

## **Butterfly Valve with Lug types**

- Disc 304 stainless steel
- Bubble tight shut-off
- Resilient seat
- Valve face-to-face dimensions comply with API 609 & MSS-SP-67
- Completely assembled and tested, ready for installation





Type overview			
Туре			DN
F6125HD			125
Technical data			
	Functional data	Valve size [mm]	5" [125]
		Fluid	chilled or hot water, up to 60% glycol
		Fluid Temp Range (water)	-22250°F [-30120°C]
		Body Pressure Rating	ANSI Class Consistent with 125, 232 psi CWP
		Close-off pressure Δps	200 psi
		Flow characteristic	modified equal percentage
		Leakage rate	0% leakage, leakage rate A
		Servicing	maintenance-free
		Flow Pattern	2-way
		Controllable flow range	90° rotation
		Cv	1022
		Maximum Velocity	12 FPS
		Lug threads	3/4-10 UNC
	Materials	Valve body	Ductile cast iron ASTM A536
		Body finish	epoxy powder coating (blue RAL 5002)
		Stem	416 stainless steel
		Stem seal	EPDM (lubricated)
		Seat	EPDM
		Pipe connection	for use with ANSI class 125/150 flanges
		Bearing	RPTFE
		Disc	304 stainless steel
		Gear operator materials	Gears - hardened steel
	Suitable actuators	Non-Spring	DRB(X)

Electrical fail-safe

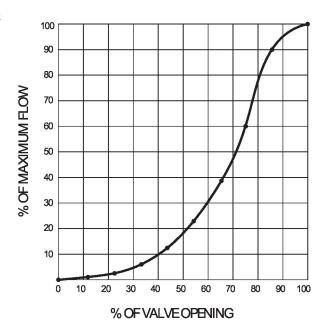
PRB(X)

PKRB(X)



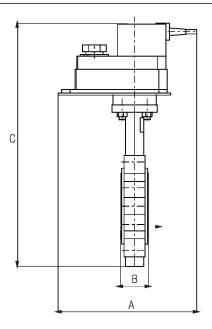
# **Product features**

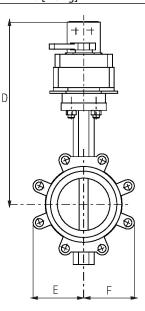
## Flow/Mounting details



# **Dimensions**

Туре	DN	Weight	
F6125HD	125	17 lb [7.5 ka]	

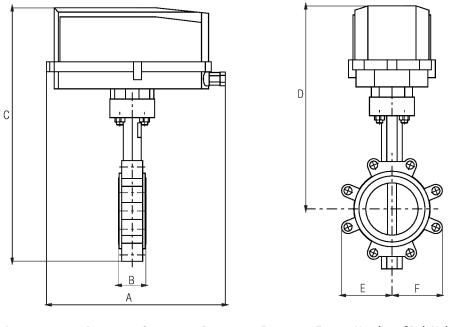




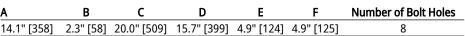
Valve with DRB, DKRB Actuator

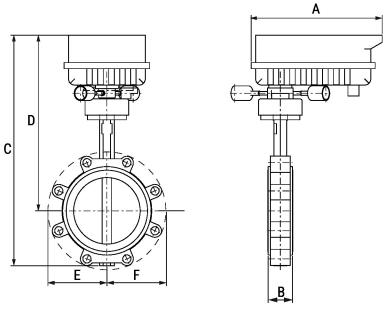
Α	В	C	D	E	F	Number of Bolt Holes
11.3" [286]	2.3" [58]	17.9" [454]	13.6" [345]	4.9" [124]	4.9" [125]	8





Valve with DRB..N4, DKRB..N4 Actuator

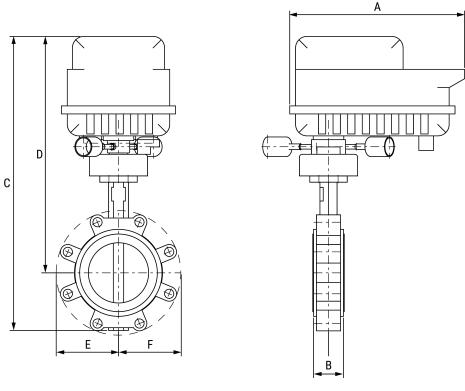




Valve with PRB(X) Actuator

Α	В	С	D	E	F	Number of Bolt Holes
12.0" [304]	2.3" [58]	19.9" [506]	15.5" [394]	4.9" [124]	4.9" [125]	8





Valve with PKR Actuator

Α	В	C	D	E	F	Number of Bolt Holes
12.0" [304]	2.3" [58]	22.1" [562]	17.8" [453]	4.9" [124]	4.9" [125]	8



