

F6100HD, 4", 2-Way Butterfly Valve

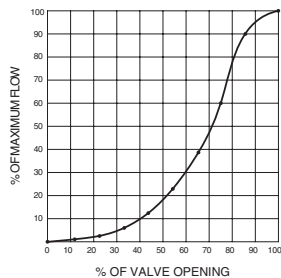
Resilient Seat, 304 Stainless Steel Disc



Technical Data

| | |
|---------------------------------|---|
| Service | chilled, hot water, up to 60% glycol |
| Flow Characteristic | modified equal percentage |
| Controllable Flow Range | 90° rotation |
| Size [mm] | 4" [100] |
| End Fitting | For use with ANSI Class 125/150 flanges |
| Body | ductile iron ASTM A536 |
| Body Finish | epoxy powder coated |
| Stem Packing | EPDM (lubricated) |
| Seat | EPDM |
| Shaft | 416 stainless steel |
| Bushings | RPTFE |
| Disc | 304 stainless steel |
| Body Pressure Rating [psi] | ANSI 125, standard class B |
| Number of Bolt Holes | 8 |
| Lug Threads | 5/8-11 UNC |
| Media Temperature Range (Water) | -22°F to 250°F [-30°C to 120°C] |
| Close-Off Pressure | 200 psi |
| Rangeability | 10:1 (for 30° to 70° range) |
| Maximum Velocity | 12 FPS |
| Cv | 600 |
| Weight | 12.6 lb [5.7 kg] |
| Leakage | 0% |
| Servicing | maintenance free |

Flow Pattern



Application

Valve is designed for use in ANSI flanged piping systems to meet the needs of bi-directional high flow HVAC hydronic applications with 0% leakage. Typical applications include cooling tower bypass, primary flow change-over systems, and large air handler coil control.

Jobsite Note

Valve assembly should be stored in a weather protected area prior to installation. Reference the butterfly valve installation instruction for additional information.

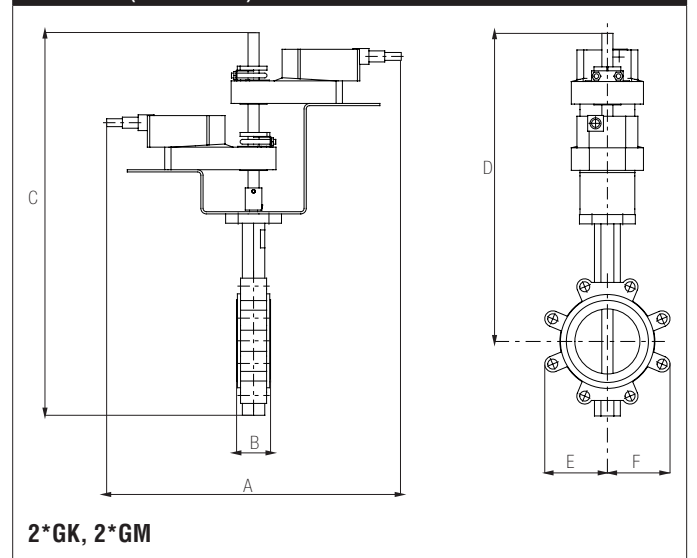
Flow/Cv

| Cv 10° | Cv 20° | Cv 30° | Cv 40° | Cv 50° | Cv 60° | Cv 70° | Cv 80° | Cv 90° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0.3 | 17 | 36 | 78 | 139 | 230 | 364 | 546 | 600 |

Suitable Actuators

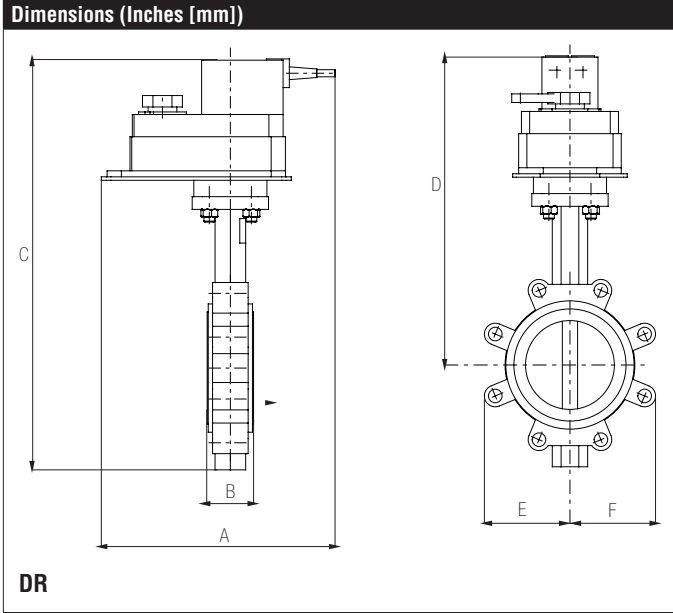
| | Non-Spring | Electronic Fail-Safe |
|---------|--------------------------|----------------------|
| F6100HD | 2*GMB(X), DRB(X), PRB(X) | PKRB(X) |

