5-year warranty

Technical data

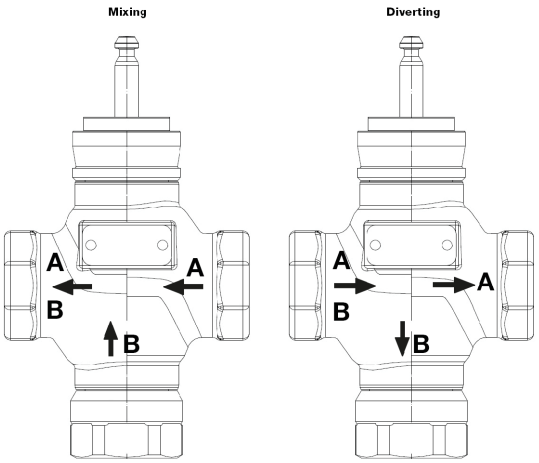
Functional data	Valve Size	1" [25]
	Fluid	chilled or hot water, up to 60% glycol
	Fluid Temp Range (water)	20...280°F [-7...138°C]
	Body Pressure Rating	ANSI Class 250, up to 400 psi below 150°F
	Servicing	repack kits available
	Rangeability Sv	A-port 100:1, B-port 50:1
	Flow Pattern	3-way Mixing/Diverting
	Leakage rate	ANSI Class VI
	Controllable flow range	stem up - open B – AB
	Cv	14
	ANSI Class	250
	Body pressure rating note	up to 400 psi below 150°F
Materials	Valve plug	brass
	Seat	Bronze
	End fitting	NPT female ends
Suitable actuators	Non-Spring	SVB(X)
	Electronic fail-safe	SVKB(X)

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
- 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 authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied 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.

