

## 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



5-year warranty

## Type overview

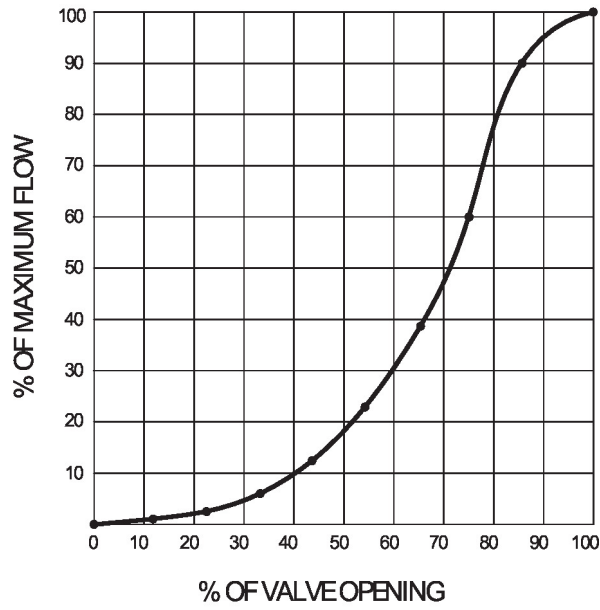
Type	DN
F6125HD	125

## Technical data

<b>Functional data</b>	Valve size [mm]	5" [125]
	Fluid	chilled or hot water, up to 60% glycol
	Fluid Temp Range (water)	-22...250°F [-30...120°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 rateA
	Pipe connection	Flange for use with ASME/ANSI class 125/150
	Servicing	maintenance-free
	Flow Pattern	2-way
	Controllable flow range	90° rotation
	Cv	1022
	Maximum Velocity	12 FPS
	Lug threads	3/4-10 UNC
	<b>Materials</b>	Valve body
Body finish		epoxy powder coating (blue RAL 5002)
Stem		416 stainless steel
Stem seal		EPDM (lubricated)
Seat		EPDM
Bearing		RPTFE
<b>Suitable actuators</b>	Disc	304 stainless steel
	Non Fail-Safe	DRB(X) PRB(X)
	Electrical fail-safe	PKRB(X)

