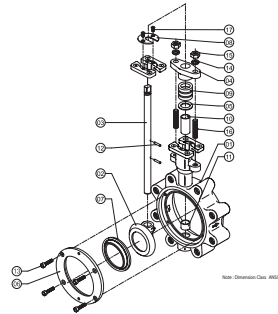


# High Performance Butterfly Valve

Lug Style, Carbon Steel Body, Stainless Steel Disc and Stem, ANSI Class 300

## HPBFV CARBON STEEL 300 CLASS



### FEATURES

- Corrosion Resistant One-Piece Body
- RPTFE Seat
- Bubble-Tight Shut-off Design
- Durable One-Piece Stem
  - A564 Gr.630/17-4 PH® Materials
- ISO 5211 Mounting Pad
  - 2" - 12" = Square Design
- Dual Offset Disc Design
- Internal Stop to Prevent Disc Over-Travel
- Tight Gland Packing Flange to Prevent Uneven Load Distribution
- Bidirectional for Dead End Service
- 29 in-Hg Vacuum Rating

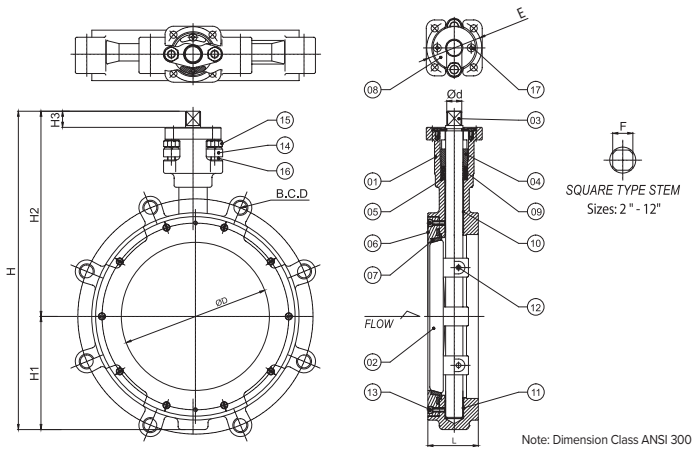
### VALVE SEAT RATING

- Basic Design = API 609, MSS-SP-68, BS 5155, ISO 5752
- Pressure / Temperature Rating = ANSI B16.34
- Shell / Seat Test = API 598, MSS-SP-61
- Working Pressure = Class 300 (740 PSIG)
- Metal to Metal Seat Leakage = Class IV per ASME/FCI 70-2

### MATERIALS

No.	Part	RPTFE	Quantity
1	Body	A216 WCB	1
2	Disc	A351 CF8M	1
3	Stem	A564 Gr. 630	1
4	Gland Flange	A216 WCB	1
5	Packing Retainer	A276 TP 316	1
6	Retainer Ring	A351 CF8M	1
7	Seat	RPTFE	1
8	Top Retainer	A283D-A36	1
9	Grand Packing	Graphite	3
10	Upper Bearing	RPTFE+316SS	1
11	Lower Bearing	RPTFE+316SS	1
12	Disc Pin	A276 TP 316	2
13	Hex Socket Bolt	A283D-A36	4 ~ 14
14	Spring Washer	A283D-A36	2
15	Hex Nut	A283D-A36	2
16	Stud Bolt	A283D-A36	2
17	Flat Head Screw	A283D-A36	2

## Dimensions



### DIMENSIONS

Size (in)	H	H1	H2	H3	Ød	F	ØD	E	L	B.C.D	n*	h*	Bolt Size
2"	8.63	2.36	6.27	0.60	0.51	0.43	1.65	F07	1.73	5.00	8	0.75	5/8" x 1-1/2"
2-1/2"	9.54	2.76	6.77	0.60	0.63	0.55	2.40	F07	1.81	5.87	8	0.87	3/4" x 1-3/4"
3"	9.85	3.01	6.84	0.60	0.63	0.55	2.91	F07	1.89	6.63	8	0.87	3/4" x 1-3/4"
4"	11.07	3.54	7.53	0.70	0.63	0.55	3.70	F07	2.13	7.87	8	0.87	3/4" x 2-1/4"
5"	12.55	4.09	8.45	0.70	0.71	0.55	4.65	F07	2.24	9.25	8	0.87	3/4" x 2-1/4"
6"	13.62	4.53	9.09	0.75	0.91	0.67	5.51	F07	2.28	10.63	12	0.87	3/4" x 2-1/2"
8"	15.91	5.65	10.26	0.81	1.10	0.87	7.40	F07	2.87	13.00	12	1.00	7/8" x 2-7/8"
10"	18.44	6.69	11.75	0.81	1.10	0.87	9.39	F10	3.25	15.25	16	1.13	1" x 3-1/4"
12"	20.71	7.83	12.88	0.95	1.10	0.87	11.02	F10	3.62	17.75	16	1.25	1-1/8" x 3-1/2"

\*Note: N = number of bolt holes  
H = bolt hole diameter



## Torque Data

### ACTUAL TORQUE: LBF.INCH

Size (in)	RPTFE SEAT	
	150 PSIG	285 PSIG
2"	220	520
2-1/2"	220	520
3"	220	520
4"	250	670
5"	600	1120
6"	600	1120
8"	1000	2440
10"	1800	4640
12"	2790	7480

There are multiple factors that affect the torque required to operate butterfly valves. Please consult Jomar Valve for additional assistance.

