

ANSI-Flanged Globe Valves

- chilled or hot water, up to 60% glycol
- ANSI Class 250, up to 280 psi below 350°F
- 250
- Cast iron - ASTM A126 Class B



Picture may differ from product



5-year warranty

Type overview

Type	DN	Cv	Body Pressure Rating
G7100S-250	4" [100]	190	ANSI Class 250, up to 280 psi below 350°F

Technical data

Functional data	Valve size [mm]	4" [100]
	Fluid	chilled or hot water, up to 60% glycol
	Fluid Temp Range (water)	32...350°F [0...176°C]
	Flow characteristic	linear
	Leakage rate	ANSI Class III
	Pipe connection	Flange for use with ASME/ANSI class 250
	Servicing	repack/rebuild kits available
	Rangeability Sv	50:1
	Flow Pattern	3-way Mixing
	Controllable flow range	stem up - open B – AB
Materials	Valve body	Cast iron - ASTM A126 Class B
	Closing element	Stainless steel
	Stem	316 stainless steel
	Stem seal	NLP EPDM (no lip packing)
	Seat	Stainless steel AISI 316
Suitable actuators	Non Fail-Safe	EVB(X) RVB(X)
	Spring	2*AFB(X)
	Electronic fail-safe	2*GKB(X)

Safety notes



- **WARNING:** This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and reproductive harm. For more information go to www.p65warnings.ca.gov
- The valve has been designed for use in stationary heating, ventilation and air-conditioning systems and must not be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.
- Only authorized specialists may carry out installation. All applicable legal or institutional installation regulations must be complied with during installation.
- The valve does not contain any parts that can be replaced or repaired by the user.
- When determining the flow rate characteristic of controlled devices, the recognised directives must be observed.

Accessories

Mechanical accessories

Description

Type

Repack Kit for Belimo G6, G7 series globe valves, Stainless steel trim

ZG-GV04

Dimensions

Type

G7100S-250

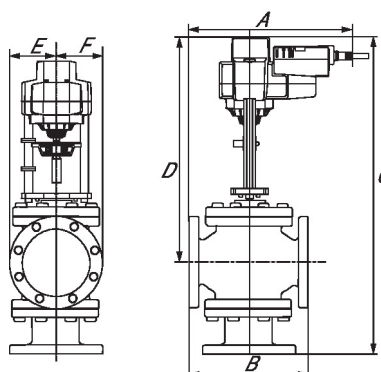
DN

4" [100]

Weight

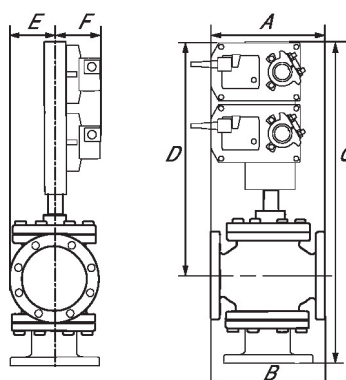
154.67 lb [70.30 kg]

EVB, EVX, RVB, RVX



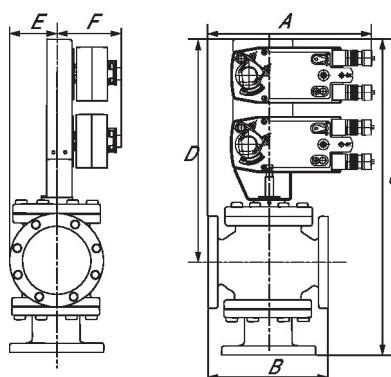
A	B	C	D	E	F	Number of Bolt Holes
14.0" [356]	13.6" [346]	29.3" [743]	19.0" [483]	5.0" [127]	5.0" [127]	8

2*GMB, 2*GMX, 2*GKB, 2*GKX



A	B	C	D	E	F	Number of Bolt Holes
14.0" [356]	13.6" [346]	33.2" [844]	23.4" [594]	5.0" [127]	5.0" [127]	8

2*AFB, 2*AFX



A	B	C	D	E	F	Number of Bolt Holes
14.0" [356]	13.6" [346]	33.7" [857]	23.4" [594]	5.0" [127]	5.3" [135]	8



Picture may differ from product



5-year warranty



Technical data

Electrical data	Nominal voltage	AC/DC 24 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 19.2...28.8 V / DC 21.6...28.8 V
	Power consumption in operation	5 W
	Power consumption in rest position	1.5 W
	Transformer sizing	7.5 VA
	Electrical Connection	18 AWG plenum cable, 1 m, with 1/2" NPT conduit connector, degree of protection NEMA 2 / IP54
	Overload Protection	electronic throughout full stroke
	Electrical Protection	actuators are double insulated
Functional data	Actuating force motor	2500 N [560 lbf]
	Operating range Y	2...10 V
	Operating range Y note	4...20 mA w/ ZG-R01 (500 Ω, 1/4 W resistor)
	Input impedance	100 kΩ for 2...10 V (0.1 mA), 500 Ω for 4...20 mA
	Position feedback U	2...10 V
	Position feedback U note	Max. 0.5 mA
	Direction of motion motor	selectable with switch 0/1
	Manual override	5 mm hex crank (3/16" Allen), supplied
	Stroke	2" [50 mm]
	Running Time (Motor)	90 s /
	Running time motor note	constant, independent of load
	Sound power level, motor	60 dB(A)
	Position indication	Mechanical, with pointer
Safety data	Power source UL	Class 2 Supply
	Degree of protection IEC/EN	IP54
	Degree of protection NEMA/UL	NEMA 2
	Housing	UL Enclosure Type 2
	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
	UL 2043 Compliant	Suitable for use in air plenums per Section 300.22(C) of the NEC and Section 602 of the IMC

Technical data

Safety data	Ambient humidity	Max. 95% RH, non-condensing
	Ambient temperature	-22...122°F [-30...50°C]
	Storage temperature	-40...176°F [-40...80°C]
	Servicing	maintenance-free
Weight	Weight	□
Materials	Housing material	Die cast aluminium and plastic casing

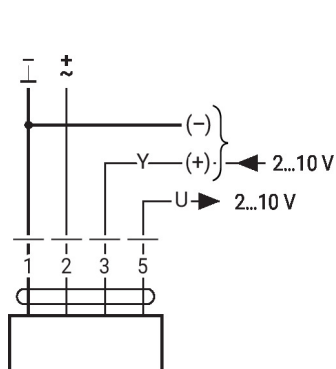
Footnotes † Use flexible metal conduit. Push the listed conduit fitting device over the actuator's cable to butt against the enclosure. Screw in conduit connector. Jacket the actuators input wiring with listed flexible conduit. Properly terminate the conduit in a suitable junction box. Rated impulse Voltage 800V. Type of action 1. Control pollution degree 3.

Electrical installation

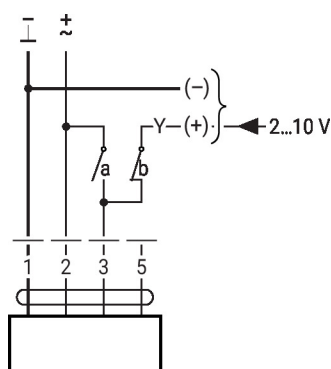
Wire colors:

- 1 = black
- 2 = red
- 3 = white
- 5 = orange

AC/DC 24 V, modulating



Override control (frost protection circuit)



1	2	3 (a)	3 (b)	
				A - AB = 100%
				A - AB = 0%
			2 V	A - AB = 0%
			10 V	A - AB = 100%