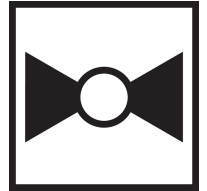


**Butterfly Valve with Grooved types**

- Disc electroless nickel coated ductile iron
- Bubble tight shut-off
- Resilient seat
- Valve face-to-face dimensions comply with AWWA (c606) & MSS-SP-67
- Completely assembled and tested, ready for installation
- VIC-300 Masterseal is manufactured by the Victaulic Company.



5-year warranty


**Type overview**

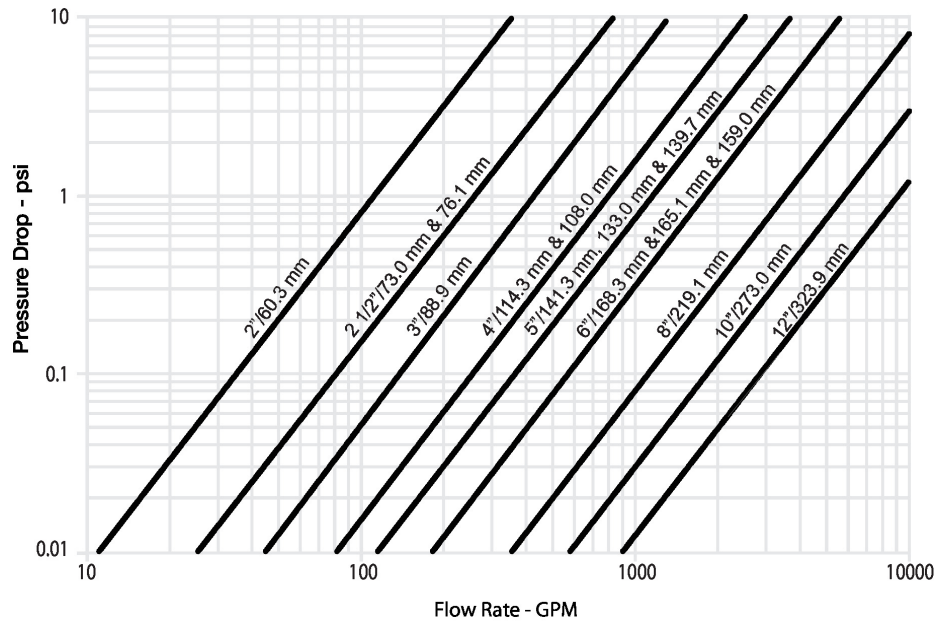
|             |           |
|-------------|-----------|
| <b>Type</b> | <b>DN</b> |
| F680VIC     | 80        |

**Technical data**

|                           |                          |  |
|---------------------------|--------------------------|--|
| <b>Functional data</b>    | Valve size [mm]          | 3" [80]                                |
|                           | Fluid                    | chilled or hot water, up to 60% glycol |
|                           | Fluid Temp Range (water) | -30...120°C [-22...250°F]              |
|                           | Body Pressure Rating     | ANSI Class Grooved AWWA, 300 psi       |
|                           | Flow characteristic      | modified equal percentage              |
|                           | Leakage rate             | 0%                                     |
|                           | Pipe connection          | Grooved<br>ANSI/AWWA (c606)            |
|                           | Servicing                | maintenance-free                       |
|                           | Flow Pattern             | 2-way                                  |
|                           | Controllable flow range  | 90° rotation                           |
|                           | Cv                       | 440                                    |
|                           | Maximum Velocity         | 20 FPS                                 |
|                           | <b>Materials</b>         | Valve body                             |
| Body finish               |                          | black alkyd enamel                     |
| Stem                      |                          | 416 stainless steel                    |
| Stem seal                 |                          | fiberglass with TFE lining             |
| Seat                      |                          | EPDM                                   |
| Disc                      |                          | electroless nickel coated ductile iron |
| <b>Suitable actuators</b> | Non Fail-Safe            | GMB(X)<br>GRCB(X)<br>PRB(X)            |
|                           | Spring                   | 2*AFB(X)                               |
|                           | Electrical fail-safe     | GKB(X)                                 |

