



5-year warranty


Technical data

| | | |
|---------------------------|---------------------------|---|
| Functional data | Valve Size | 2.5" [65] |
| | Fluid | chilled or hot water, up to 60% glycol |
| | Fluid Temp Range (water) | 32...350°F [0...176°C] |
| | Body Pressure Rating | ANSI Class 250, up to 280 psi below 350°F |
| | Flow characteristic | linear |
| | Servicing | repack/rebuild kits available |
| | Rangeability Sv | 50:1 |
| | Flow Pattern | 3-way Mixing |
| | Leakage rate | ANSI Class III |
| | Controllable flow range | stem up - open B – AB |
| | Cv | 68 |
| | ANSI Class | 250 |
| | Body pressure rating note | up to 280 psi below 350°F |
| Materials | Valve body | Cast iron - ASTM A126 Class B |
| | Valve plug | Stainless steel |
| | Stem seal | NLP EPDM (no lip packing) |
| | Seat | Stainless steel AISI 316 |
| | Pipe connection | 250 lb flanged |
| Suitable actuators | Non-Spring | EVB(X) RVB(X) |
| | Electronic fail-safe | AVKB(X) (2*GKB(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

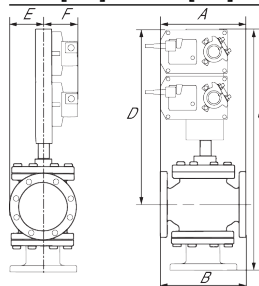
Dimensional drawings

EVB, EVX, RVB, RVX



| A | B | C | D | E | F | Number of Bolt Holes |
|-------------|------------|-------------|-------------|-----------|-----------|----------------------|
| 12.0" [304] | 9.6" [245] | 25.4" [646] | 18.3" [464] | 3.7" [95] | 3.7" [95] | 8 |

2*GMB, 2*GMX, 2*GKB, 2*GKX



| A | B | C | D | E | F | Number of Bolt Holes |
|-------------|------------|-------------|-------------|-----------|------------|----------------------|
| 12.0" [304] | 9.6" [245] | 29.0" [736] | 21.8" [554] | 3.7" [95] | 5.3" [135] | 8 |

AVKB, AVKX



| A | B | C | D | E | F | Number of Bolt Holes |
|-------------|------------|-------------|-------------|-----------|-----------|----------------------|
| 12.0" [304] | 9.6" [245] | 25.4" [646] | 18.3" [464] | 3.7" [95] | 3.7" [95] | 8 |

AFB, AFX



| A | B | C | D | E | F | Number of Bolt Holes |
|-------------|------------|-------------|-------------|-----------|------------|----------------------|
| 12.0" [304] | 9.6" [245] | 24.0" [610] | 16.9" [428] | 3.7" [95] | 5.3" [135] | 8 |



2*AFB, 2*AFX

| A | B | C | D | E | F | Number of Bolt Holes |
|-------------|------------|-------------|-------------|-----------|------------|----------------------|
| 12.0" [304] | 9.6" [245] | 29.0" [736] | 21.8" [554] | 3.7" [95] | 5.3" [135] | 8 |



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Technical data

| | | | |
|------------------------|------------------------------------|--|------------------|
| 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 | 10 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 0...95° rotation | |
| Functional data | Operating range Y | 0...135 Ω | |
| | Operating range Y note | Honeywell Electronic Series 90, input 0...135 Ω | |
| | Position feedback U | 2...10 V | |
| | Position feedback U note | Max. 0.5 mA | |
| | Position feedback U variable | VDC variable | |
| | Direction of motion motor | selectable with switch 0/1 | |
| | Manual override | 5 mm hex crank (3/16" Allen), supplied | |
| | Angle of rotation | 95°, adjustable with mechanical end stop, 35...95° | |
| | Angle of rotation note | adjustable with mechanical end stop, 35...95° | |
| | Running Time (Motor) | default 150 s, variable 70...220 s | |
| | Running time motor variable | 70...220 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 | | |
| 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 | -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 | 4.6 lb [2.1 kg] |
| | | Materials | Housing material |

Electrical installation

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.

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

1 Provide overload protection and disconnect as required.

3 Actuators may also be powered by 24 VDC.

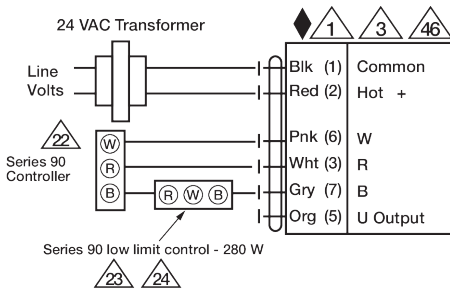
22 Actuators and controller must have separate transformers.

23 Consult controller instruction data for more detailed information.

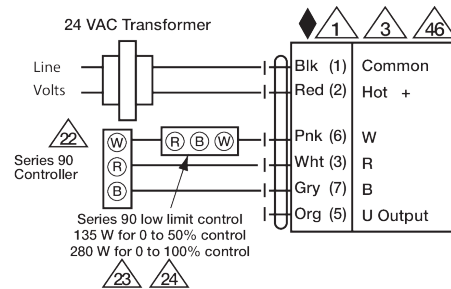
24 Resistor value depends on the type of controller and the number of actuators. No resistor is used for one actuator. Honeywell® resistor kits may also be used.

25 To reverse control rotation, use the reversing switch.

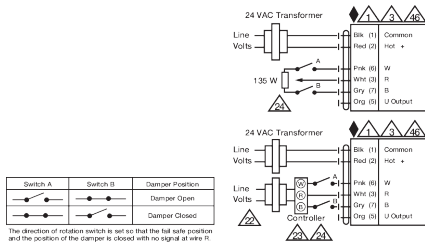
46 Actuators may be controlled in parallel. Current draw and input impedance must be observed.



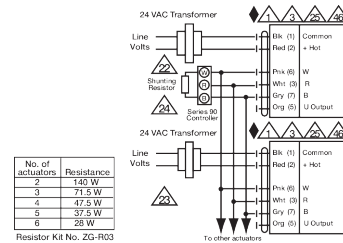
High Limit Control



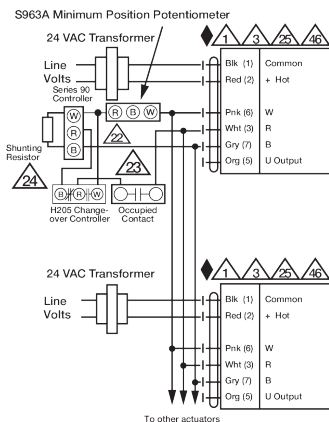
Low Limit Control



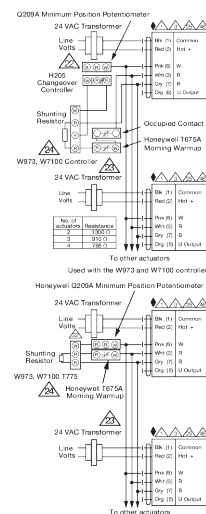
Typical and Override Control



Multiple Actuators



Multiple Actuators with Minimum Position Potentiometer



Multiple Actuators Used with W973, W7100 and T775