Product features

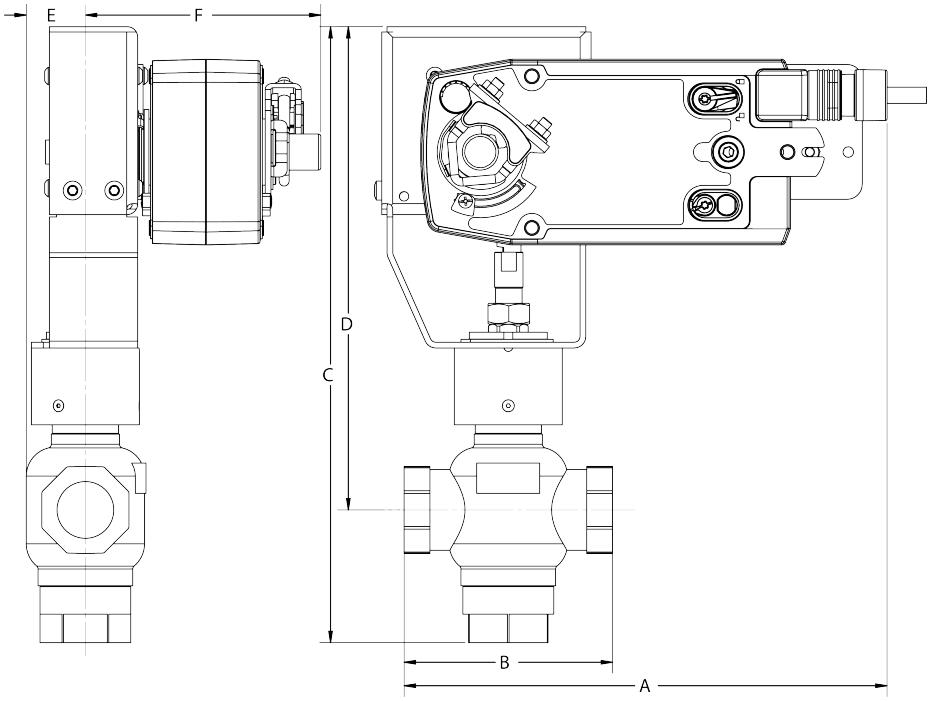
Flow/Mounting details



Dimensions

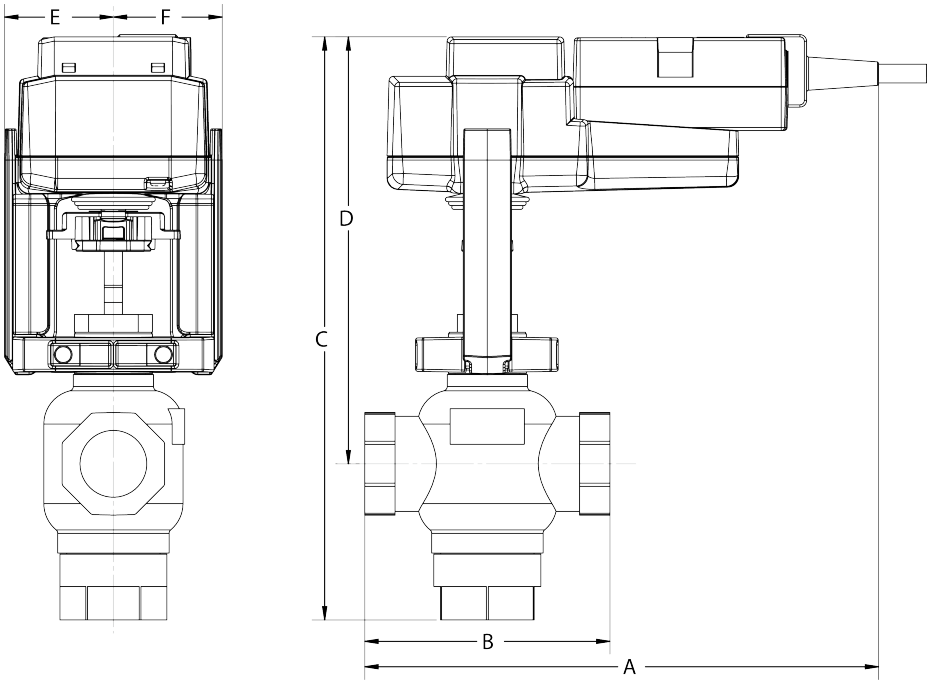
Dimensional drawings

NF



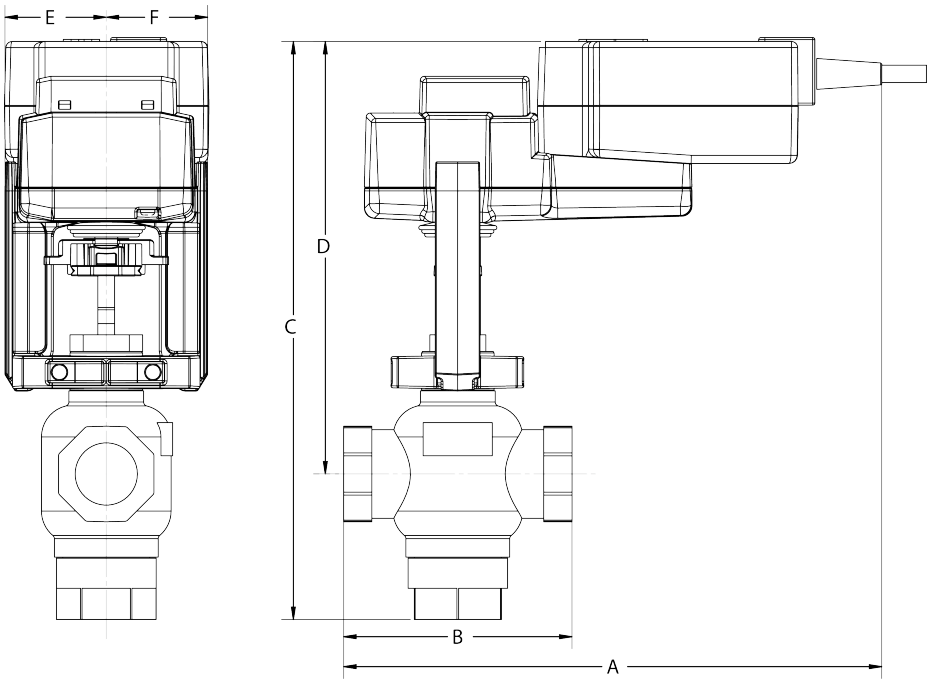
A	B	C	D	E	F
10.2" [260]	4.4" [112]	12.8" [325]	10.2" [260]	1.2" [30]	4.9" [125]

SV



A	B	C	D	E	F
9.1" [231]	4.4" [112]	10.3" [262]	8.6" [218]	1.9" [48]	1.9" [48]

SVK

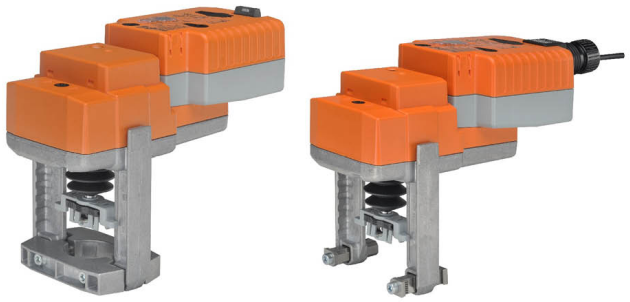


A	B	C	D	E	F
10.2" [260]	4.4" [112]	11.0" [279]	8.2" [208]	1.9" [48]	1.9" [48]