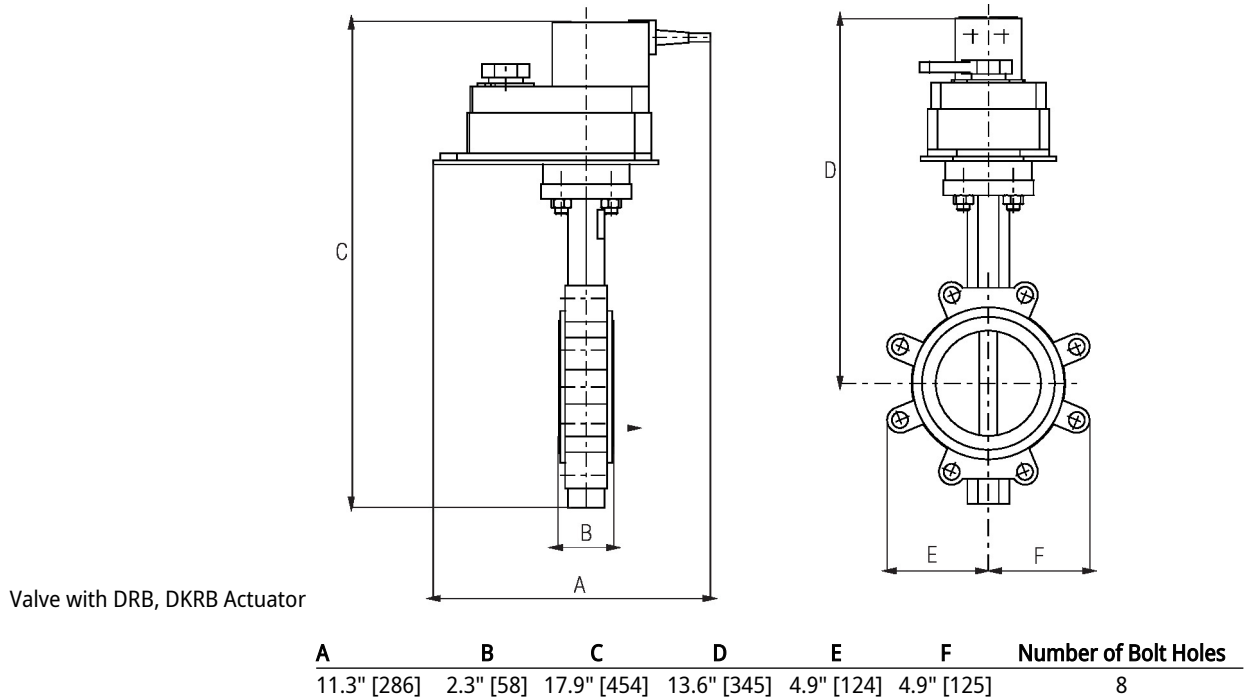
Product features

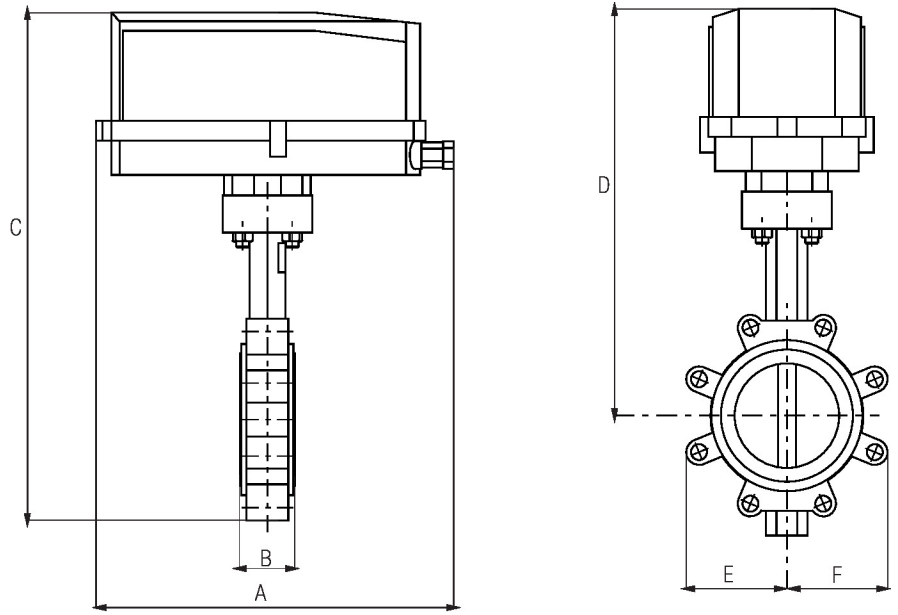
Flow/Mounting details



Dimensions

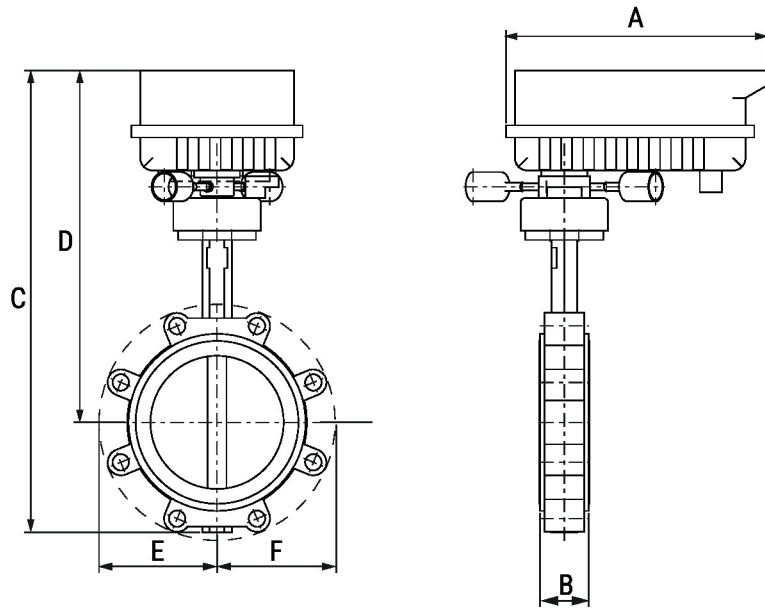
Type	DN	Weight
F6125HD	125	30 lb [14 kg]





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

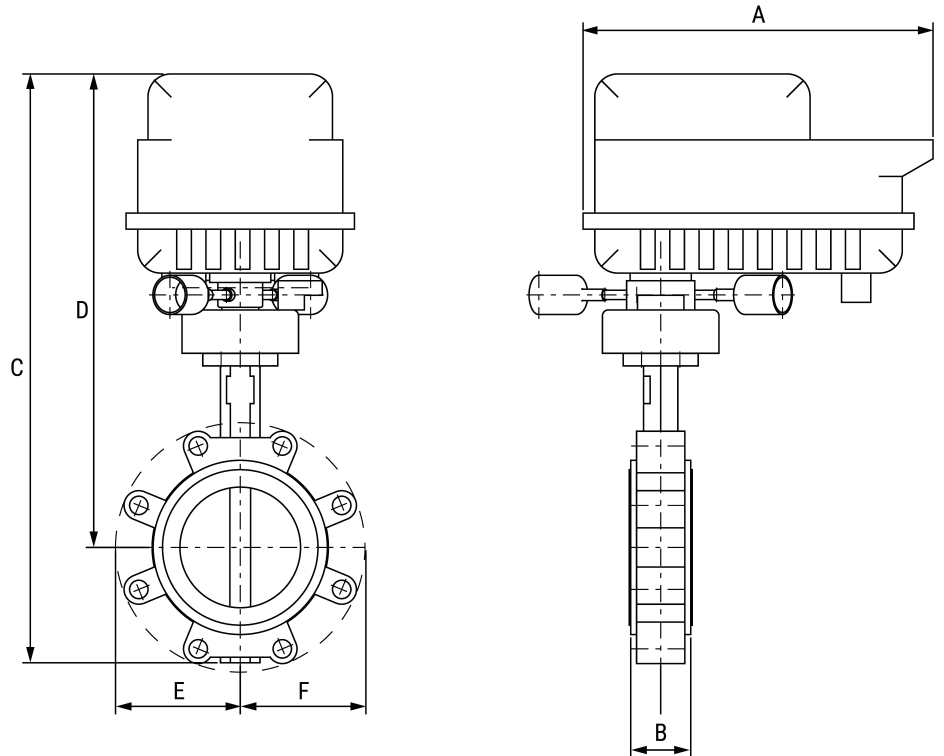
A	B	C	D	E	F	Number of Bolt Holes
14.1" [358]	2.3" [58]	20.0" [509]	15.7" [399]	4.9" [124]	4.9" [125]	8



