

BZD

Clean Butterfly Valves

The BZD series valves are semiconductor-grade butterfly valves that are based on conventional industrial butterfly valves but were perfected by applying KITZ SCT's original cleaning technology.

Features

- The valve body and the parts in the wetted area are a wafer-shaped industrial butterfly valve made of stainless steel. The parts in the wetted area are polished and undergo oil-free processing in order to minimize particle accumulation and adhesion.
- Because the valves adopt a double eccentric structure in which the stem's center of rotation deviates slightly from the disk seal surface as well as the center of the disk (pipe), there is no contact between the disk and seat ring when the valve is fully open, which prevents deformation of the seat and excessive abrasion to ensure a high level of sealing capability.
- Giving more width to the disk and seat ring seal surfaces improves the sealing capability, and the valves can be operated with a small opening/closing torque because excess swaging is not necessary.
- The seat material is durable PTFE. In addition, cracking, peeling, or excessive abrasion will not occur in the seat ring because it has a double eccentric structure with fully uniform seal contact pressure, appropriate swaging force, etc., forming a structure that will withstand long-term use.
- Use of the gears in the actuation mechanism requires only small amount of force. It also takes up less footprint than conventional lever operated valves.
- A pneumatic actuator can be mounted by using a bracket and connector.

Specifications

Size	50A	65A	80A	100A	125A	150A	200A	250A	300A	350A	400A	
Cv Value	90° Open	83	175	255	460	722	1180	2240	3660	5640	7060	9390
	60° Open	54	112	164	295	462	756	1140	2350	3610	4520	6010
	45° Open	33	69	101	182	285	465	883	1450	2230	2790	3700
	30° Open	17	36	52	94	147	240	455	743	1150	1440	1910
Maximum Operating Pressure	142psig (0.98MPa(G))											
Fluid Temperature Range	-10~80°C											
Atmospheric Temperature	-10°C~60°C											
Fluid Used	Inert gas (Not compatible with active gas or corrosive gas.)											
Cycle Life	10,000 cycles											

Product Grade

Grade	STD
Material	SCS13A, SCS14A, SCS16A
Surface Roughness	≤ 150 A: ≤ Rz 6.0 μm ≤ 200 A: ≤ Rz 12.0 μm
Cleaning	Degreasing + Precision cleaning
Clean Room Environment	Class 1000 or under
Packaging	Double bagged package

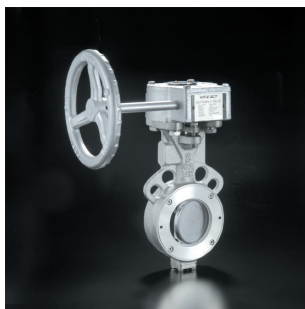
Standard Materials

Body	SCS13A (SCS14A,SCS16A)*1
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*1 SCS13A: equivalent to SUS304, SCS14A: SUS316L equivalent
SCS16A: SUS316L equivalent

Precautions

- ① The valves are not to be used with reactive or corrosive gases, nor with any liquids.



Product Code Table

Model	Size	Operation	Valve shape	Connection	Body Gasket material	Seat material	Custom specifications	Grade + Body material
BZD	50	M	S	RF	X	T	Technical number	STD-304
Clean Butterfly valve	50:50A 65:65A 80:80A 100:100A 125:125A 150:150A 200:200A 250:250A 300:300A 350:350A 400:400A	M: Manual	Straight	RF: RF flange	X: not provided (During RF)	PTFE	Blank: Standard Product	STD-304 : 304-equivalent (SCS 13A) STD-316 : 316-equivalent (SCS 14A) STD-316L : 316-equivalent (SCS 16A)

Dimensions

Unit: inch (mm)

Model	Type	Connection	D	H	E	F	A	C	B	G
	BZD65MS-RFXT	JIS 10K-65ARF Flange	8.54 (217.0)	12.48 (317.0)	6.22 (158.0)	1.81 (46.0)	5.51 (140.0)	4.53 (115.0)	2.56 (65.0)	5.51 (140.0)
	BZD80MS-RFXT	JIS 10K-80ARF Flange	10.63 (270.0)	14.21 (361.0)	7.95 (202.0)	1.81 (46.0)	6.69 (170.0)	4.96 (126.0)	3.07 (78.0)	5.91 (150.0)
	BZD100MS-RFXT	JIS 10K-100ARF Flange	10.65 (270.5)	15.20 (386.0)	7.99 (203.0)	2.05 (52.0)	6.69 (170.0)	5.75 (146.0)	3.86 (98.0)	6.89 (175.0)
	BZD125MS-RFXT	JIS 10K-125ARF Flange	11.57 (294.0)	17.50 (444.5)	8.66 (220.0)	2.20 (56.0)	7.87 (200.0)	7.13 (181.0)	4.84 (123.0)	8.86 (225.0)
	BZD150MS-RFXT	JIS 10K-150ARF Flange	12.32 (313.0)	18.84 (478.5)	8.66 (220.0)	2.20 (56.0)	7.87 (200.0)	8.31 (211.0)	5.83 (148.0)	9.45 (240.0)
	BZD200MS-RFXT	JIS 10K-200ARF Flange	16.22 (412.0)	24.76 (629.0)	12.20 (310.0)	2.80 (71.0)	12.20 (310.0)	10.12 (257.0)	7.76 (197.0)	11.42 (290.0)