Resilient Seat, 304 Stainless Steel Disc
200 psi (2: to $12^{\prime \prime}$ ) and 150 psi (14"-30") bubble tight shut-off, Long stem design allows for 2" insulation, Valve face-to-face dimensions comply with API 609 \& MSS-SP-67, Completely assembled and tested, ready for installation



5-year warranty


## Technical data

| Functional data | Valve Size | 2" [50] |
| :---: | :---: | :---: |
|  | Fluid | chilled or hot water, up to 60\% glycol |
|  | Fluid Temp Range (water) | $-22 . . .250^{\circ} \mathrm{F}\left[-30 . . .120^{\circ} \mathrm{C}\right]$ |
|  | Body Pressure Rating | ANSI Class Consistent with 125, 232 psi CWP |
|  | Close-off pressure $\triangle$ ps | 200 psi |
|  | Flow characteristic | modified equal percentage |
|  | Servicing | maintenance-free |
|  | Rangeability Sv | 10:1 (for 30...70 ${ }^{\circ}$ range) |
|  | Flow Pattern | 2-way |
|  | Leakage rate | 0\% |
|  | Controllable flow range | $90^{\circ}$ rotation |
|  | Cv | 115 |
|  | ANSI Class | Consistent with 125 |
|  | Body pressure rating note | 232 psi CWP |
|  | Maximum Velocity | 12 FPS |
|  | Lug threads | 5/8-11 UNC |
| Materials | Valve body | Ductile cast iron ASTM A536 |
|  | Body finish | epoxy powder coating (blue RAL 5002) |
|  | Stem seal | EPDM (lubricated) |
|  | Seat | EPDM |
|  | Pipe connection | for use with ANSI class 125/150 flanges |
|  | Bearing | RPTFE |
|  | Disc | 304 stainless steel |
|  | Gear operator materials | Gears - hardened steel |
| Suitable actuators | Non-Spring | $\begin{aligned} & \operatorname{ARB}(X) \\ & \operatorname{GRB}(X) \end{aligned}$ |

## Product features



## Dimensions

Dimensional drawings

AFR


$\begin{array}{ccccccc}\text { A } & \text { B } & \text { C } & \text { D } & \text { E } & \text { F } & \text { Number of Bolt Holes }\end{array}$ $\begin{array}{llllll}10.1 "[257] & 1.8 "[45] & 15.1 "[384] & 12.4 \text { " }[315] & \text { 2.9" }[73] & 2.9 "[73]\end{array}$


AMB/AMX

| $\mathbf{A}$ | B | C | D | E | F | Number of Bolt Holes |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| $8.3^{\prime \prime}[211]$ | $1.8^{\prime \prime}[45]$ | $15.1^{\prime \prime}[384]$ | $12.4^{\prime \prime}[315]$ | $2.9^{\prime \prime}[73]$ | $2.9^{\prime \prime}[73]$ | 4 |
| $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{D}$ | E | F | Number of Bolt Holes |
| $10.1^{\prime \prime}[257]$ | $1.8^{\prime \prime}[45]$ | $15.1^{\prime \prime}[384]$ | $12.4^{\prime \prime}[315]$ | $2.9^{\prime \prime}[73]$ | $2.9^{\prime \prime}[73]$ | 4 |



| A | B | C | D | E | F | Number of Bolt Holes |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| $8.3^{\prime \prime}[211]$ | $1.8^{\prime \prime}[45]$ | $15.1^{\prime \prime}[384]$ | $12.4^{4}[315]$ | $2.9^{\prime \prime}[73]$ | $2.9 "[73]$ | 4 |




5-year warranty
c $\epsilon$


## Technical data

| Electrical data | Nominal voltage | AC $24 . .240 \mathrm{~V} / \mathrm{DC} 24 . . .125 \mathrm{~V}$ |
| :---: | :---: | :---: |
|  | Nominal voltage frequency | $50 / 60 \mathrm{~Hz}$ |
|  | Power consumption in operation | 7 W |
|  | Power consumption in rest position | 3.5 W |
|  | Transformer sizing | 7 VA @ AC 24 V (class 2 power source), 8.5 VA @ AC 120 V 18 VA @ AC 240 V |
|  | Auxiliary switch | $2 \times$ SPDT, 3 A resistive ( 0.5 A inductive) @ AC 250 V, one set at $10^{\circ}$, one adjustable $10 \ldots . .90^{\circ}$ |
|  | Switching capacity auxiliary switch | 3 A resistive (0.5 A inductive) @ AC 250 V |
|  | Electrical Connection | (2) 18 GA appliance cables with $1 / 2^{\text {" conduit }}$ connectors, $3 \mathrm{ft}[1 \mathrm{~m}]$, |
|  | Overload Protection | electronic throughout $0 . . .95^{\circ}$ rotation |
| Functional data | Direction of motion motor | selectable by ccw/cw mounting |
|  | Direction of motion fail-safe | reversible with $\mathrm{cw} / \mathrm{ccw}$ mounting |
|  | Manual override | 5 mm hex crank (3/16" Allen), supplied |
|  | Angle of rotation | $90^{\circ}$ |
|  | Running Time (Motor) | 75 s |
|  | Running time fail-safe | $<20 \mathrm{~s}$ |
|  | Noise level, motor | 45 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 and 2014/35/ EU; Listed to UL 2043 - suitable for use in air plenums per Section 300.22(c) of the NEC and Section 602.2 of the IMC |
|  | Quality Standard | ISO 9001 |
|  | Ambient temperature | $-22 . . .122^{\circ} \mathrm{F}\left[-30 . . .50^{\circ} \mathrm{C}\right]$ |
|  | Storage temperature | $-40 . . .176^{\circ} \mathrm{F}\left[-40 . . .80^{\circ} \mathrm{C}\right]$ |
|  | Ambient humidity | max. $95 \%$ r.H., non-condensing |
|  | Servicing | maintenance-free |
| Weight | Weight | 4.1 lb [1.9 kg] |

## Electrical installation

## INSTALLATION NOTES

(A) Actuators with appliance cables are numbered.Universal Power Supply (UP) models can be supplied with 24 VAC up to 240 VAC, or 24 VDC up to 125 VDC.Provide overload protection and disconnect as required.
Actuators may be powered in parallel. Power consumption must be observed.
Parallel wiring required for piggy-back applications.
Meets cULus requirements without the need of an electrical ground connection.
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.


On/Off


Auxiliary Switches