Valve with PRB(X) Actuator

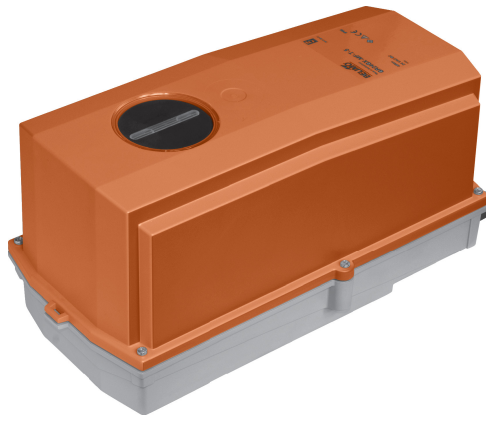
A	B	C	D	E	F	Number of Bolt Holes
12.0" [304]	2.3" [58]	19.9" [506]	15.5" [394]	4.9" [124]	4.9" [125]	8

Dimensions



Valve with PKR Actuator

A	B	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



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	21 VA
	Electrical Connection	Terminal blocks
	Overload Protection	electronic throughout 0...90° rotation
<b>Functional data</b>	Torque motor	90 Nm
	Operating range Y	2...10 V
	Operating range Y note	4...20 mA w/ ZG-R01 (500 Ω, 1/4 W resistor)
	Input impedance	100 kΩ (0.1 mA), 500 Ω, 1000 Ω (on/off)
	Operating range Y variable	Start point 0.5...30 V End point 2.5...32 V
	Operating modes optional	variable (VDC, PWM, on/off, floating point)
	Position feedback U	2...10 V
	Position feedback U note	Max. 0.5 mA
	Position feedback U variable	VDC variable
	Direction of motion motor	selectable with switch 0/1
	Direction of motion fail-safe	reversible with switch
	Manual override	under cover
	Running Time (Motor)	150 s / 90°
	Running time motor variable	95...150 s
	Running time fail-safe	<35 s
	Noise level, motor	45 dB(A)
Noise level, fail-safe	60 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]
	Servicing	maintenance-free
<b>Weight</b>	Weight	11 lb [4.8 kg]

**Materials** Housing material Die cast aluminium and plastic casing

**Accessories**

	Description	Type
<b>Gateways</b>	Gateway MP to BACnet MS/TP	UK24BAC
	Gateway MP to Modbus RTU	UK24MOD
	Gateway MP to LonWorks	UK24LON
<b>Electrical accessories</b>	<b>Description</b>	<b>Type</b>
	Service tool, with ZIP-USB function, for programmable and communicative Belimo actuators, VAV controller and HVAC performance devices	ZTH US
<b>Tools</b>	<b>Description</b>	<b>Type</b>
	Connecting cable 10 ft [3 m], A: RJ11 6/4 ZTH EU, B: 3-pin Weidmüller and supply connection	ZK4-GEN
	Service tool, with ZIP-USB function, for programmable and communicative Belimo actuators, VAV controller and HVAC performance devices	ZTH US
<b>Factory add-on option only</b>	<b>Description</b>	<b>Type</b>
	Heater, with adjustable thermostat	ACT_PACK_H

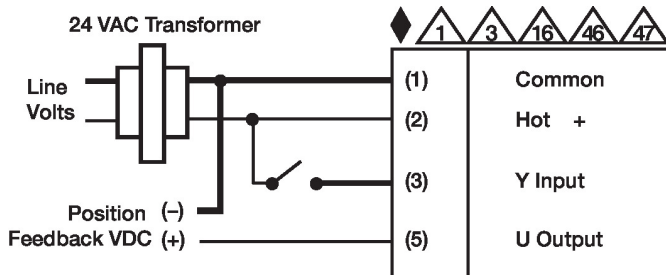
**Electrical installation**

**✂ INSTALLATION NOTES**

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

**Wiring diagrams**

On/Off



Floating Point