BELIMO

Modulating, Electronic Fail-Safe, Linear, 24 V,
Multi-Function Technology®

Technical data sheet SVKX24-MFT



5-year warranty

Technical data

Electrical data	Nominal voltage	AC/DC 24 V
	Nominal voltage frequency	50/60 Hz
	Power consumption in operation	3 W
	Power consumption in rest position	2 W
	Transformer sizing	7 VA (class 2 power source)
	Electrical Connection	18 GA plenum cable, 3 ft [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	340 lbf [1500 N]
	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, 1500 Ω for PWM, On/Off and Floating point
	Operating range Y variable	Start point 0.5...30 V End point 2.5...32 V
	Options positioning signal	variable (VDC, PWM, on/off, floating point)
	Position feedback U	2...10 V
	Position Feedback	2...10 V
	Bridging time	2 s delay before fail-safe activates
	Pre-charging time	5...20 s
	Direction of motion motor	selectable with switch
	Direction of motion fail-safe	reversible with switch
	Manual override	4 mm hex crank (shipped w/actuator)
	Stroke	0.75" [19 mm]
	Running Time (Motor)	default 90 s, variable 35...150 s
	Running time motor variable	35...150 s
	Running time fail-safe	<35 s
	Noise level, motor	45 dB(A)
	Noise level, fail-safe	60 dB(A)
	Position indication	Mechanically, with pointer
Safety data	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
	Ambient temperature	-22...122°F [-30...50°C]
	Storage temperature	-40...176°F [-40...80°C]
	Ambient humidity	max. 95% r.H., non-condensing
	Servicing	maintenance-free

Weight	Weight	3.53 lb [1.6 kg]
Materials	Housing material	Die cast aluminium and plastic casing

Accessories

Gateways	**Description**	**Type**
	Gateway MP to BACnet MS/TP	UK24BAC
	Gateway MP to LonWorks	UK24LON
	Gateway MP to Modbus RTU	UK24MOD
Service tools	**Description**	**Type**
	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 configurable and communicative Belimo actuators / VAV controller and HVAC performance devices	ZTH US

Electrical installation

INSTALLATION NOTES

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

3 Actuators may also be powered by 24 VDC.

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

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

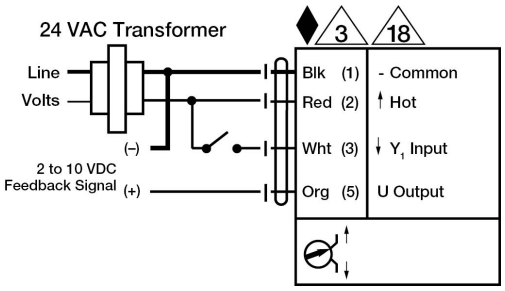
9 For triac sink the common connection from the actuator must be connected to the hot connection of the controller. Contact closures A & B also can be triacs. A & B should both be closed for the triac source and open for triac sink.

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

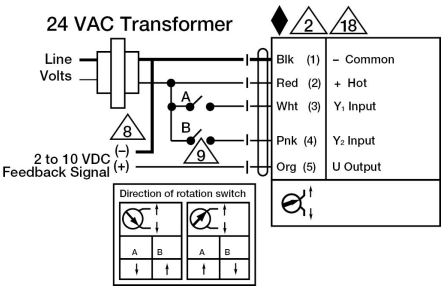
Meets cULus requirements without the need of an electrical ground connection.

Warning! Live Electrical Components!

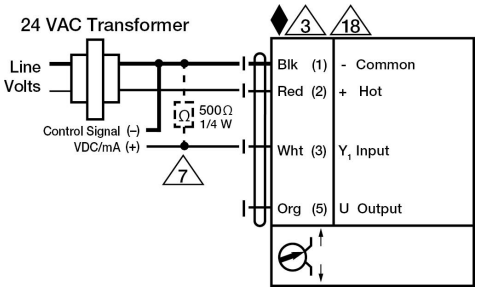
During installation, testing, servicing and troubleshooting of this product, it may be necessary to work with live electrical components. Have a qualified licensed electrician or other individual who has been properly trained in handling live electrical components perform these tasks. Failure to follow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



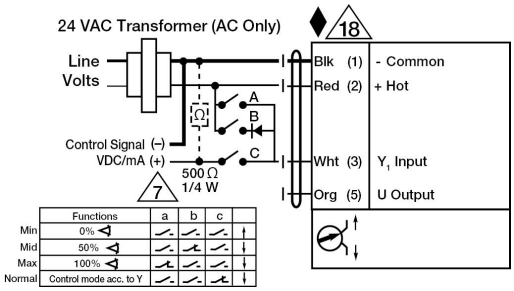
On/Off



Floating Point



VDC / 4 to 20 mA



Override Control Min, Mid, Max Positions