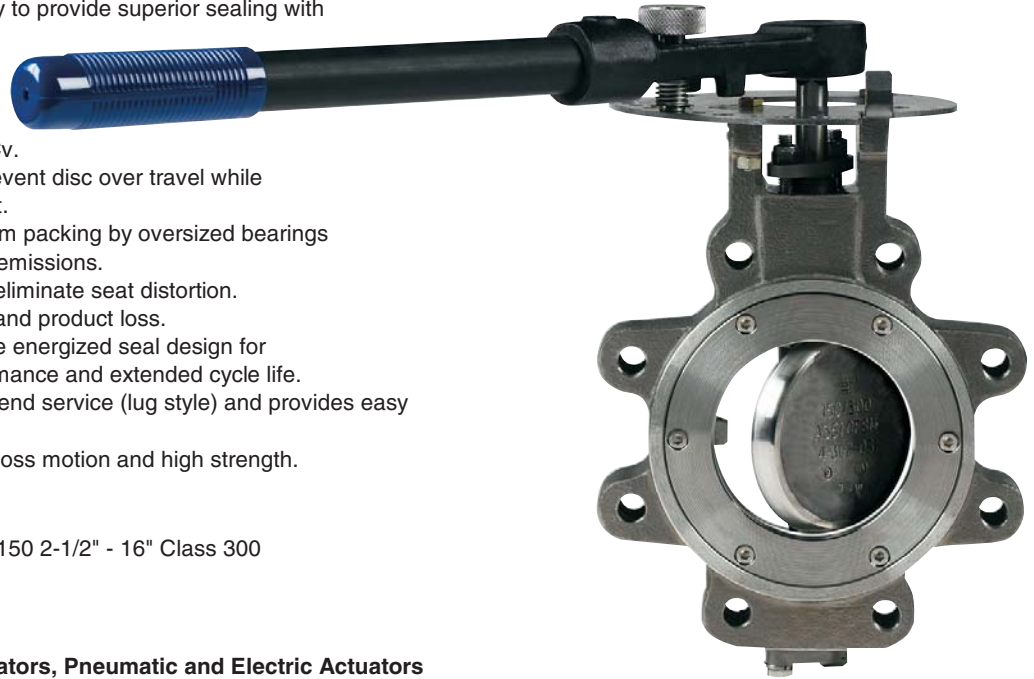


# HP Series Milwaukee Valve Company High Performance Butterfly Valves



## Features and Benefits

- \* Double offset seat/disc/stem geometry to provide superior sealing with minimal seat contact and wear
- \* Machined, tapered seat multiple sealing edges.
- \* Single piece shaft and disc designed for maximum strength and Cv.
- \* Internally cast disc position stop to prevent disc over travel while maintaining optimum disc/seat contact.
- \* Stem is centered in the adjustable stem packing by oversized bearings eliminating stem leakage and fugitive emissions.
- \* Disc spacers to center disc in seat to eliminate seat distortion.
- \* Blow out proof stem to prevent injury and product loss.
- \* Combination mechanical and pressure energized seal design for repeatable and reliable sealing performance and extended cycle life.
- \* Seat retaining ring designed for dead end service (lug style) and provides easy removal for seat replacement.
- \* Stem/disc connection allows minimal loss motion and high strength.



## Product Range

**Size/ASME Class:** 2-1/2" - 24", Class 150 2-1/2" - 16" Class 300

**Body Configuration:** Wafer and Lug

## Operators Available

10 Position Lever Handle, Gear Operators, Pneumatic and Electric Actuators

## Material of Standard Construction

<b>Body</b>	Carbon Steel or 316 Stainless Steel
<b>Disc</b>	316 Stainless Steel
<b>Stem</b>	17-4 PH Stainless Steel
<b>Bearing</b>	Stainless backed RTFE
<b>Seat</b>	RTFE/Stainless Garter Spring

## Specifications

Valve Sizes 2 1/2" through 24"

Flanged End Connections per ANSI B16.5.

Valve face to face dimension per MSS-SP-68.

