

Globe Valve Bodies, Flanged, Two-Way, Balanced



DESCRIPTION

2 1/2" to 6" flanged, balanced, single-seated, 2-way, 232 PSIG body rated, high close-off globe valves for hot, super-heated and chilled water, and high pressure steam.

APPLICATION

Valve for 2-way configuration in commercial and industrial heating, ventilation and air conditioning systems.

FEATURES

- 232 PSIG body rated
- Hot & super-heated water
- Chilled water
- Low & high pressure steam
- Balanced inner valve
- High close-off pressure
- Equal percentage flow characteristic
- High turndown ratio



VBG
"232 PSIG, Balanced,
High Close-Off"

certified
ISO 9001

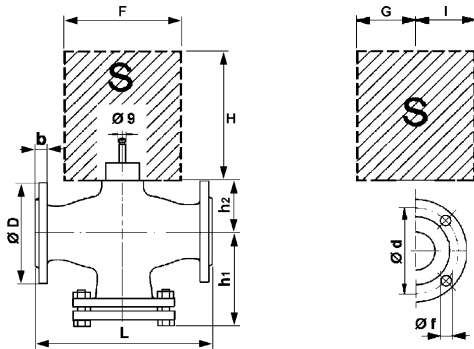


SPECIFICATIONS

Physical		- packing	FPM
Body rating	232 PSIG (1600 kPa)	- stem	Stainless steel, AISI 303
Media		- plug	Brass
- water temperature	14°F to 302°F (-10°C to 150°C)	- seat	Grey cast iron
- glycol added	Max. 50% of water contents Note: Keep stem and packaging free from icing	Stem stroke	
- steam temperature, max	302°F (150°C)	- 2 1/2" valve	0.98 in. (25 mm)
- steam pressure, max	29 PSIG (200 kPa)	- 3" to 6" valves	1.77 in. (45 mm)
Pipe Connection	Flanged, ANSI, UNI	Leakage	0...0.03% of Cv
Material /Characteristics		Stroke Cv	Equal percentage
- body	Grey cast iron	Turndown ratio	Greater than 50:1
- balancing chamber	UNI ISO 185-250 O-ring in FPM & teflon ring	Max. flow	590 ft/min (3 m/sec)
		Standards	
		Compliance	97/23/CE PED directive
		Control valves	UNI 9753
		Control flow characteristic	IEC 534-2-4
		Valve Actuator	
		Compatibilities	MVL, MVL..A/C and others

Size	Flow Coefficient		Maximum Differential Pressure	Maximum Close Off Pressure w/Actuators		Part Numbers
	Inch (mm)	Cv (Kv)		PSIG (kPa)	MVL.. PSIG (kPa)	
2.5 (65)	73.52 (63)	29 (200)	232 (1600)	188 (1300)	VBG65A VBG80A	
3 (80)	116.67 (100)	29 (200)	232 (1600)	188 (1300)		
4 (100)	151.67 (130)	29 (200)	232 (1600)	116 (800)	VBG100A VBG125A VBG150A	
5 (125)	233.33 (200)	29 (200)	232 (1600)	80 (550)		
6 (150)	350.00 (300)	29 (200)	210 (1450)	65 (450)		

Outside Valve Body Dimensions, Inch (mm)									Weight
Size	Ø D	b	Ø d	Ø f	Holes	L	e	h1	2-Way lbs. (kg)
2.5(65)	7.28 (185)	0.79 (20)	5.71 (145)	0.71 (18)	4	11.42 (290)	2.80 (71)	6.89 (175)	39.7 (18)
3 (80)	7.88 (200)	0.87 (22)	6.30 (160)	0.71 (18)	8	12.21 (310)	3.19 (81)	7.33 (186)	61.8 (28)
4 (100)	8.66 (220)	0.95 (24)	7.09 (180)	0.71 (18)		13.78 (350)	3.66 (93)	8.11 (206)	70.6 (32)
5 (125)	9.85 (250)	1.03 (26)	8.27 (210)	0.71 (18)		15.75 (400)	4.53 (115)	10.04 (255)	99.2 (45)
6 (150)	11.22 (285)	1.03 (26)	9.45 (240)	0.87 (22)		18.90 (480)	5.24 (133)	10.83 (275)	132.3 (60)

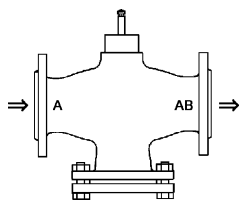


OPTIONS & ACCESSORIES

- **245** Stem heater for VBG, VBGA series, 2 1/2" to 6" valves
- For media temperature below 14°F (-10°C) to avoid freeze-up of actuator/valve stem, 24 VAC, 74 VA

S = Space requirement for actuator mounting, Inch (mm)				
Actuator	H	F	G	I
MVL..	14.61 (371)	8.66 (220)	1.18 (30)	5.83 (148)
MVL..A/C	14.61 (371)	8.66 (220)	2.28 (58)	5.83 (148)

VALVE PIPING & OPERATION



2-Way

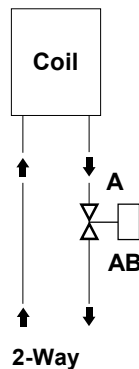
Valve markings on body: **A** and **AB**

The special characteristic of these valves is that they can work under high close-off pressure and wherever low leakage is required. This makes them particularly suitable for applications with super-heated water (i.e., remote heating plants, boiler feeding, etc) and steam.

Valve stem down, direct way **A** to **AB** is open.

MVL..A/C spring return actuator action at power failure:

- MVL..C, direct way **A** to **AB** will be open
- MVL..A, direct way **A** to **AB** will be closed



2-Way

To avoid valve clogging, all dirt, metal shavings, slag, sand, etc. located inside of piping must be removed / flushed out prior to installing the valve.

Avoid installing the valve in a location where it will be subjected to vibration.

When assembling valves on plants with high temperature media (i.e. steam, overheated water, diathermic oil) arrange for expansion joints to be mounted so as to avoid pipe expansions from overloading the valve body.

The valve can be installed in any position except in the valve stem downwards position.

Mount valve horizontally if media temperature is above 248°F (120°C).

MVL..., MVL..A/C Actuators

