On/off control valve



Features

- Hysteresis synchronous motor for long life
- Spring return operation provides a fail-safe
- Actuator mounts directly onto valve body without need for linkages or calibration
- Manual override lever
- Actuator can be replaced without any tools, or removal of valve from system



Valve body assembly

- Service: hot and chilled water models, up to 50% glycol
- System static pressure limits: 300 psi (2068.4 kPa)
- Close-off: refer to Table 2
- Fluid/ambient temperature limits: refer to Table 1
- Seat leakage: ANSI class IV (0.01%) with pressure at inlet (B-port/A-port, if 3-way)
- Body: forged brass ■ Stem: nickel-plated
- Seat: brass ■ Paddle: Buna N

Actuator

- Voltage: 24 Vac @ 50/60 Hz, 120 Vac @ 60 Hz
- Power requirements: 6.5 watts, 7.5 Va
- Control signal: on/off, 2 position, spring return
- Timing, full open to full close: 25 sec. max and 9 sec. max. spring return
- Materials: stainless steel base plate, aluminum cover
- Ambient temperature limits
 - ♦ Shipping & storage: -40 to 160 °F (-40 to 71°C)
 - ♦ Operating: Refer to Table 1
- Humidity: 5 to 95% relative humidity, non-condensing
- Agency listings
 - ♦ UL873: Underwriters Laboratories (File #E9429 Category Temperature Indicating and Regulating Equipment)
 - ♦ CUL: UL Listed for use in Canada by **Underwriters Laboratory**
 - ◆ Canadian Standards C22.2 No. 24
 - ◆ European Community: EMC Directive (89/336/EEC) Low Voltage Directive (72/23/EEC)

Table 1

Valve body and actuators model chart

Model temperature range				
Valve body	32° to 200 °F (fluid) @ 104 °F (ambient) (0 to 93 °C @ 40 °C)			
Actuator	32° to 200 °F (fluid) @ 104 °F (ambient) (0 to 93 °C @ 40 °C)			

Table 2

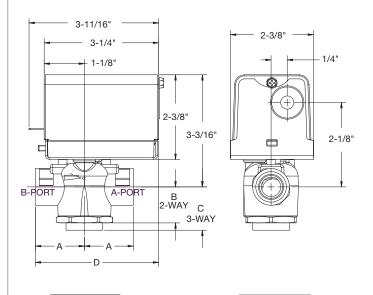
Flow coefficients and maximum close-off pressure differential

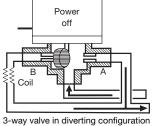
Valve size	Connection type	2-way Cv (kv)	3-way Cv (kv)	Close-off ΔP PSI (kPa)
1/2"	SW	3.5 (3.0)	4.0 (3.4)	25 (172)

Table 3

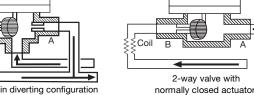
Dimensions

Valve body size	Α	В	С	D
1/2" sweat	1-5/16"	15/16"	1-5/16"	3-5/16"
	(33 mm)	(23 mm)	(33 mm)	(84 mm)





normally closed to the coil



Power