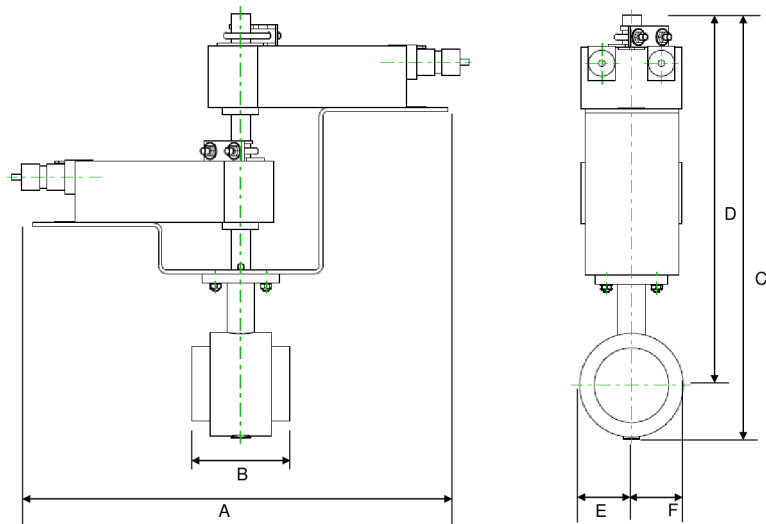
Product features

Flow/Mounting details



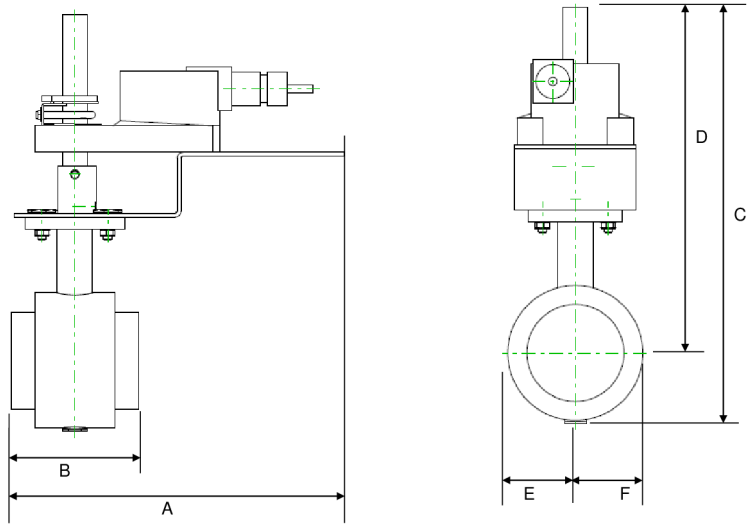
Dimensions

| Type    | DN | Weight          |
|---------|----|-----------------|
| F680VIC | 80 | 6.9 lb [3.2 kg] |



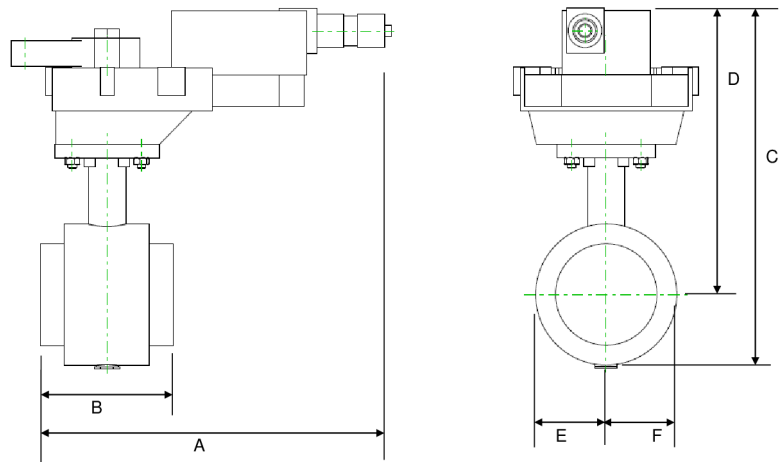
2\*AF

| A           | B         | C           | D           | E         | F         |
|-------------|-----------|-------------|-------------|-----------|-----------|
| 17.6" [448] | 3.8" [97] | 17.8" [451] | 14.3" [363] | 2.3" [58] | 2.3" [58] |



