



5-year warranty

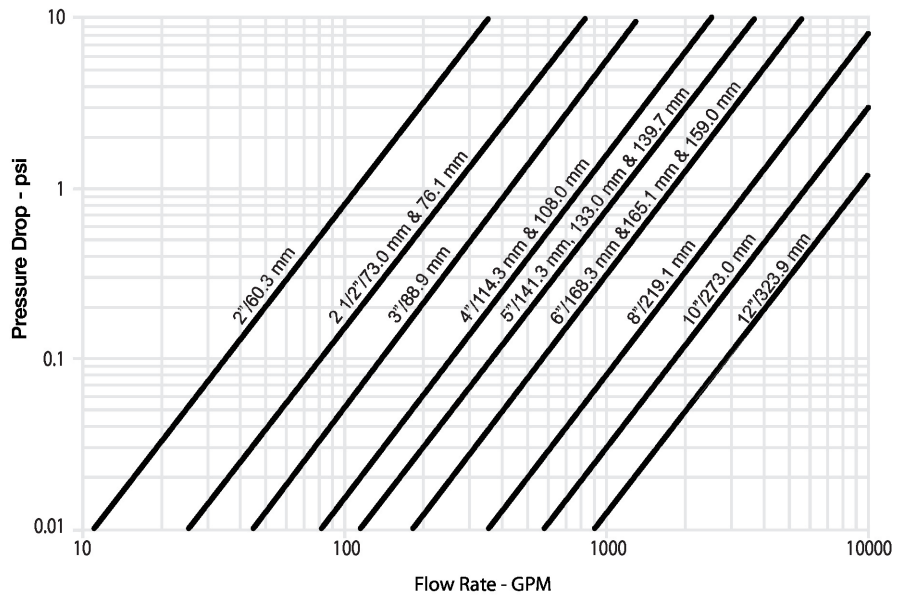


Technical data

Functional data	Valve Size	4" [100]
	Fluid	chilled or hot water, up to 60% glycol
	Fluid Temp Range (water)	-22...250°F [-30...120°C]
	Body Pressure Rating	ANSI Class Grooved AWWA, 300 psi
	Close-off pressure Δps	200 psi
	Flow characteristic	modified equal percentage
	Servicing	maintenance-free
	Rangeability Sv	100:1
	Flow Pattern	2-way
	Leakage rate	0%
	Controllable flow range	90° rotation
	Cv	820
	Maximum Velocity	20 FPS
Materials	Valve body	Ductile cast iron ASTM A536
	Body finish	black alkyd enamel
	Spindle	416 stainless steel
	Spindle seal	fiberglass with TFE lining
	Seat	EPDM
	Pipe connection	grooved ANSI/AWWA (c606)
	Disc	electroless nickel coated ductile iron
Suitable actuators	Non-Spring	DRB(X) PRB(X)
	Electrical fail-safe	(2*GKB(X)) PKRB(X)

