

BVSB Ball Valve, Brass, Screw Connection

TEREN

Two-way Model		Dimension(mm)			Actuator		Connect Screw	Weight kg
		L	H	D	Type	□KxK		
BVSB2015		59.5	39.5	-	F03	9	G1/2	0.25
BVSB2020		68	43.5	-	F03	9	G3/4	0.33
BVSB2025		88.5	46.5	-	F03	9	G1	0.51
BVSB2032		102.5	52	-	F03	9	G1-1/4	0.76
BVSB2040		113	56.5	-	F03	9	G1-1/2	1.09
BVSB2050		128	61.5	-	F03	9	G2	1.74

Applications & Features

- Two-way control ball valve, screw connection, can be applied in the flow control of hot or cold water in various HVAC systems or equipment, such as AHU, coil, etc.
- Compatible with ISO5211, can work with TERENS' ball valve actuator BVA series or other applicable actuators
- equal percentage flow characteristics
- Compact and simple structure, easy to install in small installation space
- Special design for small torque but big closing pressure
- Direct flow, big flow rate, small flow resistance, no slag blocking
- Low leakage rate, open/close softly, can prevent water hammer

Specifications

Size: DN15~50mm

Medium: cool or hot water, 50% or lower glycol water

Medium temperature: -10~95°C

Pressure: PN20

Flow characteristics: equal percentage

Leakage rate: ≤0.01%Kvs, no leak on stem

Angle of rotation: 90°

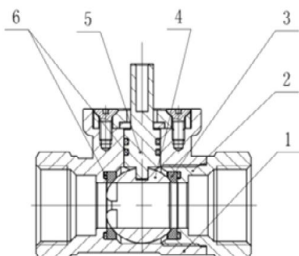
Pipe connection: screw, comply with ISO7-1 Rp

Actuator connection: comply with ISO5211, see Structure /Dimension/Weight

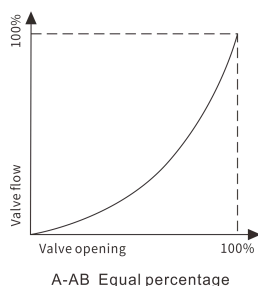
Install direction: Valve stem upward or horizontal

Structure & Material

1. Valve body: Brass
2. Valve deck: Brass
3. Valve seat: PTFE
4. Ball core: SS
5. Valve stem: Brass plating
6. Sealing ring: PTFE, HNBR



Flow Characteristics



Structure/Dimension/Weight

Two-way Model	Dimension(mm)			Actuator		Connect Screw	Weight kg
	L	H	D	Type	□KxK		
BVSB2015	59.5	39.5	-	F03	9	G1/2	0.25
BVSB2020	68	43.5	-	F03	9	G3/4	0.33
BVSB2025	88.5	46.5	-	F03	9	G1	0.51
BVSB2032	102.5	52	-	F03	9	G1-1/4	0.76
BVSB2040	113	56.5	-	F03	9	G1-1/2	1.09
BVSB2050	128	61.5	-	F03	9	G2	1.74

Formula for Flow Rate & Diff. Pressure

$$Kvs = \frac{F}{\sqrt{\frac{\Delta P}{100}}}$$

ΔP : Differential pressure when valve is 100% open, unit kPa

F: Flow rate when differential pressure is ΔP , unit m³/h

Kvs: When valve is 100% open, differential pressure is 100kpa, medium density is 1g/cm³, the flow through the valve, unit m³/h

Models and Closing Diff. Pressure

Model	DN		Kvs m³/h	Diff. Pressure(kPa)					
	mm	in		Torque 3Nm		Torque 5Nm		Torque 10Nm	
				ΔPs	ΔPm	ΔPs	ΔPm	ΔPs	ΔPm
BVSB2015	15	1/2	4	1400	35				
BVSB2020	20	3/4	6.3	1400	35				
BVSB2025	25	1	10			1400	35		
BVSB2032	32	1-1/4	16			1400	35		
BVSB2040	40	1-1/2	25			1400	35		
BVSB2050	50	2	40					1400	35

ΔP_s : (under the actuator force), the max. permitted diff. pressure for ensuring the valve is 100% close.

ΔP_m : (under the actuator force), in the strike, the max. permitted diff. pressure for ensuring the valve is in normal working condition.

Actuator Applied(for water)

BVA03(3Nm)

BVA05(5Nm)

BVA10(10Nm)

