

- For potable water applications
- NSF/ANSI 372 - Lead Free
- NSF/ANSI 61 - Water Quality
- CRN: OC/2102CL
- MSS SP67-2002a



2-year warranty



## Technical data

|                           |                          |                                                 |
|---------------------------|--------------------------|-------------------------------------------------|
| <b>Functional data</b>    | Valve size [mm]          | 6" [150]                                        |
|                           | Fluid                    | Potable water                                   |
|                           | Fluid Temp Range (water) | -22...250°F [-30...120°C]                       |
|                           | Body Pressure Rating     | ANSI Class Consistent with 125, 200 psi CWP     |
|                           | Close-off pressure Δps   | 150 psi                                         |
|                           | Flow characteristic      | modified equal percentage                       |
|                           | Installation position    | upright to horizontal (in relation to the stem) |
|                           | Servicing                | maintenance-free                                |
|                           | Rangeability Sv          | 30:1 (for 30...70° range)                       |
|                           | Flow Pattern             | 2-way                                           |
|                           | Leakage rate             | 0%                                              |
|                           | Controllable flow range  | 90° rotation                                    |
|                           | Cv                       | 1579                                            |
|                           | Maximum Velocity         | 12 FPS                                          |
|                           | Lug threads              | 3/4-10 UNC                                      |
| <b>Materials</b>          | Valve body               | Ductile cast iron ASTM A536                     |
|                           | Body finish              | Epoxy powder coating (black RAL 9005)           |
|                           | Stem                     | 416 stainless steel                             |
|                           | Stem seal                | Buna-N                                          |
|                           | Seat                     | EPDM                                            |
|                           | Pipe connection          | for use with ANSI class 125/150 flanges         |
|                           | Bearing                  | RPTFE                                           |
|                           | Disc                     | Aluminum Bronze                                 |
| <b>Suitable actuators</b> | Non-Spring               | DRB(X)<br>DRCB(X) N4                            |
|                           | Electrical fail-safe     | DKRB(X)                                         |

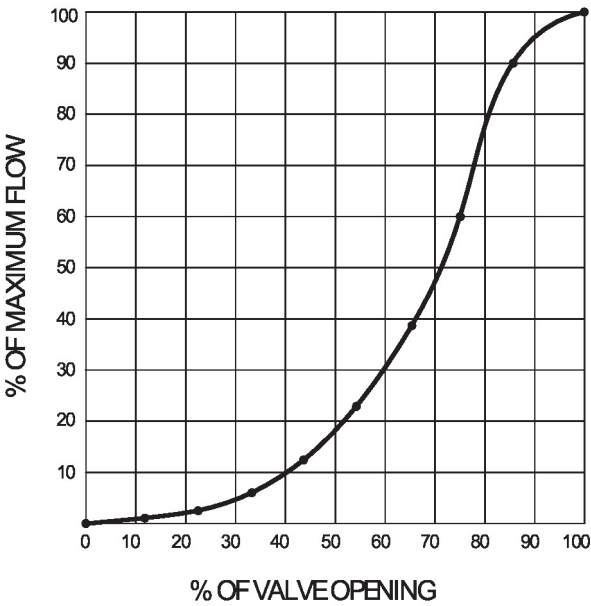
## Safety notes



- The valve has to be exercised at least once a week, so that the quality of potable water as well as the functionality are not affected.

