F6100HD, 4", 2-Way Butterfly Valve

Resilient Seat, 304 Stainless Steel Disc

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.

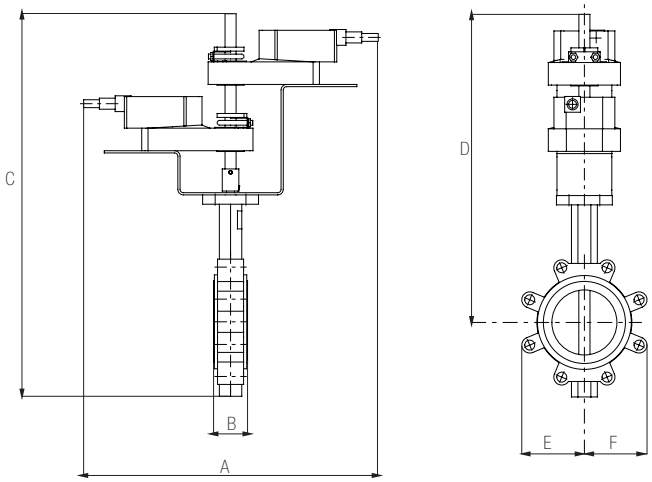
Flow/Cv								
Cv 10°	Cv 20°	Cv 30°	Cv 40°	Cv 50°	Cv 60°	Cv 70°	Cv 80°	Cv 90°
0.3	17	36	78	139	230	364	546	600

Suitable Actuators

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

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

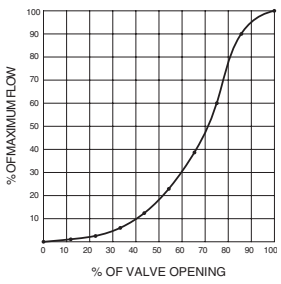
Dimensions (Inches [mm])



2*GK, 2*GM

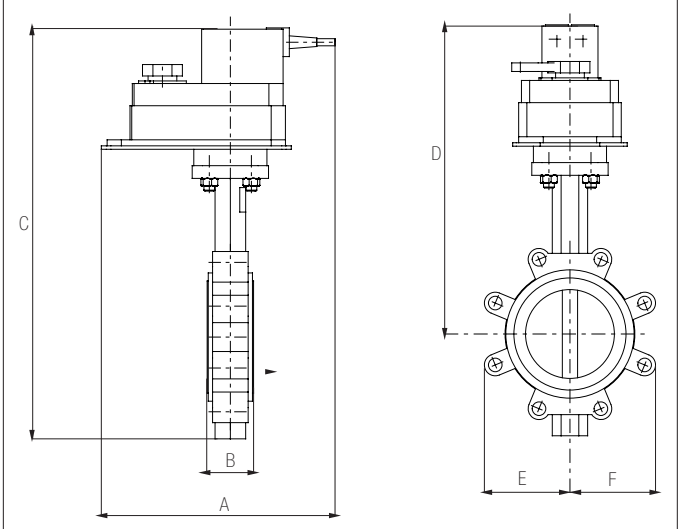
A	B	C	D	E	F
17.9" [454]	2.05" [52]	22.88" [580]	18.50" [470]	3.94" [100]	

Flow Pattern



F6100HD, 4”, 2-Way Butterfly Valve
Resilient Seat, 304 Stainless Steel Disc

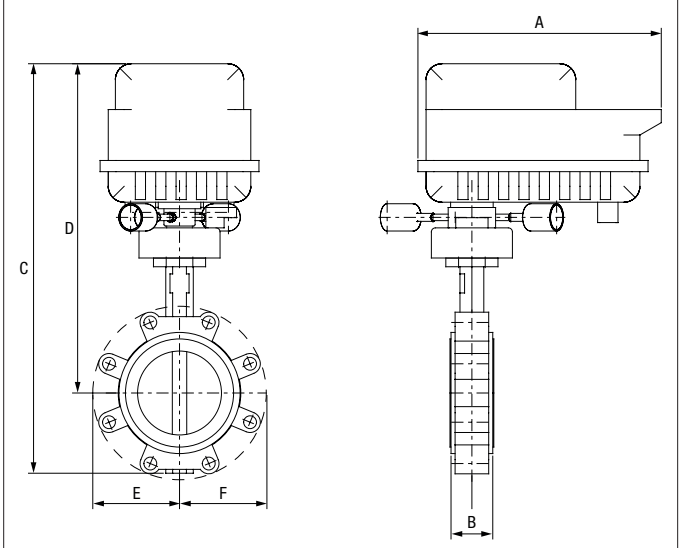
Dimensions (Inches [mm])