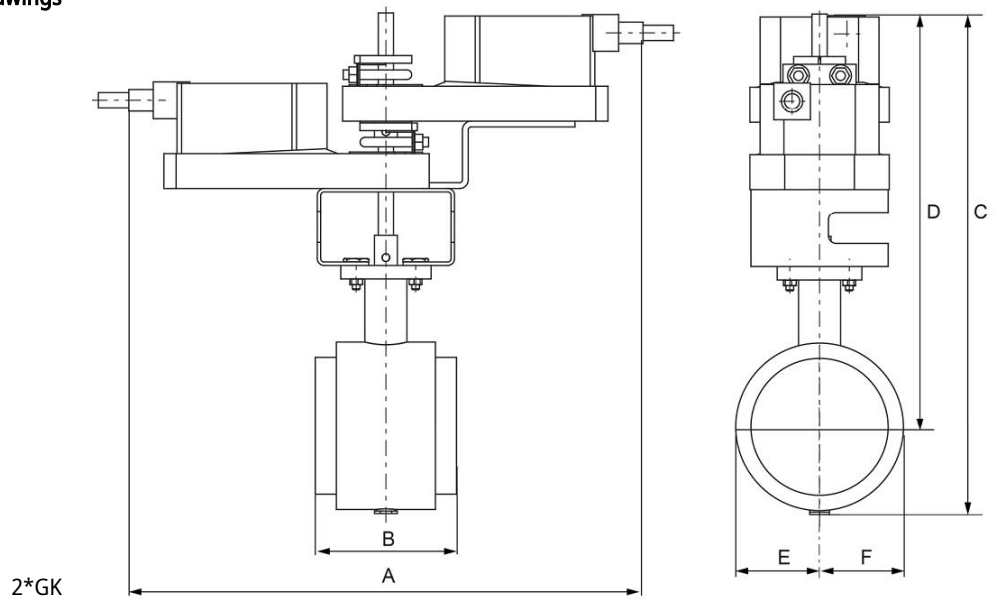
Product features

Flow/Mounting details

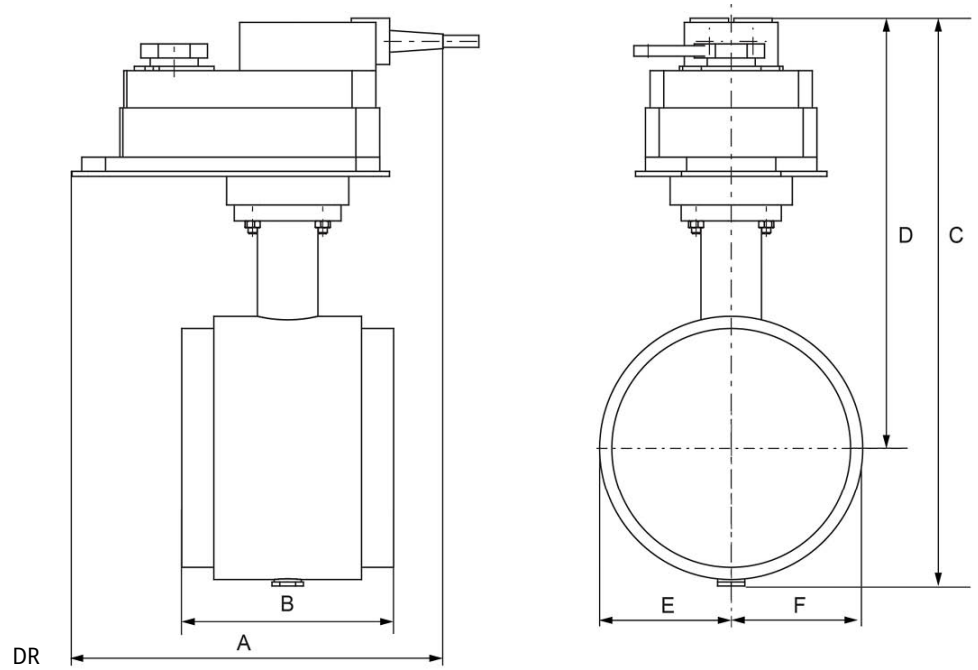


Dimensions

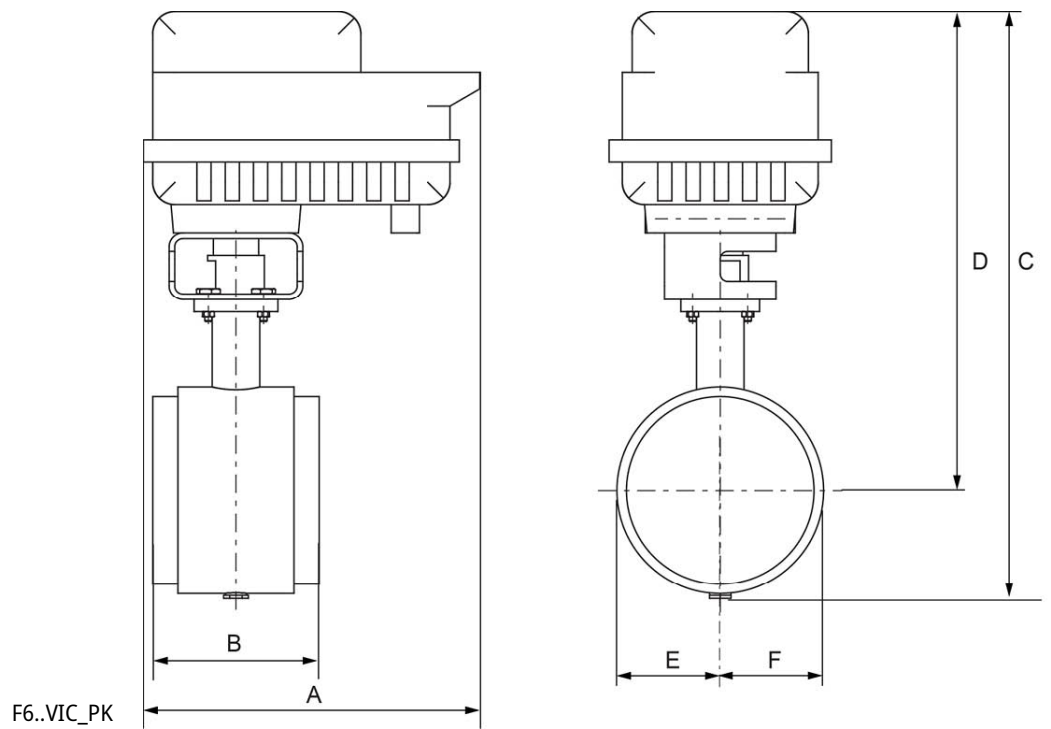