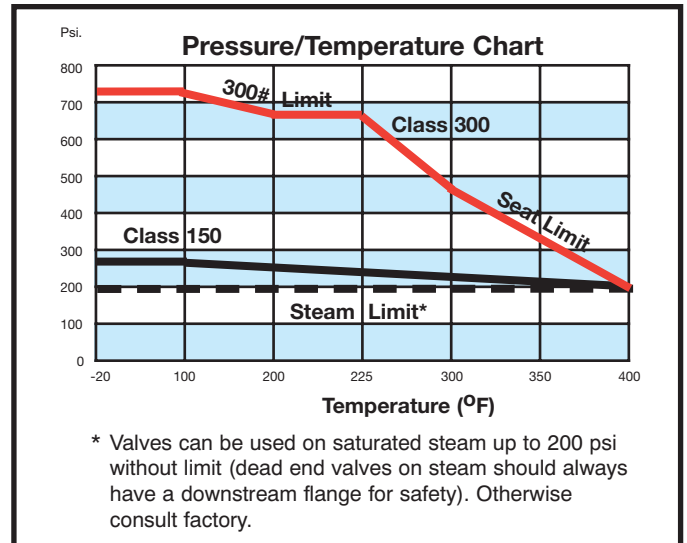
Valve bodies are cast high quality steel, with standard availability in ASTM-A-216 WCB CS and ASTM A-351 CF8M SS. Body wall thickness meets ASME/ANSI B16.34 and complies with quality standard for steel casting MSS-SP-55.

High performance valve design meets the requirements of MSS-SP-68 for double offset design.

Valve pressure tests meet MSS-SP-61, API 598 and ANSI B16.104 valve inspection and testing.

Tagging meets the requirements of MSS-SP-25.

For NACE applications consult factory.



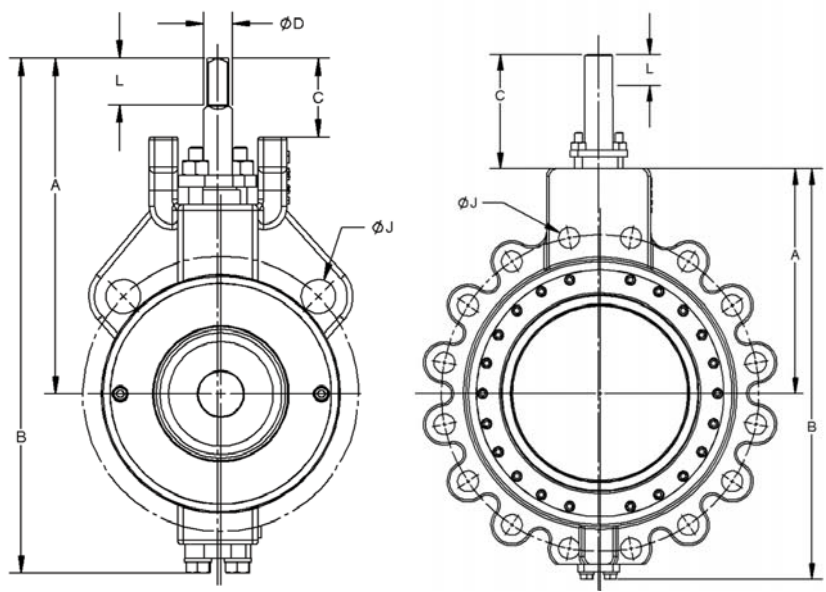
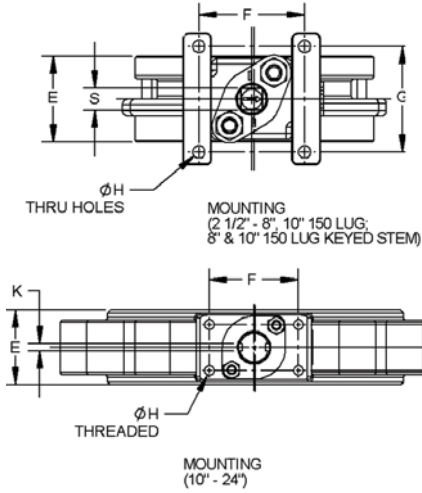
Rev.1

## Pressure Ratings

(Cold Working Pressure)

	2-1/2" through 24" Class 150	2-1/2" through 16" Class 300
Carbon Steel	285 psi	740 psi
Stainless Steel	275 psi	720 psi

