

Butterfly Valve with Lug types

- Disc 304 stainless steel
- Bubble tight shut-off
- Resilient seat
- Valve face-to-face dimensions comply with API 609 & MSS-SP-67
- Completely assembled and tested, ready for installation



5-year warranty

Type overview

| Type | DN |
|--------|----|
| F665HD | 65 |

Technical data

| | | |
|---------------------------|--------------------------------|---|
| Functional data | Valve size [mm] | 2.5" [65] |
| | Fluid | chilled or hot water, up to 60% glycol |
| | Fluid Temp Range (water) | -22...250°F [-30...120°C] |
| | Body Pressure Rating | ANSI Class Consistent with 125, 232 psi CWP |
| | Close-off pressure Δ ps | 200 psi |
| | Flow characteristic | modified equal percentage |
| | Leakage rate | 0% leakage, leakage rate A |
| | Servicing | maintenance-free |
| | Flow Pattern | 2-way |
| | Controllable flow range | 90° rotation |
| | Cv | 196 |
| | 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 | 416 stainless steel |
| | 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 | ARB(X) GRB(X) |
| | Spring | AFRB(X) |

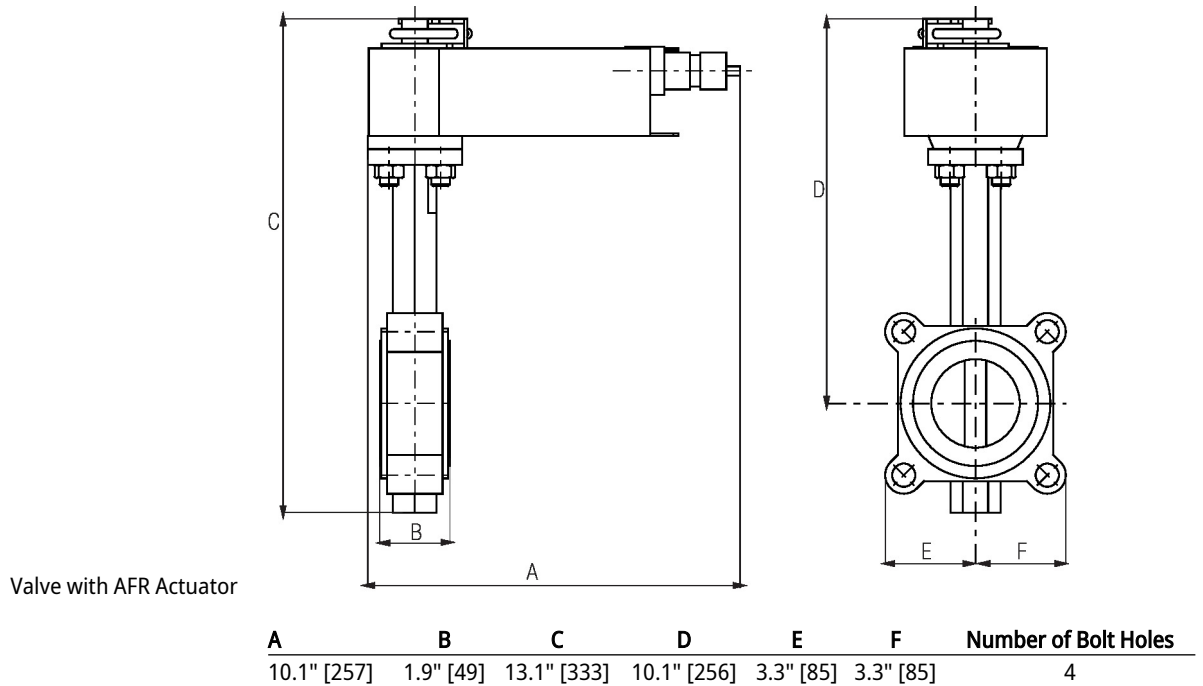
Product features

Flow/Mounting details

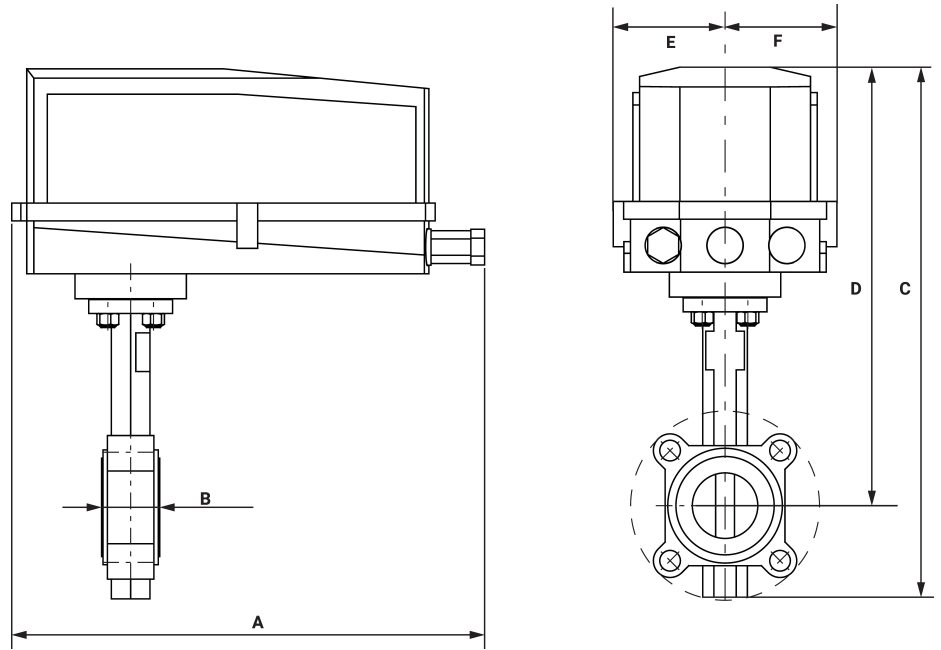


Dimensions

| Type | DN | Weight |
|--------|----|-----------------|
| F665HD | 65 | 6.2 lb [2.8 kg] |

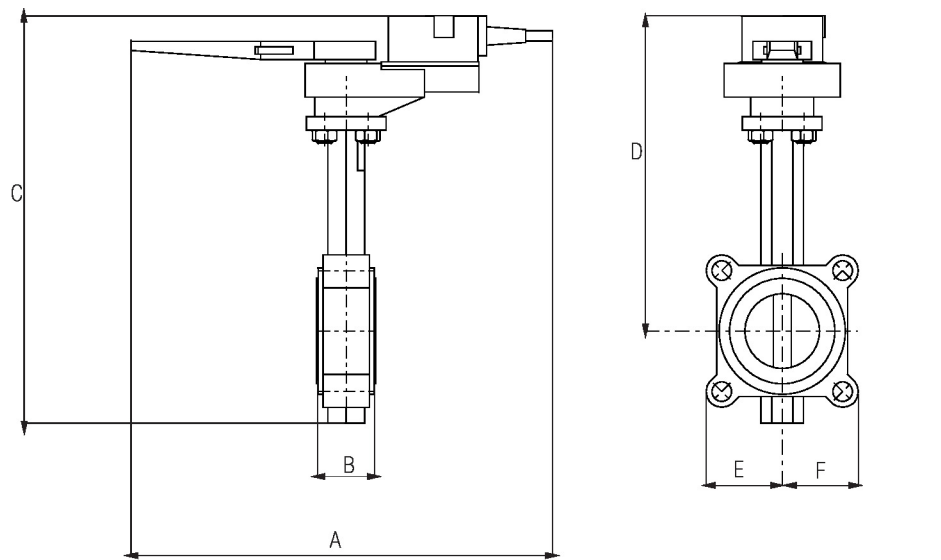


Valve with AF/GR N4 Actuator



| A | B | C | D | E | F | Number of Bolt Holes |
|-------------|-----------|-------------|-------------|-----------|-----------|----------------------|
| 14.5" [368] | 1.9" [49] | 17.0" [433] | 13.9" [354] | 3.4" [86] | 3.4" [86] | 4 |