Dimensional drawings



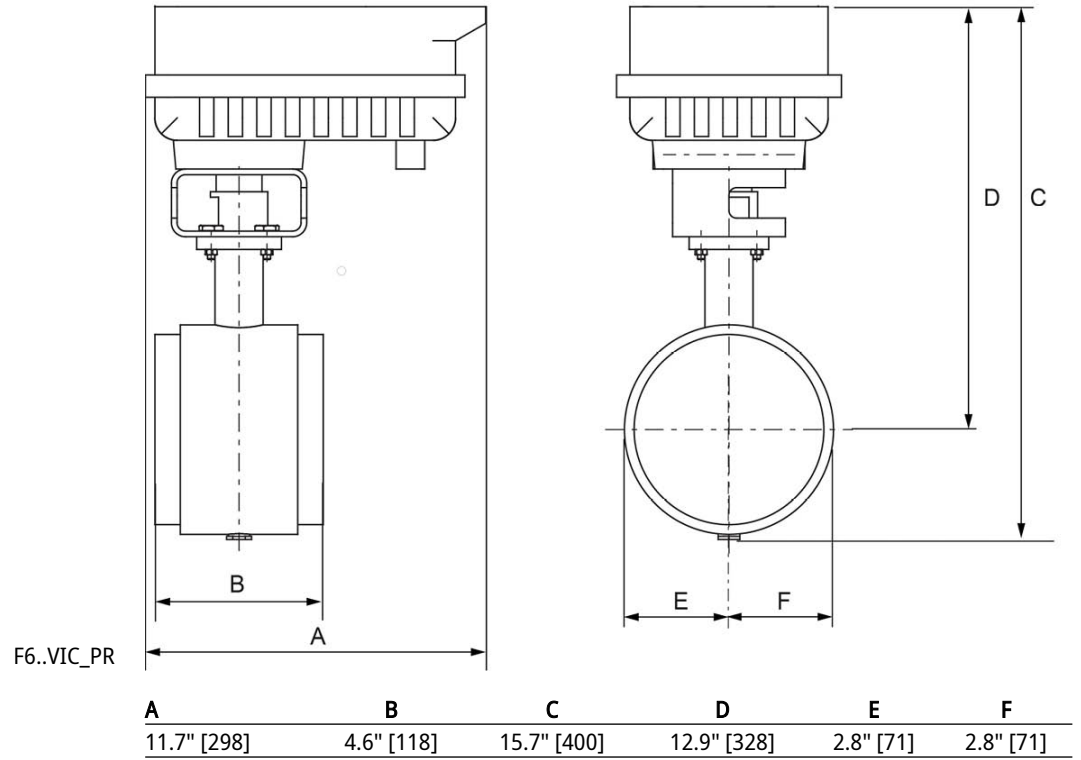
Type	DN	Weight [kg]				
F6100VIC	100	4.3				
	A	B	C	D	E	F
	18.9" [480]	4.6" [118]	16.4" [416]	13.5" [342]	2.8" [71]	2.8" [71]

