimensions (Inches)

Valve Body	COP	Inches	DN [mm]	A	B	C	D	E	F	H1	H2
B332VS	200	1¼	32	7.00	2.00	8.00	4.44	2.25	6.25	9.75	8.50
B340VS	75	1½	40	7.00	2.00	8.00	4.44	2.25	6.25	9.75	8.50
B350VS	75	2	50	15.00	8.00	8.00	5.38	2.75	6.25	9.25	8.50
B350VS	200	2	50	15.00	8.00	8.00	5.38	2.75	6.25	9.75**	8.50**

**Handles not available on spring return series or dual mounted actuators

Wiring Diagrams

- 1 Provide overload protection and disconnect as required.
- 2 Actuators may be connected in parallel if not mechanically mounted to the same shaft. Power consumption and input impedance must be observed.
- 3 Actuators may also be powered by 24 VDC.
- 4 Position feedback cannot be used with Triac sink controller. The actuator internal common reference is not compatible.
- 5 Control signal may be pulsed from either the Hot (source) or the Common (sink) 24 VAC line.
- 6 ZG-R01 may be used.
- 7 Contact closures A & B also can be triacs.
- 8 A & B should both be closed for triac source and open for triac sink. For triac sink the common connection from the actuator must be connected to the hot connection of the controller.

