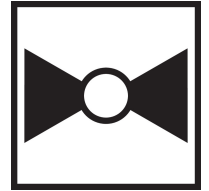




2-year warranty



Technical data

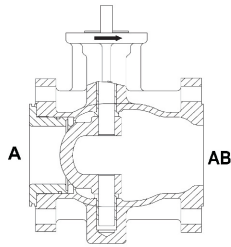
<b>Functional data</b>	Valve Size	3" [80]
	Fluid	chilled or hot water, up to 60% glycol, steam
	Fluid Temp Range (water)	-22...380°F [-30...193°C]
	Fluid Temp Range (steam)	-22...365°F [-30...185°C]
	Body Pressure Rating	ANSI Class 150
	Close-off pressure Δps	250 psi
	Flow characteristic	equal percentage
	Servicing	repack/rebuild kits available
	Rangeability Sv	300:1
	Maximum differential pressure (water)	150 psi
	Max Differential Pressure (Steam)	100 psi
	Close-Off Pressure (Steam)	150 psi
	Flow Pattern	2-way
	Leakage rate	ANSI Class IV
	Controllable flow range	75°
	Cv	207
Maximum Inlet Pressure (Steam)	150 psi	
<b>Materials</b>	Valve body	WCC grade carbon steel
	Body finish	matt black body finish
	Stem	stainless steel
	Stem seal	PTFE V-ring
	Seat	PTFE
	Pipe connection	125/150 lb flanged, ASME/ANSI b16.1/b16.5
	Ball	stainless steel
<b>Suitable actuators</b>	Non-Spring	SY1
		AMB(X)
		PRB(X)
	Spring	AF
Electronic fail-safe	GKB(X)	
	PKRB(X)	

Product features

**Product features** Fast quarter turn open or closed operation, stainless-steel ball and stem, positive isolation, two-piece body construction

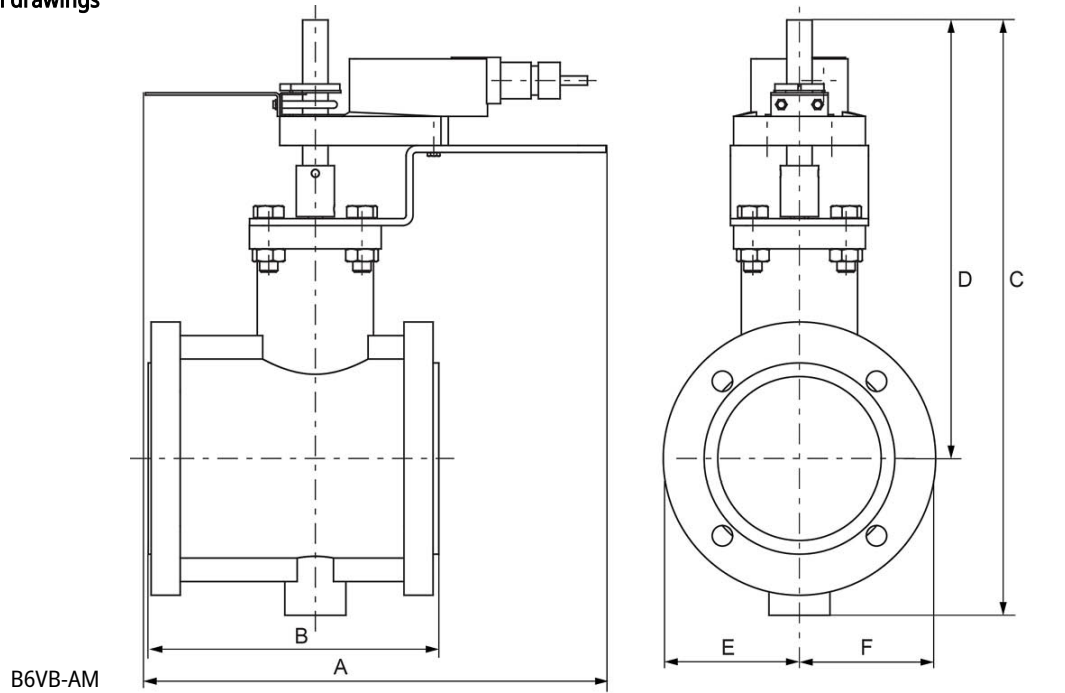
**Application** This valve is typically used in air handling units on heating or cooling coils, and fan coil unit heating or cooling coils. Some other common applications include Unit Ventilators, VAV box re-heat coils and bypass loops. This valve is suitable for use in a hydronic system with variable flow.

