BELIMO

Technical data sheet EV250SU-127+AKRX24-EV

5-year warranty

EV

Technical data

Electrical data	Nominal voltage	AC/DC 24 V
	Nominal voltage frequency	50/60 Hz
Functional data	Valve Size	2.5" [65]
	Communicative control	BACnet IP BACnet MS/TP Modbus RTU Modbus TCP MP-Bus
	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 (0.1 mA), 500 Ω
	Options positioning signal	VDC variable
	Position feedback U	2...10 V
	Position feedback U variable	VDC variable
	Running Time (Motor)	90 s
	Running time fail-safe	<35 s
	Noise level, fail-safe	45 dB(A)
	Control accuracy	±5%
	Fluid	chilled or hot water, up to 60% glycol max (open loop/steam not allowed)
	Fluid Temp Range (water)	14...250°F [-10...120°C]
	Close-off pressure Δps	175 psi
	Differential Pressure Range	5...50 psi or 1...50 psi see flow reductions chart in tech doc
	GPM	127
	Servicing	maintenance-free
	Manual override	external push button
Flow measurement	Measuring accuracy flow	±2%*
	Flow Measurement Repeatability	±0.5%
	Sensor Technology	ultrasonic with glycol and temperature compensation
Temperature measurement	Remote Temperature Sensor Length	Optional: 4.9 ft. [1.5m], 9.8 ft. [3m], 16.4 ft. [5m] Standard: 32.8 ft. [10m]
Safety data	Degree of protection IEC/EN	IP54
	Degree of protection NEMA/UL	NEMA 1
	Enclosure	UL Enclosure Type 1
	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 temperature	-22...122°F [-30...50°C]
	Storage temperature	-40...176°F [-40...80°C]
	Ambient humidity	max. 95% r.H., non-condensing
Materials	Valve body	Cast iron - GG 25
	Flow measuring pipe	Ductile cast iron - GGG50
	Stem seal	EPDM (lubricated)
	Seat	PTFE
	Pipe connection	pattern to mate with ANSI 125 flange
	O-ring	EPDM (lubricated)
	Ball	stainless steel

Safety notes

- 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

Product features

Flow measurement *All flow tolerances are at 68°F [20°C] & water.

Accessories

Electrical accessories	Description	Type
	Replacement temperature sensors for Belimo Energy Valve™, 2.5...6" [65...150] 5 ft [1.5 m]	EV-RT-15
	Service Tool, with ZIP-USB function, for parametrisable and communicative Belimo actuators, VAV controller and HVAC performance devices	ZTH US

Mechanical accessories	Description	Type
	Weather shield for Belimo Energy Valve™, 2.5...3" [65...80], Ultrasonic models only	ZS-EPIV-EV-80U

Electrical installation

INSTALLATION NOTES

A Actuators with appliance cables are numbered.

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

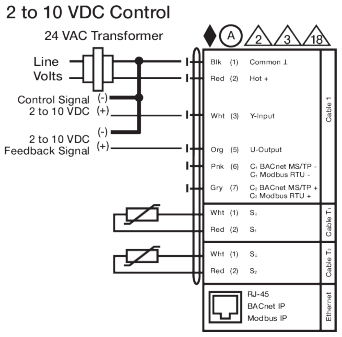
3 Actuators may also be powered by 24 VDC.

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

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

Warning! Live Electrical Components!

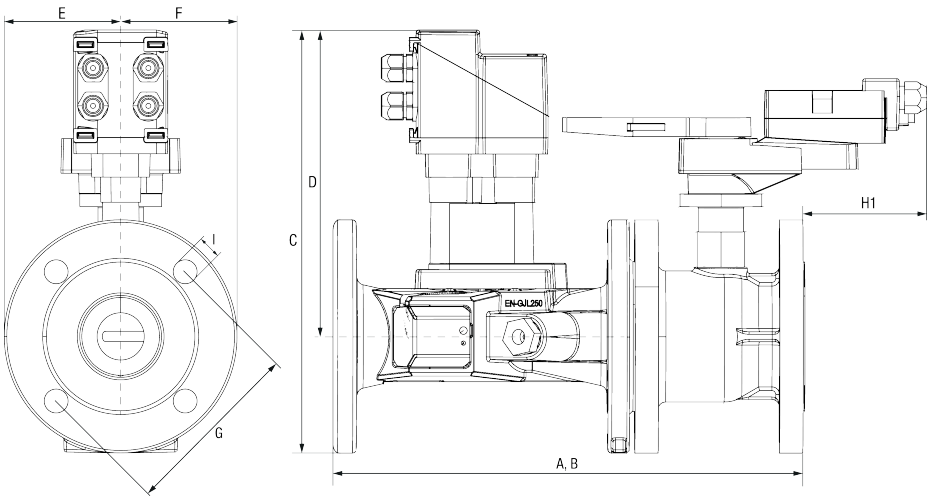
During installation, testing, servicing and troubleshooting of this product, it may be necessary to work with live electrical components. Have a qualified licensed electrician or other individual who has been properly trained in handling live electrical components perform these tasks. Failure to follow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



2...10 V, BACnet MSTP/IP, Modbus RTU/IP

Dimensions

Dimensional drawings



A	B	C	D	E	F	G	H1	I
14.9" [379]	14.9" [379]	10.9" [277]	9.6" [243]	3.6" [92]	3.6" [92]	5.5" [140]	2.8" [72]	0.7" [19]