Product features

Flow/Mounting details

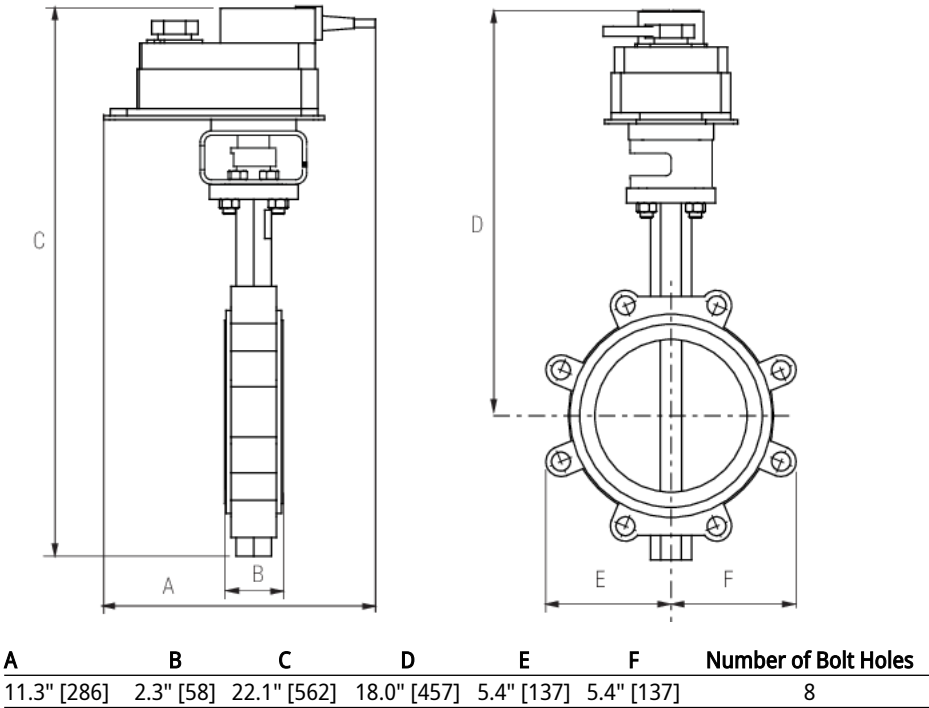


**Mode of operation** The valve is adjusted by a rotary actuator. The rotary actuator is connected by an on/off signal. Open the ball valve counterclockwise and close it clockwise.

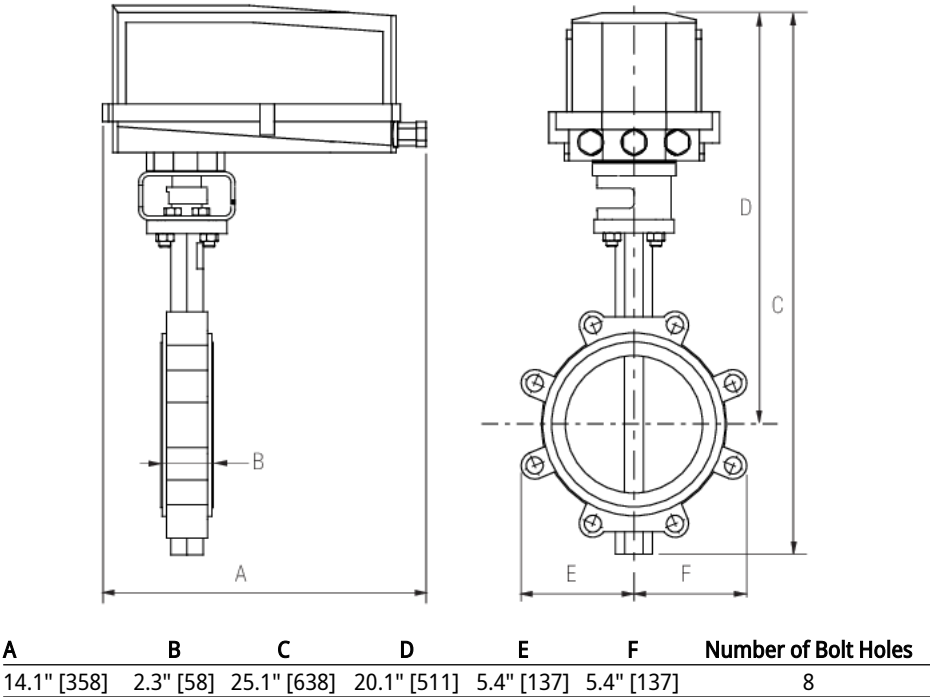
Dimensions

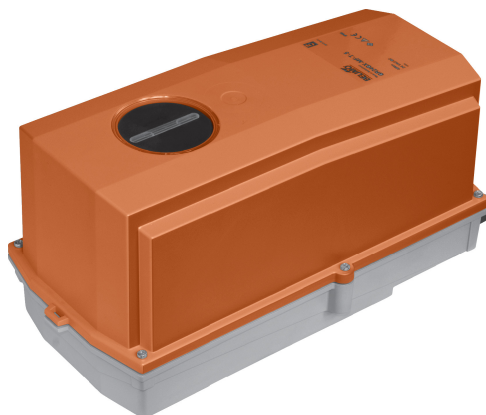
| DN  | Weight          |
|-----|-----------------|
| 150 | 26 lb [11.8 kg] |