## Flow Coefficient Charts

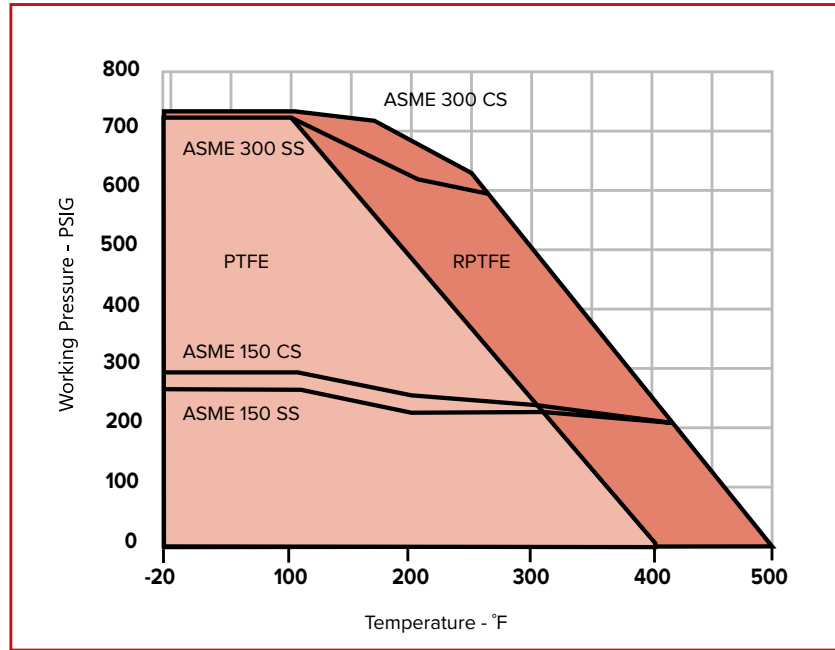
### DISC OPENING

Inches	20°	30°	40°	50°	60°	70°	80°	90°
	Cv							
2"	6	13	24	36	52	71	95	100
2-1/2"	8	19	34	52	75	102	136	143
3"	13	30	53	81	117	159	212	223
4"	25	58	104	157	228	310	414	435
5"	40	92	165	248	361	491	655	688
6"	60	139	250	377	546	744	992	1041
8"	109	255	459	692	1001	1365	1820	1911
10"	158	426	767	1156	1673	2282	3042	3194
12"	218	590	1063	1602	2319	3163	4217	4428

## Technical Data

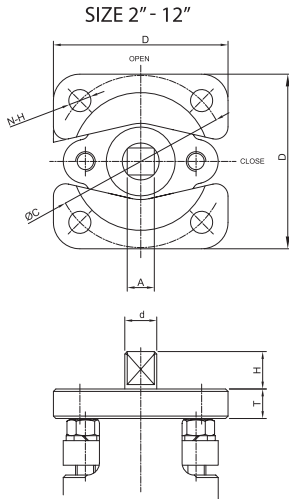
### Pressure vs. Temperature

PTFE & RPTFE Seat



## Butterfly Valve Top Flange Dimensions

### High Performance Class 300



Size	d	T	ØC	N-H	A	D	B	W	H	E
2"	0.51	0.47	F07	0.35	0.43	2.80	-	-	0.60	-
2-1/2"	0.63	0.47	F07	0.35	0.55	2.80	-	-	0.60	-
3"	0.63	0.47	F07	0.35	0.55	2.80	-	-	0.60	-
4"	0.63	0.47	F07	0.35	0.55	2.80	-	-	0.70	-
5"	0.71	0.55	F07	0.35	0.55	2.80	-	-	0.70	-
6"	0.87	0.55	F07	0.35	0.67	2.80	-	-	0.75	-
8"	1.10	0.63	F10	0.43	0.87	3.74	-	-	0.81	-
10"	1.00	0.71	F10	0.43	0.87	3.74	-	-	0.81	-
12"	1.10	0.71	F10	0.43	0.87	3.74	-	-	0.95	-

## Material Selection / How to Order