# HP Series



## DIMENSIONS

### 150 Class Weight

Valve Size	Dimensions					Mounting Flange			Stem Connection			Weight (lbs.) Bare Stem	
	A Height	B Height	C Stem Lg	D Stem Dia.	E Face	F Width	G Width	H Fastener	S Square	K Key	L Length	Wafer	Lug
2.5 Lug	7.25	11.22	1.63	0.625	1.875	2.30	2.30	1/4-20	0.46		1.00		12
3	7.25	11.22	1.63	0.625	1.875	2.30	2.30	1/4-20	0.46		1.00	12	14
4	7.81	12.59	1.63	0.625	2.125	2.30	2.30	1/4-20	0.46		1.00	16	21
5 Lug	9.38	15.22	1.69	0.875	2.125	3.00	3.00	3/8-16	0.64		1.00		36
6	9.38	15.22	1.69	0.875	2.250	3.00	3.00	3/8-16	0.64		1.00	31	36
8	11.38	19.22	1.86	1.125	2.625	3.36	3.36	1/2-13		0.250	1.50	50	60
10 Lug	12.38	20.75	1.82	1.125	2.812	3.36	3.36	1/2-13		0.250	1.50		106
10	8.63	16.50	3.72	1.125	2.812	3.88	1.38	1/2-13		0.250	1.50	73	
12 Lug	11.62	21.72	5.50	1.375	3.188	3.88	2.00	1/2-13		0.312	1.50		151
12	11.62	20.34	5.50	1.375	3.188	3.88	2.00	1/2-13		0.312	1.50	124	
14	12.00	23.09	6.00	1.500	3.625	4.50	2.00	1/2-13		0.375	1.50	139	205
16	14.00	26.84	6.00	2.000	4.000	5.75	2.50	1/2-13		0.500	2.38	219	283
18	15.00	29.09	6.00	2.250	4.500	5.75	2.50	1/2-13		0.500	2.38	314	395
20	17.00	32.50	6.00	2.500	5.000	6.00	4.00	1/2-13		0.750	2.50	350	434
24	19.50	37.88	6.50	3.000	6.062	6.00	4.00	3/4-10		0.750	2.50	535	773

### 300 Class

2.5 Lug	7.25	11.88	1.63	0.625	1.875	2.30	2.30	1/4-20	0.46		1.00		17
3 Lug	7.25	11.88	1.63	0.625	1.875	2.30	2.30	1/4-20	0.46		1.00		19
3	7.25	11.25	1.63	0.625	1.875	2.30	2.30	1/4-20	0.46		1.00	12	
4	7.81	12.59	1.63	0.625	2.125	2.30	2.30	1/4-20	0.46		1.00	16	24
5 Lug	9.38	15.22	1.69	0.875	2.125	3.00	3.00	3/8-16	0.64		1.00		36
6 Lug	9.38	16.25	1.69	0.875	2.310	3.00	3.00	3/8-16	0.64		1.00		50
6	9.38	15.22	1.69	0.875	2.310	3.00	3.00	3/8-16	0.64		1.00	31	
8	11.38	19.22	1.86	1.125	2.875	3.36	3.36	1/2-13		0.250	1.50	52	76
10	10.81	19.75	5.50	1.375	3.250	3.88	2.00	1/2-13		0.312	1.50	93	134
12	11.62	22.53	5.50	1.500	3.625	4.50	2.00	1/2-13		0.375	1.50	141	191
14	13.50	26.09	6.00	2.000	4.625	5.75	2.50	1/2-13		0.500	2.38	221	333
16	15.00	29.09	6.00	2.250	5.250	5.75	2.50	1/2-13		0.500	2.38	290	430

# HP1 LCS4111-040

"HP" Series  
(High Performance Butterfly)

Body style:  
L = Lug  
W = Wafer

Disc Material  
S = CF8M (Stainless Steel)

Seat Material  
1 = PTFE  
2 = RPTFE  
4 = UHMWPE

Operator  
1 = Bare Stem  
2 = Lever  
3 = Gear Operator  
Electric & Pneumatic Actuator Available.  
Consult factory

Size:  
025 = 2 1/2 Inch  
thru  
240 = 24 inch

ANSI CLASS  
1 = 150  
3 = 300

Body Material:  
C = WCB (Carbon Steel)  
S = CF8M (Stainless Steel)

Stem Material  
4 = 17-4 (Stainless Steel)  
5 = 316 (Stainless Steel)

Stem Packing  
1 = PTFE  
G = Graphite

External Options  
A = Assemble Dry  
O = Oxygen Clean  
- = None  
C = Chlorine Clean

NOTE: the information presented in this brochure is correct at time of printing. Milwaukee Valve reserves the right to change design, dimensions and/or material specifications without notice.