GK

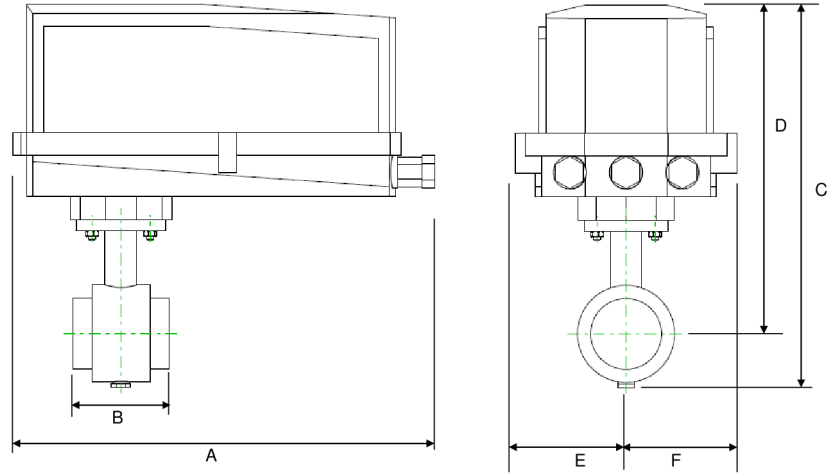
| A          | B         | C           | D           | E         | F         |
|------------|-----------|-------------|-------------|-----------|-----------|
| 9.9" [251] | 3.8" [97] | 12.3" [312] | 10.5" [267] | 2.3" [58] | 2.3" [58] |



GR

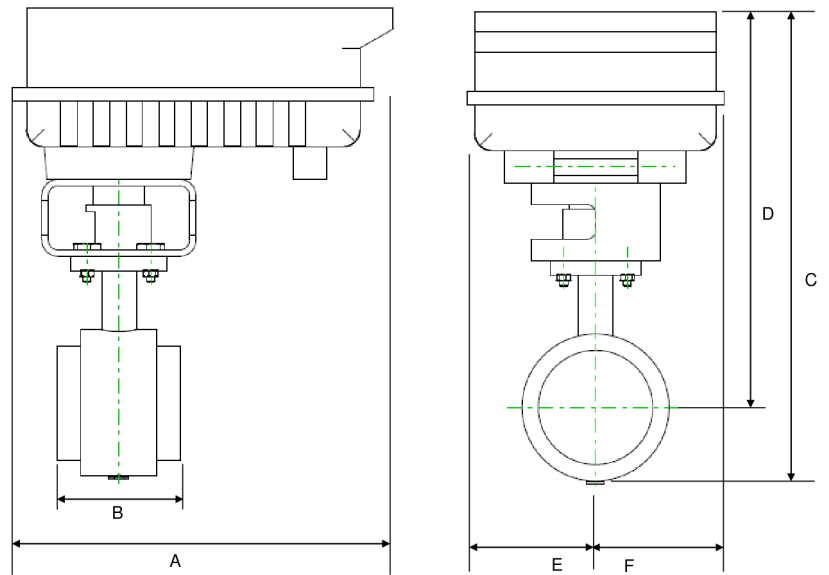
| A          | B         | C           | D          | E         | F         |
|------------|-----------|-------------|------------|-----------|-----------|
| 9.9" [251] | 3.7" [95] | 10.2" [260] | 8.1" [206] | 2.3" [58] | 2.3" [58] |

Dimensions



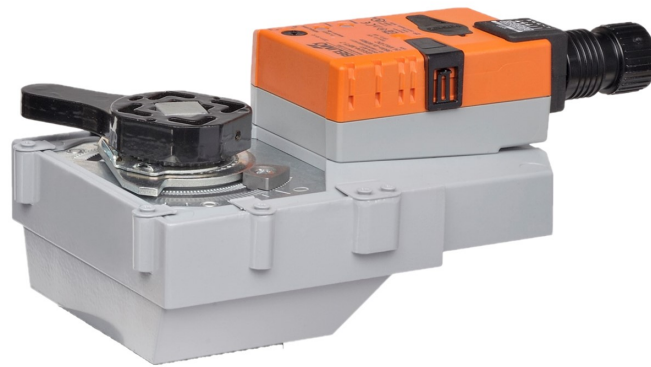
GR N4

| A           | B         | C           | D           | E         | F         |
|-------------|-----------|-------------|-------------|-----------|-----------|
| 14.1" [358] | 3.8" [97] | 14.0" [356] | 11.7" [298] | 2.3" [58] | 2.3" [58] |