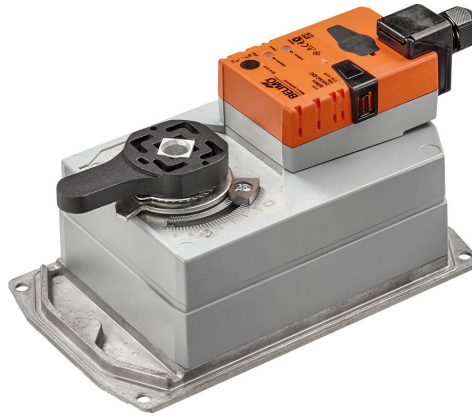


A	B	C	D	E	F
11.3" [286]	4.6" [118]	13.3" [337]	10.4" [264]	2.8" [71]	2.8" [71]



A	B	C	D	E	F
11.8" [299]	4.6" [118]	18.3" [464]	15.4" [391]	2.8" [71]	2.8" [71]





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Technical data

Electrical data	Nominal voltage	AC/DC 24 V
	Nominal voltage frequency	50/60 Hz
	Power consumption in operation	12 W
	Power consumption in rest position	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...90° rotation
Functional data	Direction of motion motor	selectable with switch 0/1
	Manual override	external push button
	Running Time (Motor)	35 s, constant, independent of load
	Running time motor note	constant, independent of load
	Noise level, motor	45 dB(A)
	Position indication	integrated into handle
Safety data	Degree of protection IEC/EN	IP54
	Degree of protection NEMA/UL	NEMA 2
	Enclosure	UL Enclosure Type 2
	Agency Listing	Listed to UL 2043 - suitable for use in air plenums per Section 300.22(C) of the NEC and Section 602 of the IMC
	Quality Standard	ISO 9001
	Ambient temperature	-22...122°F [-30...50°C]
	Storage temperature	-40...176°F [-40...80°C]
	Ambient humidity	Max. 95% RH, non-condensing
Service	maintenance-free	
Weight	Weight	2.7 lb [1.2 kg]
Materials	Housing material	UL94-5VA

Accessories

Electrical accessories	Description	Type
	Battery backup system, for non-spring return models	NSV24 US
	Battery, 12 V, 1.2 Ah (two required)	NSV-BAT
	Auxiliary switch 1 x SPDT add-on	S1A
	Auxiliary switch 2 x SPDT add-on	S2A
	Feedback potentiometer 140 Ω add-on, grey	P140A GR
	Feedback potentiometer 5 kΩ add-on, grey	P5000A GR
	Feedback potentiometer 1 kΩ add-on, grey	P1000A GR
	Feedback potentiometer 2.8 kΩ add-on, grey	P2800A GR
	Feedback potentiometer 500 Ω add-on, grey	P500A GR
	Feedback potentiometer 10 kΩ add-on, grey	P10000A GR

Mechanical accessories	Description	Type
	<p>Terminal-strip cover for NEMA 2 rating (-T models).</p>	ZS-T

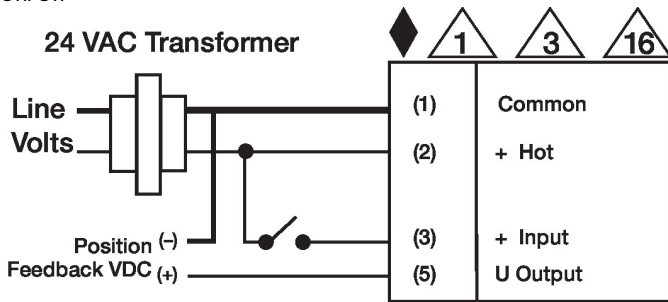
Electrical installation

✂ INSTALLATION NOTES

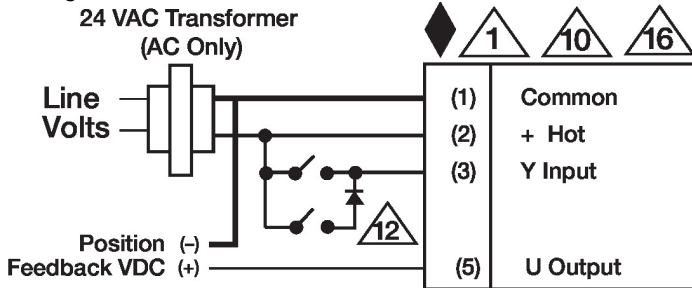
- Provide overload protection and disconnect as required.
- Actuators may also be powered by DC 24 V.
- For triac sink the Common connection from the actuator must be connected to the Hot connection of the controller. Position feedback cannot be used with a triac sink controller; the actuator internal 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



Dimensions