

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

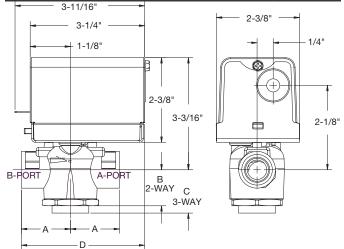
Flow coefficients and maximum close-off pressure differential

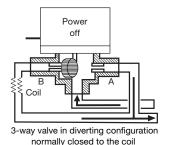
| Valve size | Connection type | 2-way Cv (kv) | 3-way Cv (kv) | Close-off ΔP PSI (kPa) |
|------------|-----------------|------------------|------------------|---------------------------|
| 1/2" | SW | 3.5 (3.0) | 4.0 (3.4) | 25 (172) |
| 3/4" | SW | | | |

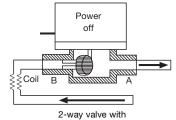
Table 3

Dimensions

| | Valve body size | Α | В | С | D |
|--|--------------------|--------------------|-------------------|---------------------|--------------------|
| | 1/2" sweat | 1-5/16" (33 mm) | 15/16" (23 mm) | 1-5/16" (33 mm) | 3-5/16" (84 mm) |
| | 3/4" sweat | 1-3/8" (35 mm) | 15/16" (23 mm) | 1-11/16" (43 mm) | 3-3/8" (86 mm) |







2-way valve with normally closed actuator