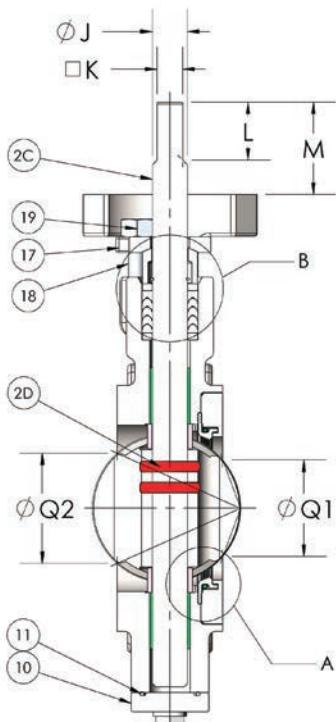
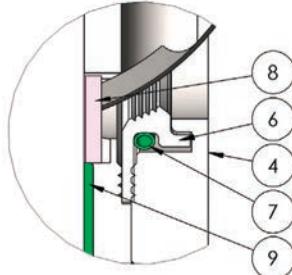


# HP Series Lug 2 1/2" - 8" with Lever

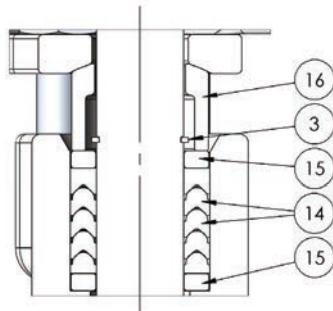


VALVE SHOWN OPEN

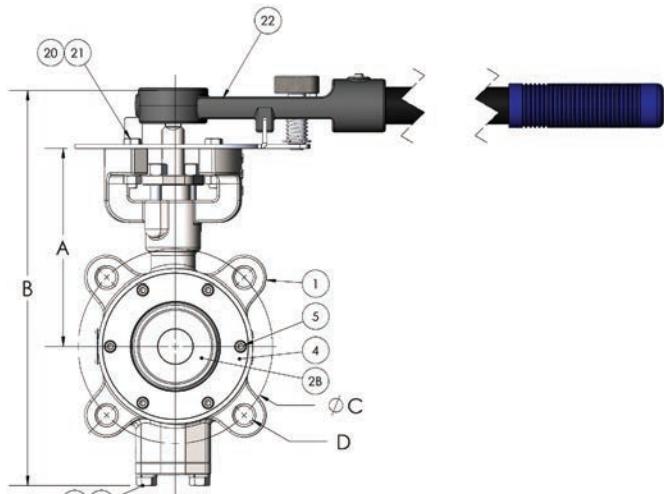
2-1/2" - 6" 150/300 LB & 8" 150 LB LUG WITH HANDLE			
ITEM NO.	PARTS NAME	MATERIAL	SPECIFICATION
1	BODY	A. CARBON STEEL B. STAINLESS STEEL	ASTM A216 GR. WCB ASTM A351 GR. CF8M
2	STEM & DISC ASSEMBLY		
2B. DISC	STAINLESS STEEL	ASTM A351 GR. CF8M	
2C. STEM	STAINLESS STEEL	17-4PH H1150	
2D. TAPER PIN	18-8 STAINLESS STEEL	COMMERCIAL	
3	STEM RETAINER	304 STAINLESS STEEL	COMMERCIAL
4	SEAT RETAINER RING	A. CARBON STEEL B. STAINLESS STEEL	ASTM A515 GR. 70 ASTM A240 TY.316
5	SOCKET HEAD CAP SCREW	STAINLESS STEEL	ASTM A193 GR. B8M
6	SEAT	A. PTFE COMMERCIAL B. 15% GLS. FLD. PTFE C. UHMWPE	COMMERCIAL COMMERCIAL COMMERCIAL
7	SEAT SPRING	STAINLESS STEEL	COMMERCIAL
8	DISC SPACER	316 STAINLESS STEEL	COMMERCIAL
9	BEARING	STAINLESS STEEL - PTFE COATED	COMMERCIAL
10	BOTTOM CAP	STAINLESS STEEL	ASTM A351 GR. CF8M
11	BOTTOM SEAL	GRAPHITE	COMMERCIAL
12	HEX HEAD CAP SCREW	STAINLESS STEEL	ASTM A193, GR. B8M
13	SPLIT LOCKWASHER	STAINLESS STEEL	COMMERCIAL
14	PACKING V-RING SET	A. PTFE COMMERCIAL B. GRAPHITE	COMMERCIAL COMMERCIAL
15	PACKING WASHER	304 STAINLESS STEEL	COMMERCIAL
16	GLAND FOLLOWER	STAINLESS STEEL	ASTM A351 GR. CF8M
17	GLAND RETAINER	STAINLESS STEEL	ASTM A351 GR. CF8M
18	STUD	STAINLESS STEEL	ASTM A193 GR. B8M
19	HEAVY HEX NUT	STAINLESS STEEL	ASTM A194 GR. 8M
20	SOCKET HEAD CAP SCREW	STAINLESS STEEL	ASTM A193 GR. B8M
21	SPLIT LOCKWASHER	STAINLESS STEEL	COMMERCIAL
22	HANDLE ASSY	DUCTILE IRON	COMMERCIAL



