F6125HD, 5”, 2-Way Butterfly Valve

Resilient Seat, 304 Stainless Steel Disc

Application

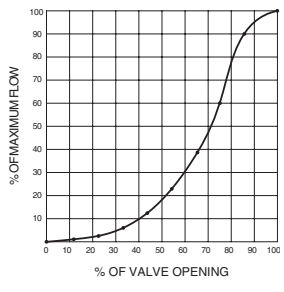
Valve is designed for use in ANSI flanged piping systems to meet the needs of bi-directional high flow HVAC hydronic applications with 0% leakage. Typical applications include cooling tower bypass, primary flow change-over systems, and large air handler coil control.

Jobsite Note

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

Technical Data	
Service	chilled, hot water, up to 60% glycol
Flow Characteristic	modified equal percentage
Controllable Flow Range	90° rotation
Size [mm]	5” [125]
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	3/4-10 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	1022
Weight	16.5 lb [7.5 kg]
Leakage	0%
Servicing	maintenance free

Flow Pattern

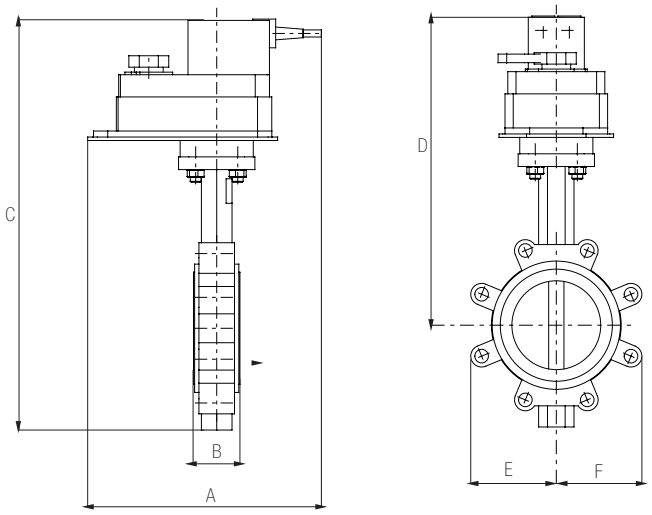


Flow/Cv								
Cv 10°	Cv 20°	Cv 30°	Cv 40°	Cv 50°	Cv 60°	Cv 70°	Cv 80°	Cv 90°
0.5	29	61	133	237	392	620	930	1022

Suitable Actuators

	Non-Spring	Electronic Fail-Safe
F6125HD	DRB(X), PRB(X)	PKRB(X)

Dimensions (Inches [mm])

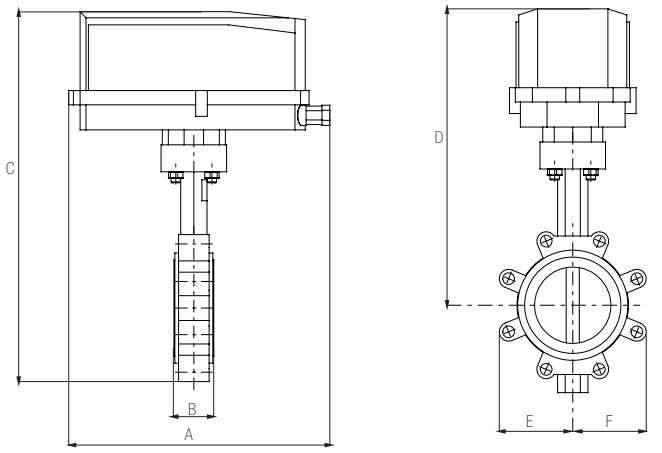


DRB, DKRB

A	B	C	D	E	F
8.5” [216]	2.21” [56.1]	18.75” [476]	14.66” [372.3]	4.48” [114]	