## Flow/Mounting details

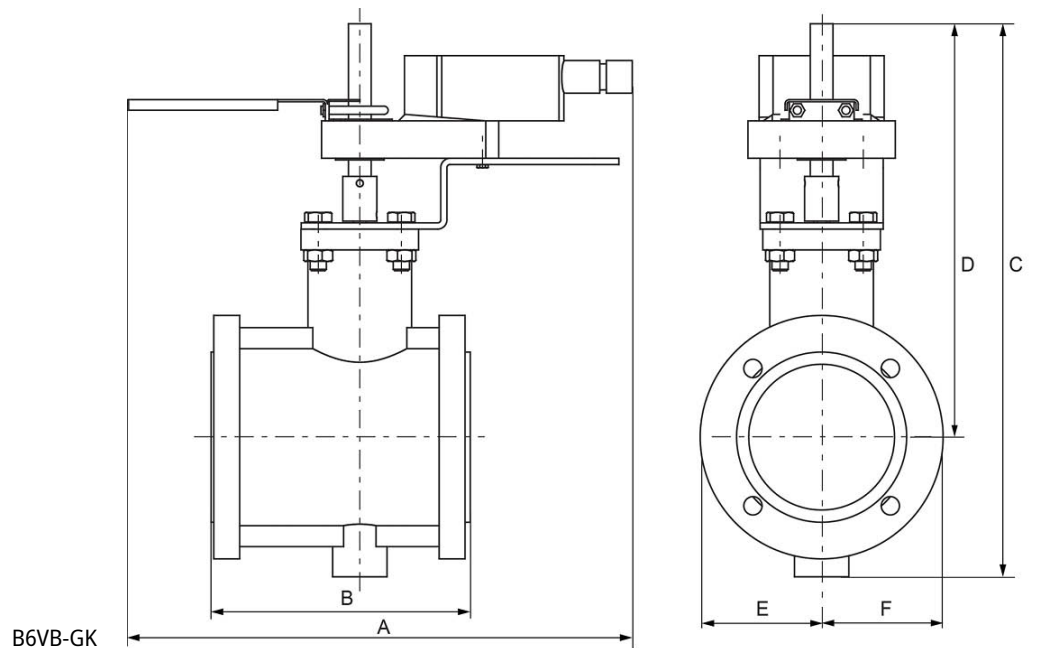


## Dimensions

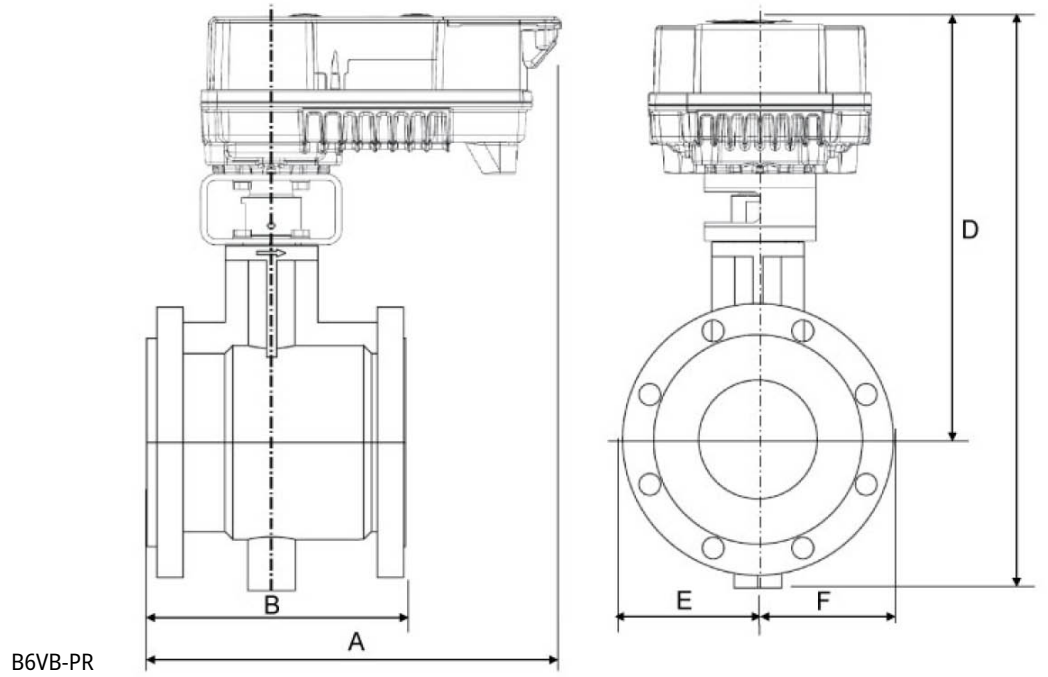
## Dimensional drawings



A	B	C	D	E	F	Number of Bolt Holes
