

Howell Grooved Butterfly Valve

Easy to Actuate

SPECIFICATIONS:

- Ductile Iron, Epoxy Coated, 1 Piece Body
- Ductile Iron Disc, Encapsulated With:
 - BUNA Nitrile/NBR 150°F / 65°C (Howell Standard)
- Other Options:
 - EPDM 180°F / 82°C
 - VITON® 400°F / 200°C
- Teflon Stem Bushing
- ISO 5211 Direct Mounting Pad
- Square Stem, 416 Stainless Steel
- Standard 10 Position Lever Handle
- Size Range: 2" to 12"

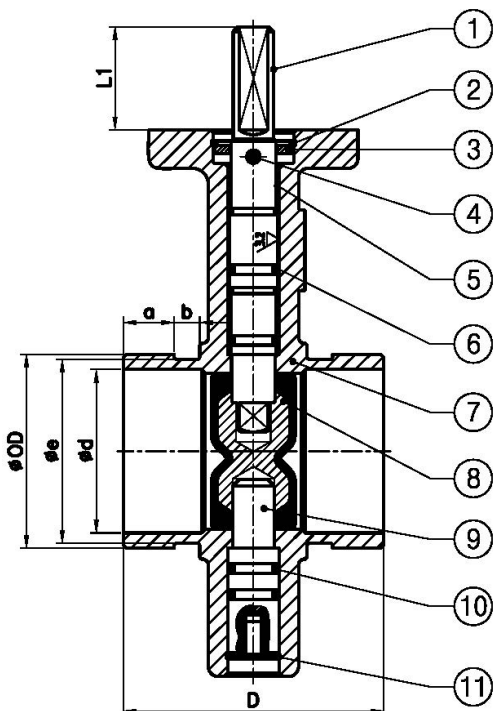


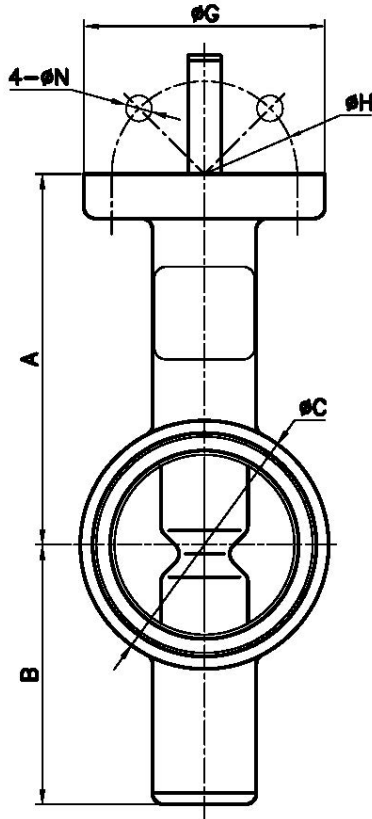
STANDARDS:

CRN Registered
 End to End Dimensions to MSS SP-67
 Grooved Ends to ANSI/AWWA C606
 Valve Body & Disc to ASTM A536
 Testing to API 598:
 Shell 300psi and Seat 250psi

MATERIALS LIST:

Item	Part	Material	Quantity
1	Upper Stem	ASTM A582 416	1
2	Retaining Ring 1	SPRING STEEL	1
3	Washer	ASTM A582 416	1
4	Pin	ASTM A582 416	1
5	Bushing	PTFE	2
6	O-Ring 1	ASTM D2000 NBR	1
7	Body	ASTM A536 64-45-12	1
8	Disc	ASTM A536 64-45-12	1
9	Lower Stem	ASTM A582 416	1
10	O-Ring 2	ASTM D2000 NBR	1
11	Retaining Ring 2	SPRING STEEL	1





DIMENSIONS:

SIZE	a		b		ϕD		ϕe		ϕd		D		L1	
	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM
2"	0.6	16	0.3	8	2.4	60	2.3	57	0.9	22	3.2	82	1.3	32
2-1/2"	0.6	16	0.3	8	2.9	73	2.7	69	1.1	27	3.8	97	1.3	32
3"	0.6	16	0.3	8	3.5	89	3.3	85	1.3	34	3.8	97	1.3	32
4"	0.6	16	0.4	10	4.5	114	4.3	110	1.7	43	4.6	116	1.3	32
5"	0.6	16	0.4	10	5.6	141	5.4	137	1.9	49	5.3	133	1.3	32
6"	0.6	16	0.4	10	6.6	168	6.5	164	2.4	61	5.3	133	1.3	32
8"	0.8	19	0.4	11	8.6	219	8.4	214	3.0	77	5.8	148	1.8	45
10"	0.8	19	0.5	13	10.8	273	10.6	268	3.6	90	6.3	159	1.8	45
12"	0.8	19	0.5	13	12.8	324	12.5	318	3.0	77	6.4	164	1.8	45

DIMENSIONS:

SIZE	A		B		ϕC		ϕG		ϕH		ϕN	
	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM
2"	3.9	100	2.8	70	2.6	67	2.6	65	2.0	50	0.3	7
2-1/2"	4.2	106	3.0	75	3.1	78	2.6	65	2.0	50	0.3	7
3"	4.4	113	3.2	82	4.1	105	2.6	65	2.0	50	0.3	7
4"	5.3	135	3.9	100	5.2	132	3.5	90	2.8	70	0.4	10
5"	5.9	149	4.7	119	5.7	146	3.5	90	2.8	70	0.4	10
6"	6.9	176	5.1	130	7.3	185	3.5	90	2.8	70	0.4	10
8"	8.0	204	6.4	162	9.1	231	4.9	125	4.0	102	0.5	12
10"	9.0	228	7.9	200	10.9	278	4.9	125	4.0	102	0.5	12
12"	10.5	266	8.8	224	13.0	329	5.5	140	4.0	102	0.5	12

Valve Sizing Coefficients

The Cv values are in imperial units, that is the flow rate of water passing through the butterfly valve giving a pressure drop of 1 psi at a temperature of 20°C / 68°F.

Cv VALUES

Size	Disc Position (degrees)							
	20°	30°	40°	50°	60°	70°	80°	90°
2"	8	9	18	28	55	72	110	135
2-1/2"	10	15	27	44	85	110	168	210
3"	15	23	39	65	130	165	250	310
4"	27	41	71	115	230	300	465	540
5"	58	86	150	245	480	640	980	1100
6"	96	140	245	400	785	1010	1615	1910
8"	165	245	410	685	1275	1715	2670	3185
10"	255	380	650	1130	2100	2700	4250	4900
12"	370	540	950	1570	3050	3950	5950	7350