F6125HD, 5”, 2-Way Butterfly Valve
Resilient Seat, 304 Stainless Steel Disc

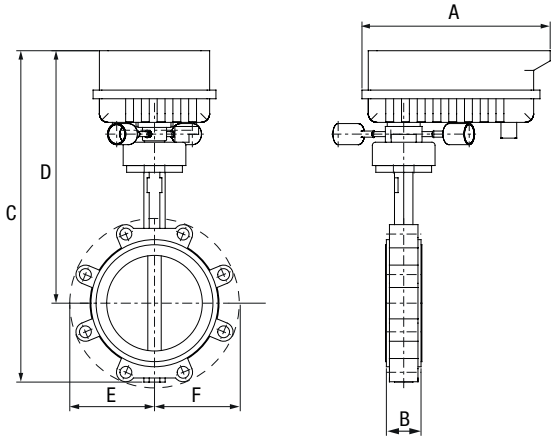
Dimensions (Inches [mm])



DRB..N4(H), DKRB..N4(H)

A	B	C	D	E	F
14.1” [358]	2.21” [56.1]	20.6” [523.2]	16.20” [411]	4.48” [114]	

Dimensions (Inches [mm])

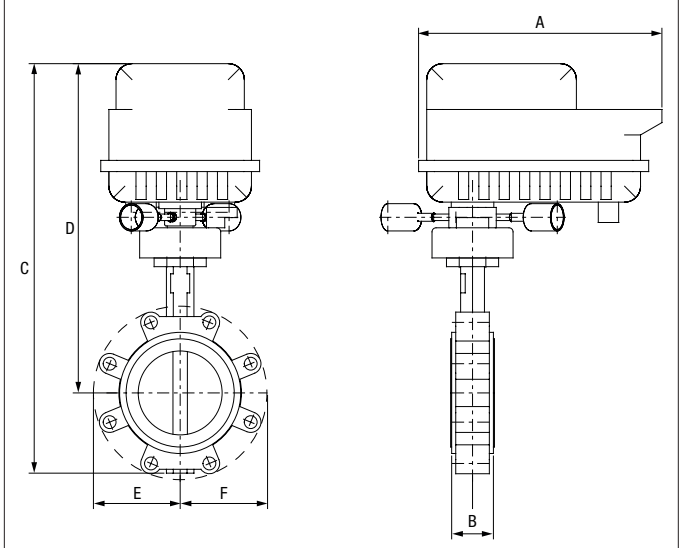


PRB, PRX

A	B	C	D	E	F
11.95” [303.5]	2.21” [56.1]	19.93” [506.2]	15.52” [394.2]	4.48” [114]	

F6125HD, 5”, 2-Way Butterfly Valve
Resilient Seat, 304 Stainless Steel Disc

Dimensions (Inches [mm])

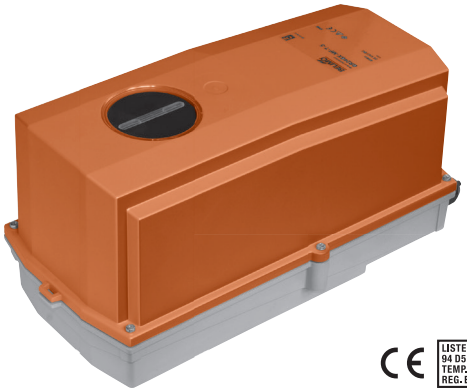


PKR

A	B	C	D	E	F
11.95” [303.5]	2.21” [56.1]	22.13” [562.1]	17.75” [451]	4.48” [114]	

DKRX24-3-T N4

On/Off, Floating Point, Electronic Fail-Safe, 24V



Technical Data	
Power Supply	24 VAC, ±20%, 50/60 Hz
Power Consumption Running	12 W
Power Consumption Holding	3 W
Transformer Sizing	21 VA (class 2 power source)
Electrical Connection	terminal block
Overload Protection	electronic thoughout 0° to 90° rotation
Nominal torque	Min. 810 in-lbs [90 Nm]
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
Running Time (Fail-Safe)	<35 sec
Ambient Humidity	5 to 95% RH non condensing (EN 60730-1)
Ambient Temperature Range	-22°F to 122°F [-30°C to 50°C]
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)
Noise Level (Fail-Safe)	<60 dB (A)
Servicing	maintenance free
Quality Standard	ISO 9001
Degree of Protection IEC/EN	IP66/67

Wiring Diagrams

INSTALLATION NOTES

1 Provide overload protection and disconnect as required.

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.

11 Actuators may be connected in parallel if not mechanically linked. Power consumption and input impedance must be observed.

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.