Dimensions (Inches [mm])

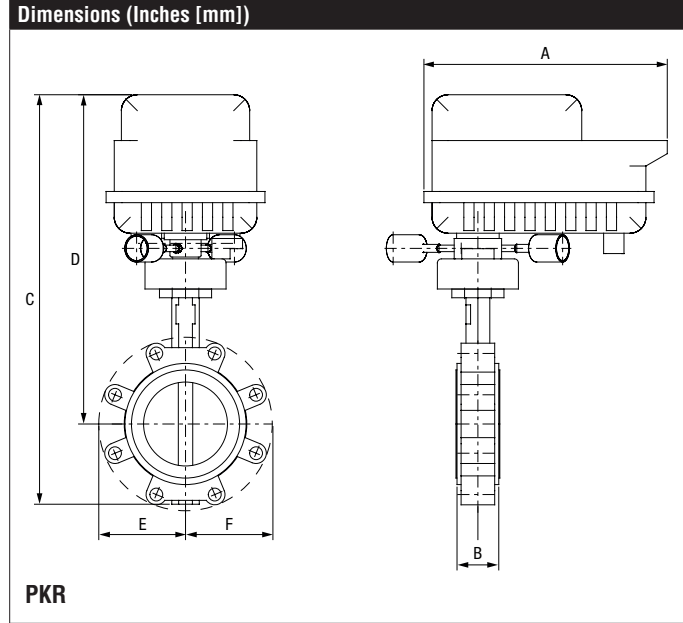


| A | B | C | D | E | F |
|-------------|------------|--------------|--------------|-------------|---|
| 17.9" [454] | 2.05" [52] | 22.88" [580] | 18.50" [470] | 3.94" [100] | |

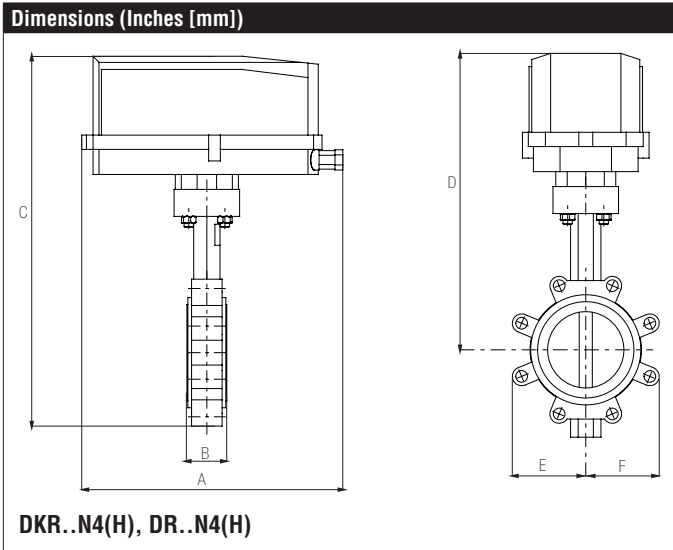
Date created, 03/16/2017 - Subject to change. © Belimo Aircontrols (USA), Inc.



| A | B | C | D | E | F |
|------------|------------|--------------|-----------|-------------|---|
| 8.5" [217] | 2.05" [52] | 18.25" [464] | 21" [533] | 3.94" [100] | |



| A | B | C | D | E | F |
|----------------|------------|-------------|--------------|-------------|---|
| 11.95" [303.5] | 2.05" [52] | 20.4" [516] | 16.20" [411] | 3.94" [100] | |

