

Butterfly Valves



Through pursuit of functions required for butterfly valves. Variety of product range to comply with user's requirements.

Specification

Maximum service pressure			
ASME 150	1.03 MPa	10K	1.0 MPa
ASME 200	1.38 MPa	16K	1.6 MPa
ASME 250	1.72 MPa	20K	2.0 MPa
PN16	1.6 MPa		
PM25	2.5 MPa		

Service temperature range	
NBR (Buna-N) seat	0°C to +70°C
EPDM seat	-20°C to +120°C *
Continuous service temperature range	0°C to +100°C

* There are some fluid type restrictions for the service at 130°C. Contact us for details.

Applicable standards	
Valve design	API 609, MSS-SP 67, EN 593, JIS B 2032
Face to face dimensions	API 609 Category A, MSS-SP 67 W-1: Size 2 to 14 W-2: Size 16 to 24 EN 558 basic series 20, ISO 5752 20 Series, JIS B 2002 46 Series

Coupling flanges	
Wafer type	ASME Class 150/200/250 EN 1092 PN10: DN 50 to DN 350, PN16: All sizes PN25: DN 50 to DN 300 BS 10 Table D/Table E JIS 10K/16K/20K
Lugged type	ASME Class 150/200/250 EN 1092 PN10: DN 50 to DN 150, PN16: All sizes PN25: DN 50 to DN 300

Feature

Non-peeling Seat-to-body Construction

Molded-in (bonded) seat structure is employed for size 2 to 12. Larger sized valves are provided with replaceable seat. This non-peeling seat-to-body construction assures maintenance-free application for high fluid velocity service*1, vacuum service*2 and handling surging fluid velocity. It also guarantees peel-free valve mounting on pipelines.

*1 Maximum 4 meters/second for on-off service for valves up to size 12, and 3 meters/second for size 14 and larger.

*2 Up to 30 Torr. Vacuum service is option for size 14 and larger.

Spherical Design for Discs and Seats

Rubber seats are spherically designed where they contact top and bottom stems. This protects widely designed rubber seats from peeling or deformation for prolonged service life of valves. Thinly streamlined metal discs are the results of elaborate laboratory study to ultimately minimize the pressure loss.

Choice of Materials and Operating Devices

Choice among 4 disc and 2 seat materials and manual, pneumatic or electric valve operating devices makes service applications highly versatile.

Integral ISO 5211 Actuator Mounting Flange

Any pneumatic or electric valve actuators provided with ISO 5211 valve mounting flanges can be easily mounted for actuation of valves in the field.

Low Valve Operating Torque

Low operating torques are designed low for extension of valve service life and economic consideration in selection of valve operating devices.

Light-designed for Operation Efficiency

Designed much lighter than our conventional series for operation efficiency in piping

Emission-free Stem Sealing Mechanism

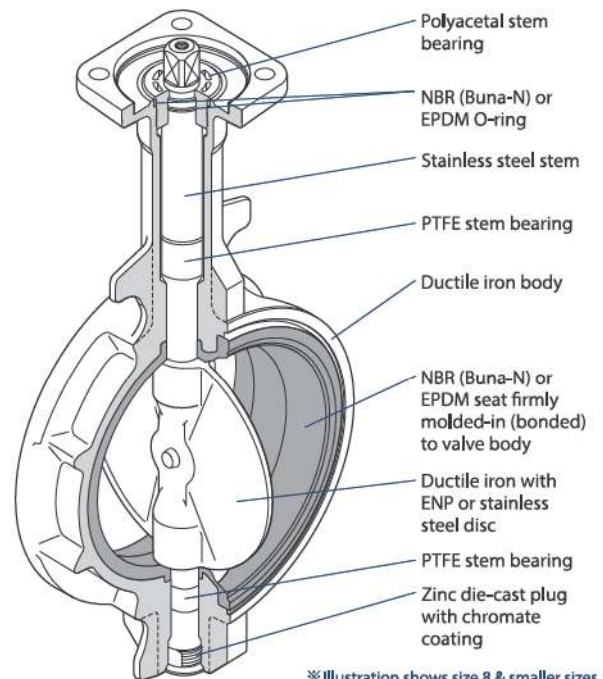
Prevention of external fluid leakage is maximized with a rubber O-ring assembled around the top stem and tight contact between spherically designed rubber seat and spherically designed top and bottom end of the disc.

Dew Condensation Prevention

Dew condensation prevention type is optionally available with heat insulating plate (size 2 to 6) or stainless steel stand (size 8 to 24).

