





5-year warranty



Technical data

Functional data

Valve Size	6" [150]
Fluid	chilled or hot water, up to 60% glycol
Fluid Temp Range (water)	32150°F [065°C]
Body Pressure Rating	ANSI Class 125, up to 175 psi below 150°F
Flow characteristic	linear
Servicing	repack/rebuild kits available
Rangeability Sv	50:1
Flow Pattern	3-way Diverting
Leakage rate	ANSI Class III
Controllable flow range	stem up - open AB – B
Cv	248
ANSI Class	125
Body pressure rating note	up to 175 psi below 150°F
Valve body	Cast iron - ASTM A126 Class B
Valve plug	bronze
Stem seal	NLP EPDM (no lip packing)
Seat	Stainless steel AISI 316

Materials

Valve body	Cast iron - ASTM A126 Class B
Valve plug	bronze
Stem seal	NLP EPDM (no lip packing)
Seat	Stainless steel AISI 316
Pipe connection	125 lb flanged
Non-Spring	FVR(X)

Safety notes



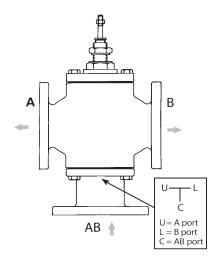
Suitable actuators

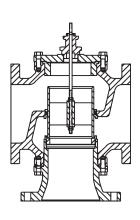
- WARNING: This product can expose you to lead which is known to the State of California to cause cancer and reproductive harm. For more information go to www.p65warnings.ca.gov
- The valve has been designed for use in stationary heating, ventilation and air-conditioning systems and must not be used 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



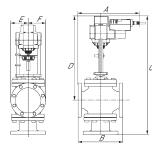
Flow/Mounting details



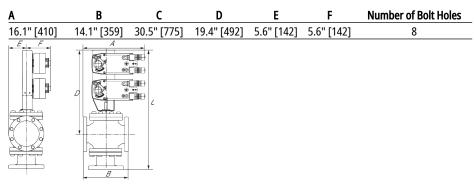


Dimensions

Dimensional drawings



EVB, EVX, RVB, RVX



2*AFB, 2*AFX

Α	В	C	D	E	F	Number of Bolt Holes
16.1" [410]	14.1" [359]	34.0" [864]	23.0" [584]	5.6" [142]	5.3" [135]	8



Modulating, Spring Return, 24 V, 0 to 135 Ω Input







Tec	hni	ical	d	ata
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Electrical data	Nominal voltage	AC/DC 24 V
	Nominal voltage frequency	50/60 Hz
	Power consumption in operation	7.5 W
	Power consumption in rest position	3 W
	Transformer sizing	20 VA (class 2 power source)
	Electrical Connection	18 GA appliance cable, 3ft [1m] 10ft [3m] and 16ft [5m], with 1/2" conduit connector, degree of protection NEMA 2 / IP54
	Overload Protection	electronic throughout 095° rotation
Functional data	Operating range Y	0135 Ω

Operating range Y	0135 Ω
Operating range Y note	Honeywell Electronic Series 90, input 0135 Ω
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
Direction of motion fail-safe	reversible with cw/ccw mounting
Manual override	5 mm hex crank (3/16" Allen), supplied
Angle of rotation	95°, adjustable with mechanical end stop, 3595°
Angle of rotation note	adjustable with mechanical end stop, 3595°
Running Time (Motor)	default 150 s, variable 70220 s
Running time motor variable	70220 s
Running time fail-safe	<20 s
Override control	MIN (minimum position) = 0%
	MID (intermediate position) = 50%
	MAX (maximum position) = 100%
Noise level, motor	40 dB(A)
Noise level, fail-safe	62 dB(A)
Position indication	Mechanical
Degree of protection IEC/EN	IP54

Safety data

Degree of protection IEC/EN	IP54
Degree of protection NEMA/UL	NEMA 2 UL Enclosure Type 2
Agency Listing	cULus acc. to UL60730-1A/-2-14, CAN/CSA
	E60730-1:02, CE acc. to 2014/30/EU
Quality Standard	ISO 9001
Ambient temperature	-22122°F [-3050°C]
Storage temperature	-40176°F [-4080°C]
Ambient humidity	max. 95% r.H., non-condensing
Servicing	maintenance-free
Weight	9.26 lb [4.2 kg]



Materials Housing material

Galvanized steel and plastic housing

Safety notes



- 3/8"-16 shaft clevis for AHK/AH.
- Battery Back Up System for SY(7~10)-110
- 5/16" shaft clevis for LH.
- Cable to ZIP-RS232 US to diagnostic/programming socket.
- MFT95 resistor kit for 4 to 20 mA control applications.

Accessories

Gateways	Description	туре
	Gateway MP to BACnet MS/TP	UK24BAC
	Gateway MP to LonWorks	UK24LON
	Gateway MP to Modbus RTU	UK24MOD
Service 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 parametrisable and communicative Belimo actuators, VAV controller and HVAC performance devices	ZTH US

Electrical installation



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

Provide overload protection and disconnect as required.

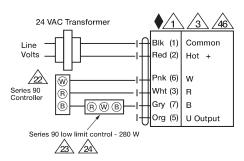
 $\sqrt{3}$ Actuators may also be powered by 24 VDC.

 $\frac{1}{22}$ Actuators and controller must have separate transformers.

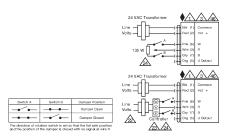
Resistor value depends on the type of controller and the number of actuators. No resistor is used for one actuator. Honeywell® resistor kits may also be used.

 $\sqrt{25}$ To reverse control rotation, use the reversing switch.

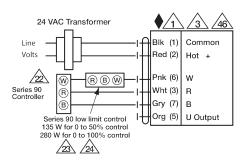
 $_{\!\scriptscriptstyle \Delta}$ Actuators may be controlled in parallel. Current draw and input impedance must be observed.



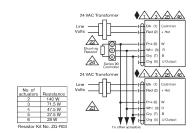
High Limit Control



Typical and Override Control

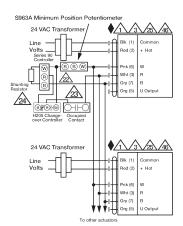


Low Limit Control

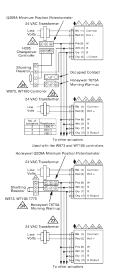


Multiple Actuators





Multiple Actuators with Minimum Position Potentiometer



Multiple Actuators Used with W973, W7100 and T775