12.6" [320]	8.0" [203]	16.3" [415]	12.0" [306]	3.7" [95]	3.7" [95]	4

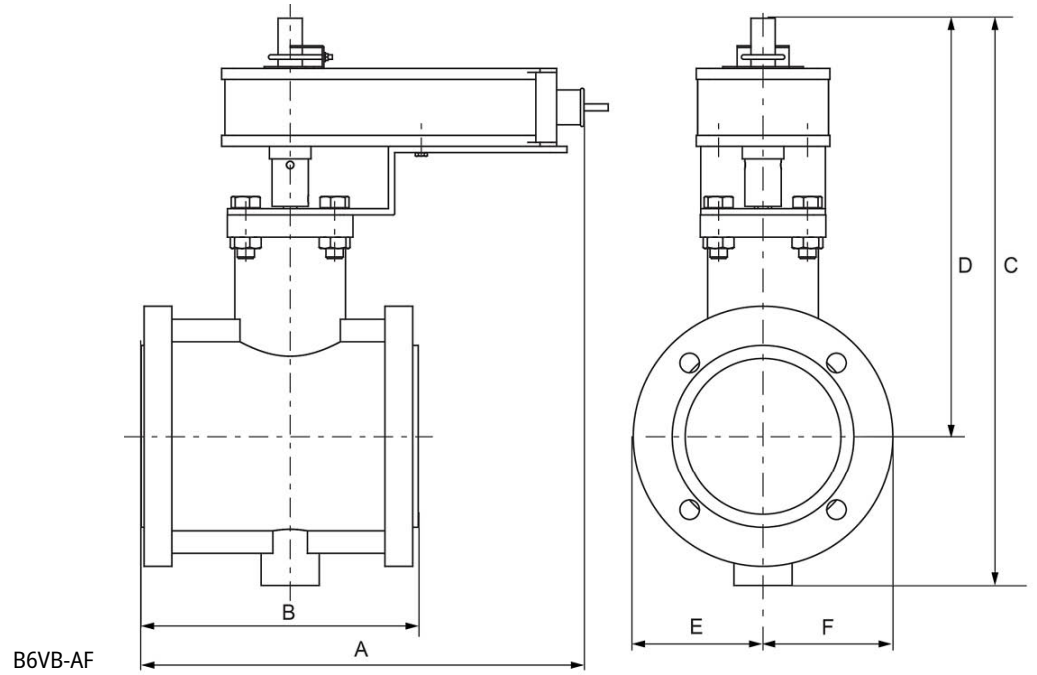


A	B	C	D	E	F	Number of Bolt Holes
13.1" [332]	8.0" [203]	17.0" [433]	12.7" [323]	3.7" [95]	3.7" [95]	4