Valve with DR/DK Actuator



Valve with DR N4/DK N4 Actuator





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     | 12 W                                            |
|                        | Power consumption in rest position | 3 W                                             |
|                        | Transformer sizing                 | 36 VA                                           |
|                        | Electrical Connection              | Screw terminal (for 22 to 12 AWG wire)          |
|                        | Overload Protection                | electronic throughout 0...90° rotation          |
| <b>Functional data</b> | Direction of motion motor          | selectable with switch 0/1                      |
|                        | Manual override                    | under cover                                     |
|                        | Running Time (Motor)               | 35 s / 90°                                      |
|                        | Running time motor note            | constant, independent of load                   |
|                        | Noise level, motor                 | 45 dB(A)                                        |
|                        | Position indication                | Mechanical, 5...20 mm stroke                    |
| <b>Safety data</b>     | Power source UL                    | Class 2 Supply                                  |
|                        | Degree of protection IEC/EN        | IP66/67                                         |
|                        | Degree of protection NEMA/UL       | NEMA 4X                                         |
|                        | Enclosure                          | UL Enclosure Type 4X                            |
|                        | Quality Standard                   | ISO 9001                                        |
|                        | Ambient humidity                   | Max. 100% RH                                    |
|                        | Ambient temperature                | -22...122°F [-30...50°C]                        |
|                        | Ambient temperature note           | -40...50°C for actuator with integrated heating |
|                        | Storage temperature                | -40...176°F [-40...80°C]                        |
| <b>Weight</b>          | Servicing                          | maintenance-free                                |
|                        | Weight                             | 10 lb [4.6 kg]                                  |
| <b>Materials</b>       | Housing material                   | Die cast aluminium and plastic casing           |

**Footnotes** Control Signal must be specified at time of order. Control cannot be changed via field wiring.

## 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 $\Omega$ add-on, grey    | P140A GR   |
|                            | Feedback potentiometer 5 k $\Omega$ add-on, grey    | P5000A GR  |
|                            | Feedback potentiometer 1 k $\Omega$ add-on, grey    | P1000A GR  |
|                            | Feedback potentiometer 2.8 k $\Omega$ add-on, grey  | P2800A GR  |
|                            | Feedback potentiometer 500 $\Omega$ add-on, grey    | P500A GR   |
|                            | Feedback potentiometer 10 k $\Omega$ add-on, grey   | P10000A GR |
| Factory add-on option only | Description                                         | Type       |
|                            | Heater, with adjustable thermostat                  | ACT_PACK_H |

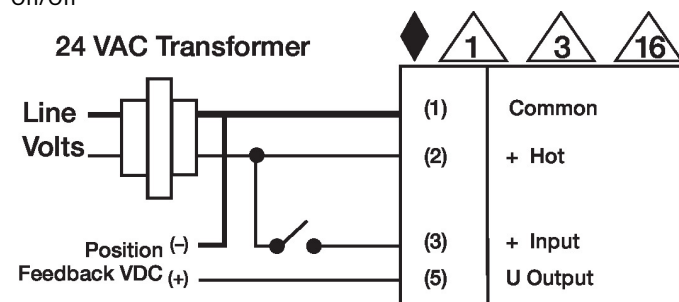
## Electrical installation

### ⚡ INSTALLATION NOTES

- 1 Provide overload protection and disconnect as required.
- 3 Actuators may also be powered by DC 24 V.
- 10 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.
- 12 IN4004 or IN4007 diode. (IN4007 supplied, Belimo part number 40155).
- 16 Actuators are provided with a numbered screw terminal strip instead of a cable.
- Meets cULus requirements without the need of an electrical ground connection.
- 1 **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

