

IBC/IBD/IBE

Bellows Valves Large-size Straight Type

The IBC/IBD/IBE series, like the SBB series, consist of larger pipe size bellows valves that, while having a compact design, high Cv value, and high durability, are premised on use in supply lines.

■ Features

- KITZ SCT's Y shape structure yields higher Cv than conventional S shape structure.
- The inner surfaces of the IBC/IBD valves are uniformly polished whole-surface cylindrical grinding.
- Because of their screw-sleeve structure with built-in bearing, the IBE valves require less torque on the handle for easy operation.
- Adopted a seat structure to reduce gas pooling and particle shedding.
- By setting the air supply inlet on the top of the actuator, there is no concern over piping direction.
- Realization of more compact design through positioning the actuator on the side.
- Purge port options available for the Inlet, Outlet, or Both.

■ Specifications

Model	IBC			IBD			IBE				
Model (size)	32A	40A	50A	65A	80A	100A	125A	150A	200A	250A	300A
Cv	21.0	30.0	51.0	89.0	127.0	205.0	329.0	473.0	1117.0	1739.0	2608.0
Wetted Area Volume	368cm ³	440cm ³	980cm ³	1710cm ³	2910cm ³	5890cm ³	11310cm ³	19290cm ³	45700cm ³	71100cm ³	131260cm ³
Maximum Operating Pressure	Butt Weld, OPEN State 0.98MPa(G)										
Fluid Temperature Range	Manual -10~100°C										
	Pneumatic -10°C~80°C										
Atmospheric Temperature	-10°C~60°C										
Leak Rates	Across the Seat He Leak Rates ≤ 1×10 ⁻¹⁰ Pa·m ³ /sec										
	Inboard He Leak Rates ≤ 1×10 ⁻¹⁰ Pa·m ³ /sec										
Operation Pressure of Pneumatic Actuator	0.5~0.7MPa (G)										
Cycle Life	10,000 cycles (N2 charged, In-house Test)										

■ Product Grade

Specifications		IBC Series		IBD Series		IBE Series	
Grade		STD	EP (electro polished)	STD	EP (electro polished)	STD	EP (electro polished)
Material		SCS16A				SCS16A (125A~150A) SUS316L (200A~300A)	
Surface Roughness	Body Inner Only	Rz 6.0 μm	Rz 0.7 μm	Rz 6.0 μm	Rz 0.7 μm	Rz 6.0 μm (125A~150A)	≤ Rz 0.7 μm
		After welding, No Bead Cut		After Welding, No Bead Cut		Rz 12.0 μm (200A~300A)	
Cleaning		Degreasing + Precision Cleaning					
Clean Room Environment		Class 100 Clean Room Environment					
Packaging		Single Bagged Package	Double Bagged Package	Single Bagged Package	Double Bagged Package	Single Bagged Package	Double Bagged Package

■ Precautions

- ① IBC/IBD/IBE Series cannot be used with reactive or corrosive gases, nor with any liquids.
- ② These valves are designed to be used under atmospheric pressure. Usage such as under vacuum vessels is not guaranteed.



■ Product Code Table

Model	Size	Operation Method	Valve Shape	Connection Method	Bonnet Gasket material	Disk Material	Purge Port	Grade + Body Material	
IBC	32	M	Y3	W	C	T	IP	EP-316L	
IBC-type bellows Seal valve		32: 32A 40: 40A	Manual	Y-type Mold	W: Butt Weld RF: RF Flange	C: PCTFE	PTFE	Not Displayed: Without Purge Port IP: 1st OP: 2nd PP: Both	STD-316L : Mechanical polish + SUS316L EP-316L : Electro polish + SUS316L

*1 Please ask to the sales representative about handle color.
*2 Inch size butt weld also available.

■ IBC 32A-40A Dimensions

Unit: inch (mm)

Model	Type	Connection	L	E	H	A	D	d	t
	IBC32MY3-WCT	32A Butt Weld	10.63 (270.0)	2.17 (55.0)	7.87 (200.0)	4.72 (120.0)	1.68 (42.7)	1.55 (39.4)	0.06 (1.65)
	IBC40MY3-WCT	40A Butt Weld	10.63 (270.0)	2.17 (55.0)	7.87 (200.0)	4.72 (120.0)	1.91 (48.6)	1.78 (45.3)	0.06 (1.65)