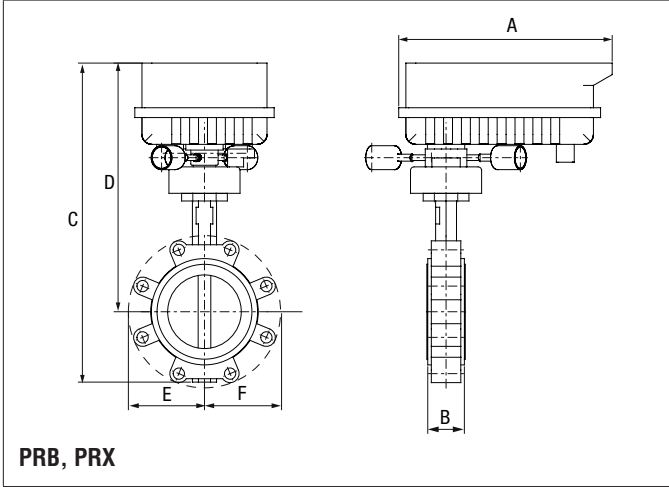


| A | B | C | D | E | F |
|-------------|------------|-------------|--------------|-------------|---|
| 14.1" [358] | 2.05" [52] | 20.4" [516] | 16.00" [406] | 3.94" [100] | |

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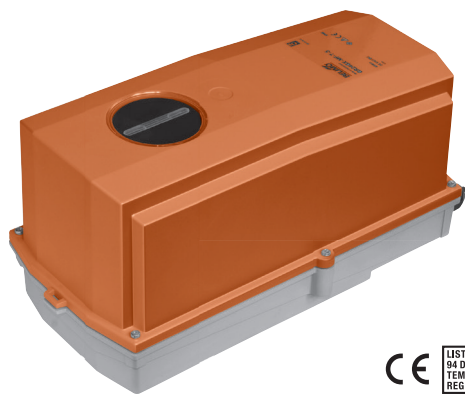
Dimensions (Inches [mm])



| A | B | C | D | E | F |
|---------|------------|---------|---------|-------------|---|
| 11.95" | 2.05" [52] | 17.86" | 13.92" | 3.94" [100] | |
| [303.5] | | [453.6] | [353.6] | | |

DRX24-MFT-T N4

Modulating, Non-Spring Return, 24 V, for 2 to 10 VDC or 4 to 20 mA



| Technical Data | |
|-------------------------------|---|
| Power Supply | 24 VAC, ±20%, 50/60 Hz, 24 VDC, ±10% |
| Power Consumption Running | 12 W |
| Power Consumption Holding | 3 W |
| Transformer Sizing | 21 VA (class 2 power source) |
| Electrical Connection | screw terminal (for 22 to 12 AWG wire) |
| Overload Protection | electronic throughout 0° to 90° rotation |
| Operating Range Y | 2 to 10 VDC, 4 to 20 mA w/ ZG-R01 (500 Ω, 1/4 W resistor), variable (VDC, floating point, on/off) |
| Input Impedance | 100 k Ω for 2 to 10 VDC (0.1 mA), 500 Ω for 4 to 20 mA, 1500 Ω for On/Off |
| Feedback Output U | 2 to 10 VDC, 0.5 mA max, VDC variable |
| Direction of Rotation (Motor) | reversible with built-in switch |
| Position Indication | dial |
| Manual Override | under cover |
| Running Time (Motor) | default 150 sec, variable 90...150 sec |
| Ambient Humidity | 5 to 95% RH non condensing (EN 60730-1) |
| Storage Temperature Range | -40°F to 176°F [-40°C to 80°C] |
| Housing | NEMA 4X, IP66/67, UL Enclosure Type 4X |
| Housing Material | polycarbonate |
| Noise Level (Motor) | <45 dB (A) |
| Servicing | maintenance free |
| Quality Standard | ISO 9001 |
| Degree of Protection IEC/EN | IP66/67 |

Date created, 02/02/2018 - Subject to change. © Belimo Aircontrols (USA), Inc.

Wiring Diagrams
INSTALLATION NOTES

- Provide overload protection and disconnect as required.
- Actuators may also be powered by 24 VDC.
- Only connect common to negative (-) leg of control circuits.
- A 500 Ω resistor (ZG-R01) converts the 4 to 20 mA control signal to 2 to 10 VDC.
- 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.

