

Actuators







## Type overview

Туре	Stroke
WGVL	2" [50 mm]

### Technical data

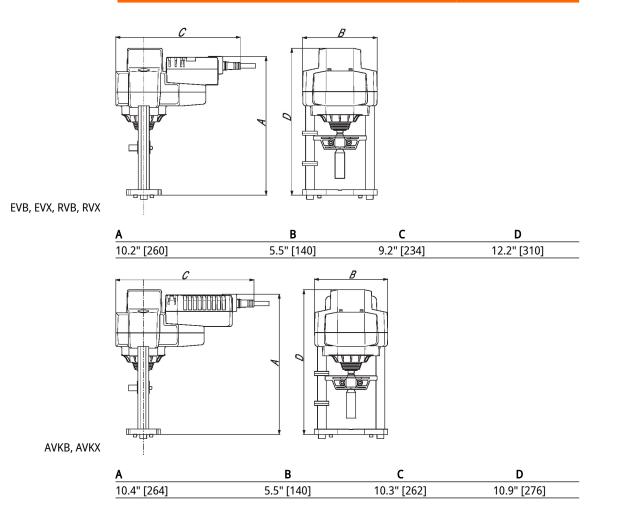
	Functional data	Fluid	chilled or hot water and steam
		Fluid Temp Range (water)	Please Refer to Manufacturer's Valve
			Specifications
		Mounting Position	360°
		Applicable valve size	26" [50150]
	Materials	Hardware	SS and Nickel plated steel
		Housing material	Die cast aluminium and plastic casing
		Stem	316 stainless steel
		Stem adapter	steel
		Frame, plate, base	aluminum, steel (fits Warren Type 20,22,23,30, and 32) and Belimo G6/G7
		Collar	steel
		Coupling	GF Nylon supplied
Si	uitable actuators	Non-Spring	EVB(X)
			RVB(X)
		Electrical fail-safe	AVKB(X)
		For close-off pressure reference Sele	ct Pro or retrofit technical documentation.
Product features			
r rouuci reatures			
Defau	lt/Configuration		e will be factory installed along with an AVK or EV, RV series ll the necessary hardware to facilitate mounting to the

### Dimensions

Туре	Weight
WGVL	5.7 lb [2.6 kg]

Warren valve.







Multi-Function Technology®

Modulating, Non-Spring Return, Linear, 24 V,

**Technical data sheet** 

# EVX24-MFT





## **Technical 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	5 W
	Power consumption in rest position	1.5 W
	Transformer sizing	7.5 VA
	Electrical Connection	18 GA plenum cable, 1 m, with 1/2" 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	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 PWM, On/Off and Floating point
	Operating range Y variable	Start point 0.530 V End point 2.532 V
	Operating modes optional	variable (VDC, PWM, 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 0/1
	Manual override	5 mm hex crank (3/16" Allen), supplied
	Stroke	2" [50 mm]
	Running Time (Motor)	90 s /
	Running time motor variable	90150 s
	Noise level, motor	60 dB(A)
	Position indication	Mechanically, with pointer
Safety data	Power source UL	Class 2 Supply
	Degree of protection IEC/EN	IP54
	Degree of protection NEMA/UL	NEMA 2
	Enclosure	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
	Ambient humidity	Max. 95% RH, non-condensing



#### **Technical data sheet**

EVX24-MFT

Safety data	Ambient temperature	-22122°F [-3050°C]
	Storage temperature	-40176°F [-4080°C]
	Servicing	maintenance-free
Weight	Weight	5.73 lb [2.6 kg]
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 2 x SPDT for NG GV Actuators	S2A-GV
	Service Tool, with ZIP-USB function, for programmable and	ZTH US
	communicative Belimo actuators, VAV controller and HVAC performance devices	
Tools	Description	Туре
	Connection cable 10 ft [3 m], A: RJ11 6/4 ZTH EU, B: 3-pin Weidmüller and supply connection	ZK4-GEN
	Service Tool, with ZIP-USB function, for programmable 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.

A 500 Ω resistor (ZG-R01) converts the 4...20 mA control signal to 2...10 V.

🚯 Control signal may be pulsed from either the Hot (Source) or Common (Sink) 24 V line.

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.

#### A 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.



**Technical data sheet** 