## On/Off, Floating point, Non fail-safe, 24...240 V







# **Technical data**

Electrical data	Nominal voltage	AC 24240 V / DC 24125 V	
	Nominal voltage frequency	50/60 Hz	
	Remark about nominal voltage range	AC 19.2264 V / DC 19.2137.5 V	
	Power consumption in operation	20 W	
	Power consumption in rest position	7 W	
	Transformer sizing	with 24 V 20 VA / with 240 V 52 VA	
	Auxiliary switch	2x SPDT, 1 mA3 A (0.5 A inductive), DC 5 VAC 250 V (II, reinforced insulation), 1x 10° / 1x 090° (default setting 85°)	
	Switching capacity auxiliary switch	1 mA3 A (0.5 A inductive), DC 5 VAC 250 V (II, reinforced insulation)	
	Electrical Connection	Terminal blocks, (PE) Ground-Screw	
	Overload Protection	electronic thoughout 090° rotation	
Functional data	Direction of motion motor	reversible with app	
	Manual override	7 mm hex crank, supplied	
	Angle of rotation	90°	
	Running Time (Motor)	35 s / 90°	
	Running time motor variable	30120 s	
	Noise level, motor	68 dB(A)	
	Position indication	integral pointer	
Safety data	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	
	Agency Listing	cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02, CE acc. to 2014/30/EU and 2014/35/EU	
	Quality Standard	ISO 9001	
	Ambient humidity	Max. 100% RH	
	Ambient temperature	-22122°F [-3050°C]	
	Servicing	maintenance-free	
Weight	Weight	13 lb [6.0 kg]	
Materials	Housing material	Die cast aluminium and plastic casing	



#### **Product features**

### **Application**

PR Series valve actuators are designed with an integrated linkage and visual position indicators. For outdoor applications, the installed valve must be mounted with the actuator at or above horizontal. For indoor applications the actuator can be in any location including directly under the valve.

#### Operation

The PR series actuator provides 90° of rotation and a visual indicator shows the position of the valve. The PR Series actuator uses a low power consumption brushless DC motor and is electronically protected against overload. A universal power supply is furnished to connect supply voltage in the range of AC 24...240 V and DC 24...125 V. Included is a smart heater with thermostat to eliminate condensation. Two auxiliary switches are provided; one set at 10° open and the other is field adjustable. Running time is field adjustable from 30...120 seconds by using the Near Field Communication (NFC) app and a smart phone.

†Use 60°C/75°C copper wire size range 12...28 AWG, stranded or solid. Use flexible metal conduit. Push the listed conduit fitting device over the actuator's cable to butt against the enclosure. Screw in conduit connector. Jacket the actuators input wiring with listed flexible conduit. Properly terminate the conduit in a suitable junction box. Rated impulse Voltage 4000 V. Type of action 1. Control pollution degree 3.

#### **Accessories**

#### Mechanical accessories

Description	Туре
Hand crank for PR, PKR, PM	ZG-HND PR
For Belimo Butterfly Valve with PR and PKR Series Actuators	UFLKP014

#### **Electrical installation**



Meets cULus requirements without the need of an electrical ground connection.

(UP) Universal Power Supply (UP) models can be supplied with 24 VAC up to 240 VAC, or 24 VDC up to 125 VDC.



Disconnect power.

Provide overload protection and disconnect as required.

Two built-in auxiliary switches (2x SPDT), for end position indication, interlock control, fan

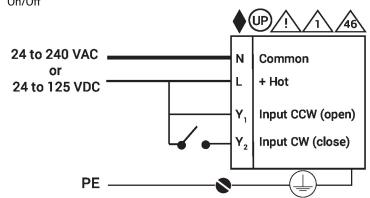


Actuators may be controlled in parallel. Current draw and input impedance must be observed.

### 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.

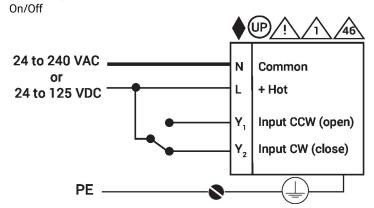
### Wiring diagrams On/Off



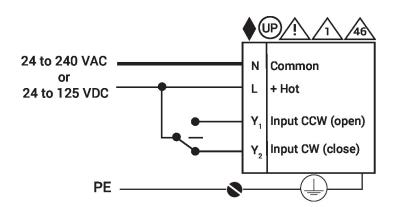


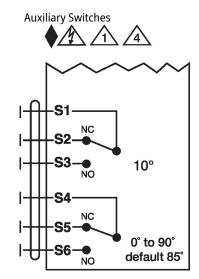
### **Electrical installation**

## Wiring diagrams



Floating Point







# **Dimensions**

