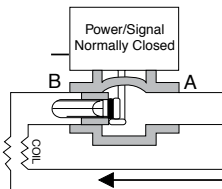
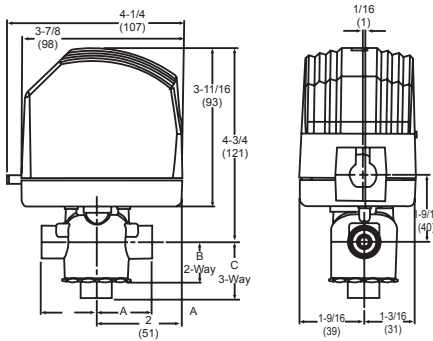


Modulating control valve

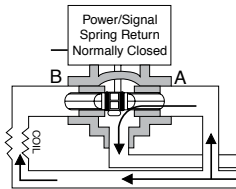


Features

- Magnetic clutch to maximize life of motor and gear train
- Man. operating lever/position indicator facilitates field setup
- Actuator can be installed after the valve body
- Spring will return actuator to normal position when the power is lost
- The floating type is compatible with any 24 Vac three-wire signal when three minute time-out logic resides in the valve actuator or system controller
- The three-wire floating valve includes a time-out feature that automatically turns off the control signal to the valve after three minutes at 60 Hz and 3.6 minutes at 50 Hz
- Features a two second time delay upon power loss to prevent the loss of valve position during brief outages. There is a three second delay at power-up.



Two-Way Spring Return Valves



Three-Way Spring Return Valve

Specifications

Outputs

- **Electrical**
 - ♦ **Stroke**
60 Hz: 2 min. 30 sec., 50 Hz: 3 minutes
 - ♦ **Action**
Floating: direct acting
Proportional: direct acting
(valve opens B port with increase in signal)
Field selectable reverse acting
- **Mechanical**
 - ♦ **Manual override:** Allows manual positioning
 - ♦ **Operating pressure limits:** 300 psi static pressure
 - ♦ **Material**
Actuator: high temperature plastic
Valve: body: forged brass; stem: chrome-plated brass; seat: brass; plug/paddle: high temperature thermoplastic/rubber
 - ♦ **Flow characteristic:** 1.0 to 4.0 Cv: equal percentage



Environment

- **Ambient temperature limits**
 - ♦ **Shipping and storage:** -40 to 158 °F (-40 to 70 °C)
 - ♦ **Operating:** 35 to 125 °F (1.7 to 52 °C)
 - ♦ **Fluid:** 32 to 200 °F (0 to 93 °C) (not steam rated)
- **Humidity:** 5 to 95% RH, non-condensing
- **Seat leakage:** ANSI class IV (0.01%)
- **Shipping weight:** 1.9 lbs. (860 g), actuator and valve body
- **Location:** NEMA Type 1

Agency listings

- **UL 873**
 - ♦ Underwriter Laboratories (file #E9429 Category Temperature-Indicating and Regulating Equipment), Class 2
- **CUL**
 - ♦ UL Listed for use in Canada by Underwriters Laboratories
 - ♦ Canadian Standards C22.2 No. 24

Modulating valve flow coefficients and maximum close-off differential pressure

Valve size	Connection type	Flow coefficient Cv (kv)	Maximum close-off ΔP, PSI (kPa)	
			Spring operating mode (driven closed)	Spring power failure mode ^a (spring closed)
1/2"	SW	4.0 (3.5)	35 (241)	20 (137)
3/4"	SW			

^a If the valve is driven closed before a power failure, the spring operating mode close-off pressures apply

Actuator specifications: Floating

Action	Inputs						Outputs			
	VAC	Frequency	Control circuit, max.		Total actuator, max.		Nominal stroke time		Elapsed time before time-out	
			mA	VA	mA	VA	60 Hz	50 Hz	60Hz	50 Hz
Spring return	24 Vac +25%/-15%	50/60 Hz	24	0.6	68	1.6	2 min. 30 sec.	3 min.	3 min.	3 min. 36 sec.

Proportional

Action	Inputs				Outputs					
	VAC	Frequency	Control circuit		Total actuator, max.		Nominal stroke time		Elapsed time before time-out	
			Range/input impedance		mA	VA	60 Hz	50 Hz	60Hz	50 Hz
Spring return	24 Vac +25%/-15%	50/60 Hz	0-10 VDC/200K, 0-5 VDC/200K 5-10 VDC/200K, 4-20 mA/300		65	1.6	2 min. 30 sec.	3 min.	2 min. 45 sec.	3 min. 18 sec.

Zehnder Rittling · 100 Rittling Blvd. · Buffalo, NY USA 14220

T 716-827-6510 · F 716-218-2805 · sales@zehnder-rittling.com · www.zehnder-rittling.com

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