B6VB-PR

A	B	C	D	E	F	Number of Bolt Holes
11.8" [299]	8.0" [203]	18.9" [480]	14.6" [371]	3.9" [100]	3.9" [100]	4



B6VB-AF

A	B	C	D	E	F	Number of Bolt Holes
12.7" [323]	8.0" [203]	16.4" [416]	12.0" [306]	3.7" [95]	3.7" [95]	4



5-year warranty



Technical data

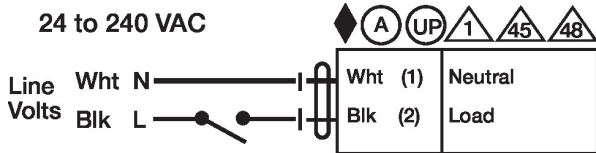
<b>Electrical data</b>	Nominal voltage	AC 24...240 V / DC 24...125 V
	Nominal voltage frequency	50/60 Hz
	Power consumption in operation	7 W
	Power consumption in rest position	3.5 W
	Power consumption for wire sizing	18 VA
	Transformer sizing	7 VA @ AC 24 V (class 2 power source), 8.5 VA @ AC 120 V, 18 VA @ AC 240 V
	Auxiliary switch	2 x SPDT, 3 A resistive (0.5 A inductive) @ AC 250 V, one set at 10°, one adjustable 10...90°
	Switching capacity auxiliary switch	3 A resistive (0.5 A inductive) @ AC 250 V
	Electrical Connection	(2) 18 GA appliance cables with 1/2" conduit connectors, 3 ft [1 m],
	Overload Protection	electronic throughout 0...95° rotation
<b>Functional data</b>	Direction of motion motor	selectable by ccw/cw mounting
	Direction of motion fail-safe	reversible with cw/ccw mounting
	Manual override	5 mm hex crank (3/16" Allen), supplied
	Angle of rotation	95°,
	Running Time (Motor)	75 s
	Running time fail-safe	<20 s
	Noise level, motor	50 dB(A)
	Noise level, fail-safe	62 dB(A)
Position indication	Mechanical	
<b>Safety data</b>	Degree of protection IEC/EN	IP54
	Degree of protection NEMA/UL	NEMA 2
	Enclosure	UL Enclosure Type 2
	Agency Listing	cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02, CE acc. to 2014/30/EU and 2014/35/EU; Listed to UL 2043 - suitable for use in air plenums per Section 300.22(c) of the NEC and Section 602.2 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
	Servicing	maintenance-free
	<b>Weight</b>	Weight
<b>Materials</b>	Housing material	Galvanized steel and plastic housing

Electrical installation

- ⚠ 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.
- ◆ Meets cULus requirements without the need of an electrical ground connection.
- Ⓐ Actuators with appliance cables are numbered.
- Ⓢ UP Universal Power Supply (UP) models can be supplied with 24 VAC up to 240 VAC, or 24 VDC up to 125 VDC.
- ⚡ Apply only AC line voltage or only UL-Class 2 voltage to the terminals of auxiliary switches. Mixed or combined operation of line voltage/safety extra low voltage is not allowed.
- 1 Provide overload protection and disconnect as required.
- 3 Actuators may also be powered by DC 24 V.
- 4 Two built-in auxiliary switches (2x SPDT), for end position indication, interlock control, fan startup, etc.
- 45 Actuators may be powered in parallel. Power consumption must be observed.
- 48 Parallel wiring required for piggy-back applications.

Wiring diagrams

On/Off



Auxiliary Switches