Valve with ARB(X) Actuator

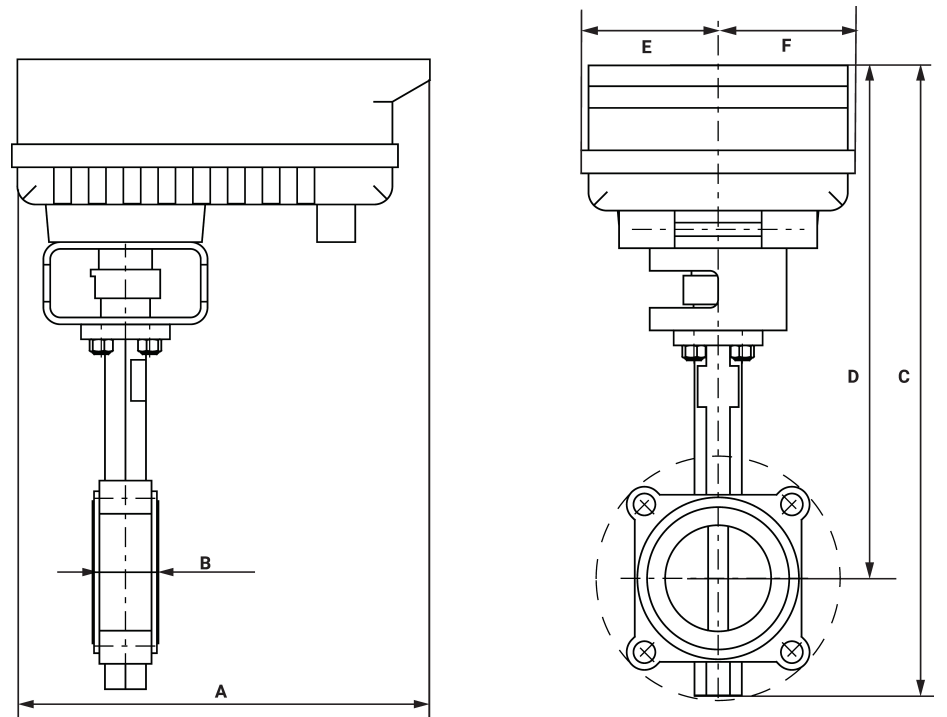


| A | B | C | D | E | F | Number of Bolt Holes |
|-------------|-----------|-------------|-------------|-----------|-----------|----------------------|
| 14.5" [368] | 1.9" [49] | 13.3" [337] | 10.2" [260] | 3.3" [85] | 3.3" [85] | 4 |