F6..VIC\_PR

| A           | B         | C           | D           | E          | F          |
|-------------|-----------|-------------|-------------|------------|------------|
| 11.7" [298] | 3.8" [97] | 14.5" [368] | 12.1" [307] | 8.0" [203] | 8.0" [203] |



5-year warranty



Technical data








|                        |                                    |   |
|------------------------|------------------------------------|---|
| <b>Electrical data</b> | Nominal voltage                    | AC/DC 24 V  |
|                        | Nominal voltage frequency          | 50/60 Hz  |
|                        | Nominal voltage range              | AC 19.2...28.8 V / DC 21.6...28.8 V   |
|                        | Power consumption in operation     | 8 W   |
|                        | Power consumption in rest position | 2.5 W   |
|                        | Transformer sizing                 | 11 VA   |
|                        | Electrical Connection              | 1/2" NPT conduit connector, screw terminals   |
|                        | Overload Protection                | electronic throughout 0...90° rotation  |
| <b>Functional data</b> | Direction of motion motor          | selectable with switch 0/1  |
|                        | Manual override                    | external push button  |
|                        | Angle of rotation                  | 90°   |
|                        | Angle of rotation note             | adjustable with mechanical stop   |
|                        | Running Time (Motor)               | 35 s / 90°  |
|                        | Running time motor note            | constant, independent of load   |
|                        | Noise level, motor                 | 45 dB(A)  |
|                        | Position indication                | integrated into handle  |
| <b>Safety data</b>     | 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<br>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  |
| <b>Weight</b>          | Weight                             | 2.8 lb [1.3 kg]   |
| <b>Materials</b>       | Housing material                   | Galvanized steel and plastic housing  |

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

Accessories

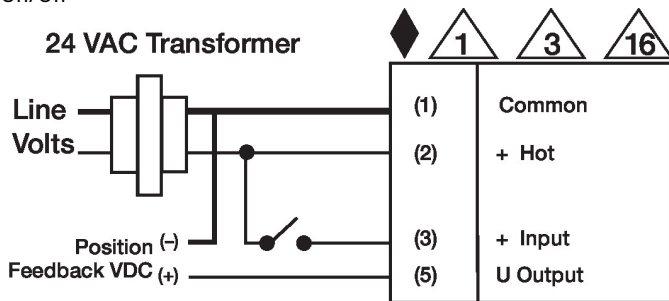
| Electrical accessories | Description   | Type       |
|------------------------|---|------------|
|                        | Battery backup system, for non-spring return models | NSV24 US   |
|                        | Battery, 12 V, 1.2 Ah (two required)                | NSV-BAT    |
|                        | Auxiliary switch 1x SPDT add-on                     | S1A        |
|                        | Auxiliary switch 2x SPDT add-on                     | S2A        |
|                        | Feedback potentiometer 140 Ω add-on, grey           | P140A GR   |
|                        | Feedback potentiometer 1 kΩ add-on, grey            | P1000A GR  |
|                        | Feedback potentiometer 10 kΩ add-on, grey           | P10000A GR |
|                        | Feedback potentiometer 2.8 kΩ add-on, grey          | P2800A GR  |
|                        | Feedback potentiometer 500 Ω add-on, grey           | P500A GR   |
|                        | Feedback potentiometer 5 kΩ add-on, grey            | P5000A GR  |

Electrical installation

-  Provide overload protection and disconnect as required.
-  Actuators may also be powered by DC 24 V.
-  For triac sink the Common connection from the actuator must be connected to the Hot connection of the controller. Position feedback cannot be used with a triac sink controller; the actuator internal common reference is not compatible.
-  IN4004 or IN4007 diode. (IN4007 supplied, Belimo part number 40155).
-  Actuators are provided with a numbered screw terminal strip instead of a cable.
-  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



Floating Point

