

#### **ANSI-Flanged Globe Valves**

- chilled or hot water, up to 60% glycol
- ANSI Class 125, up to 175 psi below 150°F
- 125
- Cast iron ASTM A126 Class B





Picture may differ from product

Type overview	
Туре	DN
G7125	5" [125]

#### **Technical data**

#### **Functional data**

Valve size [mm]	5" [125]
Fluid	chilled or hot water, up to 60% glycol
Fluid Temp Range (water)	32350°F [0176°C]
Body Pressure Rating	ANSI Class 125, up to 175 psi below 150°F
Flow characteristic	linear
Leakage rate	ANSI Class III
Pipe connection	Flange
	for use with ASME/ANSI class 125
Servicing	repack/rebuild kits available
Rangeability Sv	50:1
Flow Pattern	3-way Mixing
Controllable flow range	stem up - open B – AB
Cv	280
Valve body	Cast iron - ASTM A126 Class B
Valve plug	bronze
Stem	stainless steel
Stem seal	NLP EPDM (no lip packing)
Seat	Stainless steel AISI 316

# Safety notes



Suitable actuators

Non Fail-Safe

Electronic fail-safe

Materials

 WARNING: This product can expose you to lead which is known to the State of California to cause cancer and reproductive harm. For more information go to www.p65warnings.ca.gov

RVB(X)

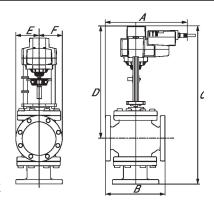
2\*GKB(X)

- 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.



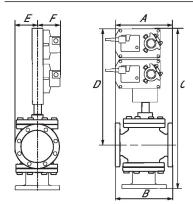
# **Dimensions**

Туре	DN	Weight	
G7125	5" [125]	160 lb [70 ka]	



EVB, EVX, RVB, RVX

Α	В	С	D	Е	F	Number of Bolt Holes
15.7" [400]	15.7" [400]	27.0" [686]	17.8" [453]	5.0" [127]	5.0" [127]	8



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

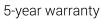
Α	В	С	D	E	F	Number of Bolt Holes
15.1" [383]	15.7" [400]	30.0" [762]	20.7" [527]	5.0" [127]	5.0" [127]	8



## MFT/programmable, Non fail-safe, 24 V











echnical data		
Electrical data	Nominal voltage	AC/DC 24 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 19.228.8 V / DC 21.628.8 V
	Power consumption in operation	6 W
	Power consumption in rest position	1.5 W
	Transformer sizing	11 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	4500 N [1010 lbf]
	Operating range Y	210 V
	Operating range Y note	420 mA w/ ZG-R01 (500 Ω, 1/4 W resistor)
	Input impedance	100 k $\Omega$ for 210 V (0.1 mA), 500 $\Omega$ for 420 mA, 1500 $\Omega$ for On/Off
	Operating range Y variable	Start point 0.530 V End point 2.532 V
	Operating modes optional	variable (VDC, on/off, floating point)
	Position feedback U	210 V
	Position feedback U note	Max. 0.5 mA
	Position feedback U variable	VDC variable
	Direction of motion motor	selectable with switch
	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
	Noise level, motor	65 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



Safety data	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
	Ambient humidity	Max. 95% RH, non-condensing
	Ambient temperature	-22122°F [-3050°C]
	Storage temperature	-40176°F [-4080°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.

#### **Accessories**

Gateways	Description	Туре	
	Gateway MP to BACnet MS/TP	UK24BAC	
	Gateway MP to Modbus RTU	UK24MOD	
	Gateway MP to LonWorks	UK24LON	
Electrical accessories	Description	Туре	
	Belimo PC-Tool, Software for adjustments and diagnostics	MFT-P	
	Auxiliary switch 2x SPDT for NG GV Actuators	S2A-GV	
	Service tool, with ZIP-USB function, for configurable and communicative	ZTH US	
	Belimo actuators, VAV controller and HVAC performance devices		
Tools	Description	Туре	
	Connecting cable 10 ft [3 m], A: RJ11 6/4 LINK.10, B: 3-pin Weidmüller and supply connection	ZK4-GEN	
	Service tool, with ZIP-USB function, for configurable and communicative Belimo actuators, VAV controller and HVAC performance devices	ZTH US	

### **Electrical installation**



## **X** INSTALLATION NOTES

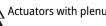
Actuators may be connected in parallel. Power consumption and input impedance must be observed.



Actuators may also be powered by DC 24 V.

 $\Lambda$  A 500  $\Omega$  resistor (ZG-R01) converts the 4...20 mA control signal to 2...10 V. (Source) Or Common (Sink) 24 V line.

**A** For triac sink the common connection from the actuator must be connected to the hot connection of the controller. Contact closures A & B also can be triacs. A & B should both be closed for the triac source and open for triac sink.



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

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



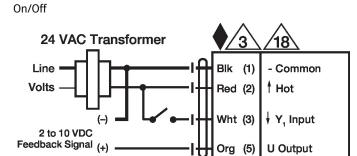
During installation, testing, servicing and troubleshooting of this product, it may be necessary to work with live electrical components. Have a qualified licensed electrician or other individual who has been properly trained in handling live electrical components perform these tasks.



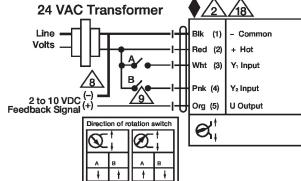
### **Electrical installation**

Failure to follow all electrical safety precautions when exposed to live electrical components could result in death or serious injury.

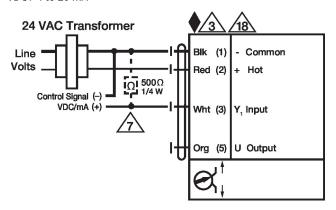
## Wiring diagrams







VDC / 4 to 20 mA



Override Control Min, Mid, Max Positions