Molded-in (bonded) seat structure

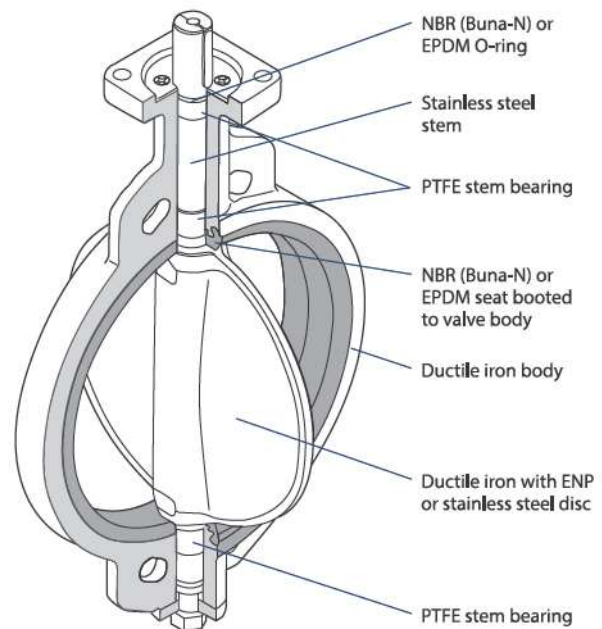
(Size 2 to 12)*1



※ Illustration shows size 8 & smaller sizes

Replaceable seat structure

(Size 14 to 24)*2



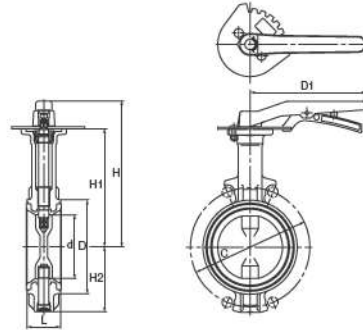
Ductile Iron Butterfly Valves

DJ series

Wafer Type

JIS 10K/16K/20K Design - Lever Operated

- 10DJ
- 16DJ
- 20DJ E



Size		unit: mm								
mm	inch	d	H	H1	H2	L	D	C		D1
								10DJ	16/20DJ	
40	1½	40	172	128	37	33	74	105	—	180
50	2	50	191	147	67	43	90	120	120	180
65	2½	65	199	155	75	46	104	140	140	180
80	3	80	217	173	91	46	124	150	160	180
100	4	100	227	183	101	52	146	175	185	180
125	5	125	265	211	127	56	176	210	225	230
150	6	150	277	223	139	56	206	240	260	230

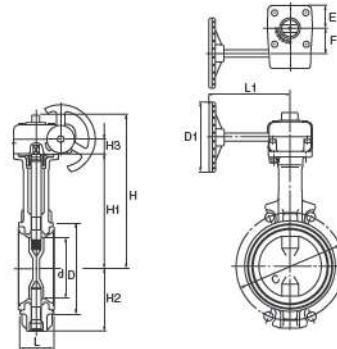
Disc and seat material coding. Please refer to page 1.

Wafer Type

ASME 150/200/250 psi Design - Gear Operated

- G-150DJ
- G-200DJ *
- G-250DJ *

* Available up to size 300^A



Size		unit: mm															
mm	inch	d	H	H1	H2	L	D	C	H3	D1			L1			E	F
										150	200	250	150	200	250		
50	2	50	194	147	67	42.9	90	120.5	18.5	80	80	80	122	122	122	29	28
65	2½	65	202	155	75	46	104	139.5	18.5	80	80	80	122	122	122	29	28
80	3	80	236	173	91	46	124	152.5	24	110	110	110	135	135	135	36.5	40.5
100	4	100	246	183	101	52.3	146	190.5	24	110	110	110	135	135	135	36.5	40.5
125	5	125	274	211	127	55.6	176	216	24	110	110	110	150	150	150	36.5	40.5
150	6	150	286	223	139	55.6	206	241.5	24	110	110	110	150	150	150	36.5	40.5
200	8	197	325	248	169	60.5	257	298.5	32	170	170	170	180	180	180	51	63
250	10	246	381	304	219	68.3	312	362	32	170	170	250	180	180	250	51	63
300	12	295	406	329	244	77.7	364	432	32	170	170	250	180	180	250	51	63
350	14	334	447	360	309	77.7	407	476.5	47	310	—	—	220	—	—	54	66.5
400	16	385	502	415	348	101.6	466	539.5	47	310	—	—	220	—	—	54	66.5
450	18	434	526	439	365	114.3	522	578	47	310	—	—	220	—	—	54	66.5
500	20	482	587	468	414	127	575	635	60	500	—	—	360	—	—	68	88.5
600	24	579	635	536	463	153.9	680	749.5	60	500	—	—	360	—	—	68	88.5

Disc and seat material coding. Please refer to page 1.