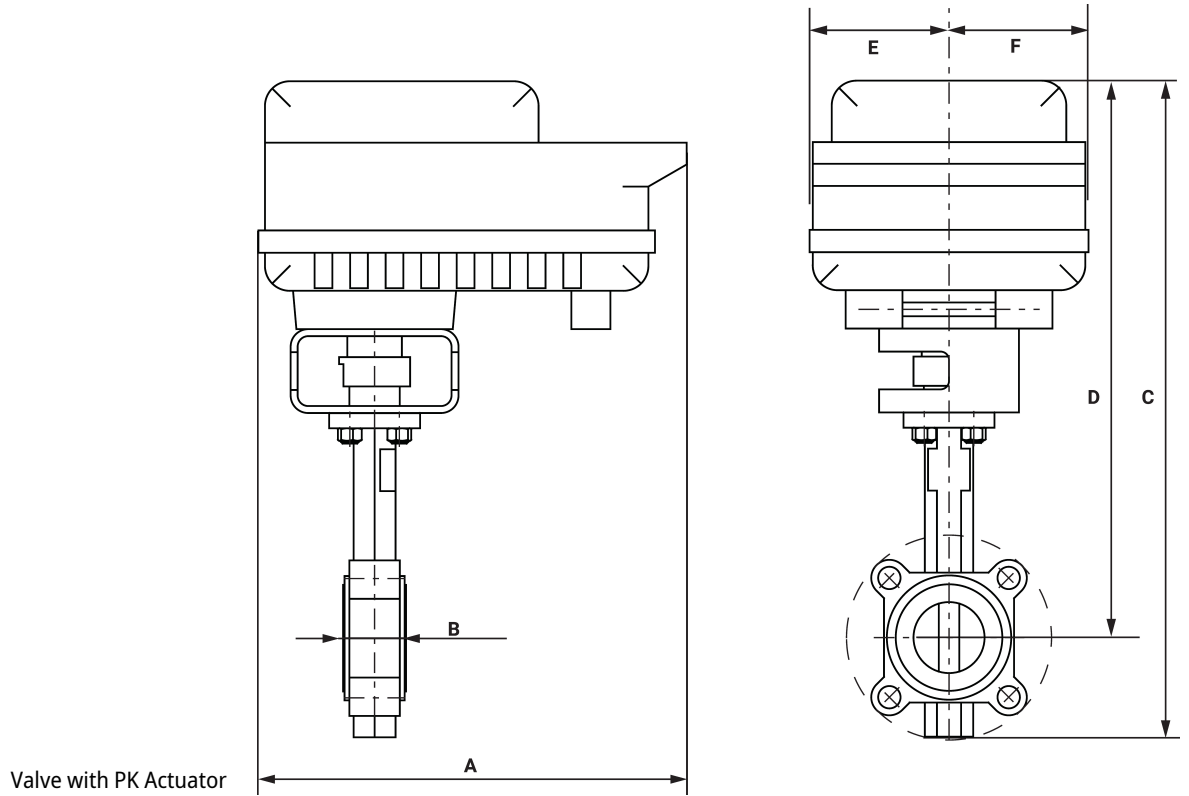
Valve with AFX24-MFT(-S) Actuator

| A | B | C | D | E | F | Number of Bolt Holes |
|-------------|-----------|-------------|-------------|-----------|-----------|----------------------|
| 10.1" [257] | 1.9" [49] | 16.0" [406] | 12.9" [328] | 3.3" [85] | 3.3" [85] | 4 |



Valve with PR Actuator

| A | B | C | D | E | F | Number of Bolt Holes |
|-------------|-----------|-------------|-------------|------------|------------|----------------------|
| 12.0" [304] | 1.9" [49] | 17.6" [448] | 14.5" [368] | 3.9" [100] | 3.9" [100] | 4 |



| A | B | C | D | E | F | Number of Bolt Holes |
|-------------|-----------|-------------|-------------|------------|------------|----------------------|
| 12.0" [304] | 1.9" [49] | 19.3" [490] | 16.2" [411] | 3.9" [100] | 3.9" [100] | 4 |
| A | B | C | D | E | F | Number of Bolt Holes |
| 8.4" [213] | 1.9" [49] | 16.0" [406] | 12.9" [328] | 3.3" [85] | 3.3" [85] | 4 |
| A | B | C | D | E | F | Number of Bolt Holes |
| 10.8" [275] | 1.9" [49] | 13.9" [354] | 10.8" [274] | 3.3" [85] | 3.3" [85] | 4 |



5-year warranty



Technical data

| | | |
|------------------------|------------------------------------|---|
| Electrical data | Nominal voltage | AC 24...240 V / DC 24...125 V |
| | Nominal voltage frequency | 50/60 Hz |
| | Nominal voltage range | AC 19.2...264 V / DC 21.6...137.5 V |
| | Power consumption in operation | 7 W |
| | Power consumption in rest position | 3.5 W |
| | Electrical Connection | 18 GA appliance cable, 1 m, with 1/2" conduit connector |
| | Overload Protection | electronic throughout 0...95° rotation |
| Functional data | Direction of motion motor | selectable by ccw/cw mounting |
| | Direction of motion fail-safe | reversible with cw/ccw mounting |
| | Manual override | 5 mm hex crank (3/16" Allen), supplied |
| | Angle of rotation | 90° |
| | Running Time (Motor) | 75 s / 90° |
| | Running time fail-safe | <20 s @ 20°C |
| | Noise level, motor | 45 dB(A) |
| | Noise level, fail-safe | 62 dB(A) |
| Position indication | Mechanical | |
| Safety data | Power source UL | Class 2 Supply |
| | Degree of protection IEC/EN | IP54 |
| | Degree of protection NEMA/UL | NEMA 2 |
| | Enclosure | 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 |
| | Quality Standard | ISO 9001 |
| | UL 2043 Compliant | Suitable for use in air plenums per Section 300.22(C) of the NEC and Section 602 of the IMC |
| | Ambient humidity | Max. 95% RH, non-condensing |
| | Ambient temperature | -22...122°F [-30...50°C] |
| | Storage temperature | -40...176°F [-40...80°C] |
| | Servicing | maintenance-free |
| | Weight | Weight |
| Materials | Housing material | Galvanized steel and plastic housing |

Footnotes †Rated Impulse Voltage 800V, Type of action 1.AA, Control Pollution Degree 3

Electrical installation

✂ INSTALLATION NOTES

- (A)** Actuators with appliance cables are numbered.
- (UP)** Universal Power Supply (UP) models can be supplied with 24 VAC up to 240 VAC, or 24 VDC up to 125 VDC.
- 1** Provide overload protection and disconnect as required.
- 45** Actuators may be powered in parallel. Power consumption must be observed.
- 48** 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.

Wiring diagrams

On/Off

24 to 240 VAC