DR

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

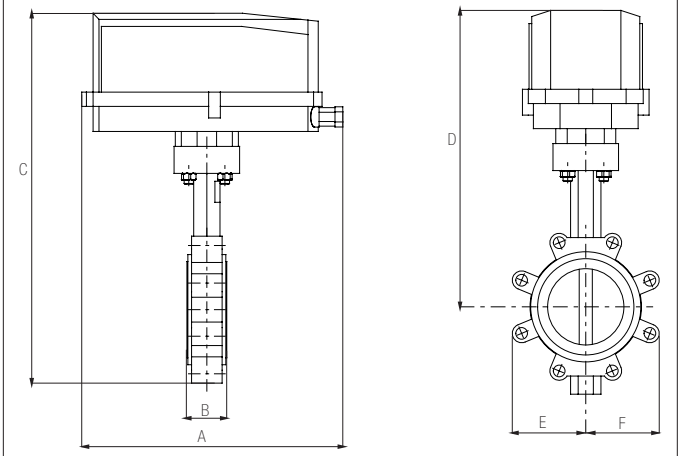
Dimensions (Inches [mm])



PKR

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

Dimensions (Inches [mm])



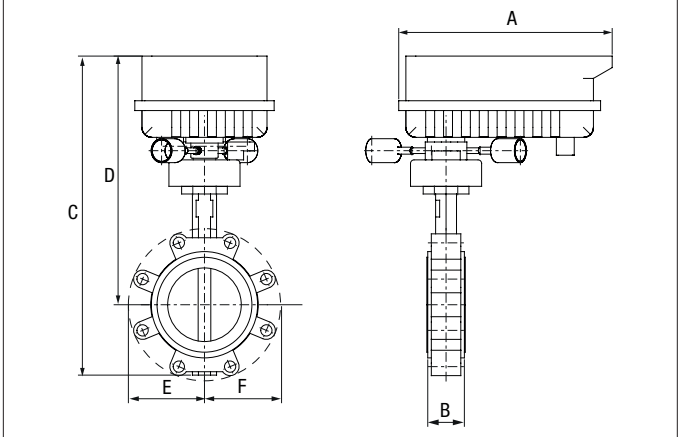
DKR..N4(H), DR..N4(H)

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

F6100HD, 4", 2-Way Butterfly Valve

Resilient Seat, 304 Stainless Steel Disc

Dimensions (Inches [mm])

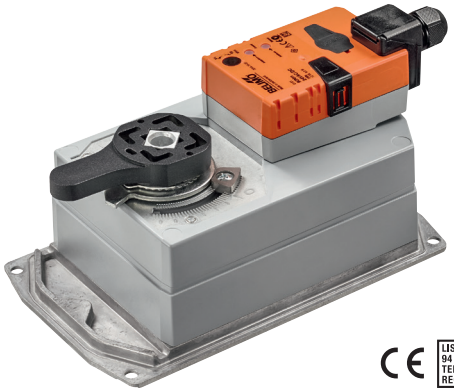


PRB, PRX

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

DRCX24-3-T

On/Off or Floating Point, Non-Spring Return, 24 V



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 thoughout 0° to 90° rotation
Input Impedance	100 Ω
Direction of Rotation (Motor)	reversible with built-in switch
Position Indication	integrated into handle
Manual Override	external push button
Running Time (Motor)	35 sec, constant, independent of load
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 2, IP54, UL Enclosure Type 2
Housing Material	UL94-5VA
Noise Level (Motor)	<45 dB (A)
Servicing	maintenance free
Quality Standard	ISO 9001
Degree of Protection IEC/EN	IP54

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

Wiring Diagrams

INSTALLATION NOTES

1 Provide overload protection and disconnect as required.

3 Actuators may also be powered by 24 VDC.

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.

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.