DETAIL A



DETAIL B



2.5" CLASS 150 HP LUG SHOWN

VALVE SIZE	VALVE DIMENSIONS						TOP WORKS	STEM CONNECTION						CORE DIMS		Bolt Ø	
	"A" HEIGHT	"B" HEIGHT	"C" B.C.	"D" TAP	# OF HOLES	"E" FACE	"F"	"H" B.C.	"J" ØSTEM	"K" SQUARE	"L" LENGTH	"L2"	"M" LENGTH	"N" KEYWAY	ØQ1	ØQ2	
2.5" 150 LUG	5.59	11.24	5.50	5/8-11	4	1.88	16.87	3.25	0.62	0.46	1.02	N/A	1.64	N/A	1.72	1.97	0.27
2.5" 300 LUG	5.59	12.01	5.88	3/4-10	8	1.88	16.87	3.25	0.62	0.46	1.02	N/A	1.64	N/A	1.72	1.97	0.27
3" 150 LUG	5.59	11.24	6.00	5/8-11	4	1.88	16.87	3.25	0.62	0.46	1.02	N/A	1.72	N/A	2.28	2.47	0.27
3" 300 LUG	5.59	11.97	6.63	3/4-10	8	1.88	16.87	3.25	0.62	0.46	1.02	N/A	1.72	N/A	2.28	2.47	0.27
4" 150 LUG	6.25	12.77	7.50	5/8-11	8	2.13	16.87	3.25	0.62	0.46	1.02	N/A	1.56	N/A	3.06	3.53	0.27
4" 300 LUG	6.25	13.05	7.88	3/4-10	8	2.13	16.87	3.25	0.62	0.46	1.02	N/A	1.56	N/A	3.06	3.53	0.27
5" 150 LUG	7.69	15.52	8.50	3/4-10	8	2.13	19.87	4.25	0.87	0.64	1.04	N/A	1.69	N/A	4.35	4.46	0.44
5" 300 LUG	7.69	15.52	9.25	3/4-10	8	2.13	19.87	4.25	0.87	0.64	1.04	N/A	1.69	N/A	4.35	4.46	0.44
6" 150 LUG	7.69	15.52	9.50	3/4-10	8	2.25	19.87	4.25	0.87	0.64	1.04	N/A	1.69	N/A	5.33	5.43	0.44
6" 300 LUG	7.69	16.56	10.63	3/4-10	12	2.31	19.87	4.25	0.87	0.64	1.04	N/A	1.69	N/A	5.33	5.39	0.44
8" 150 LUG	9.51	19.27	13.00	3/4-10	8	2.63	22.85	4.75	1.12	N/A	N/A	1.50	1.86	0.25	7.10	7.37	0.56

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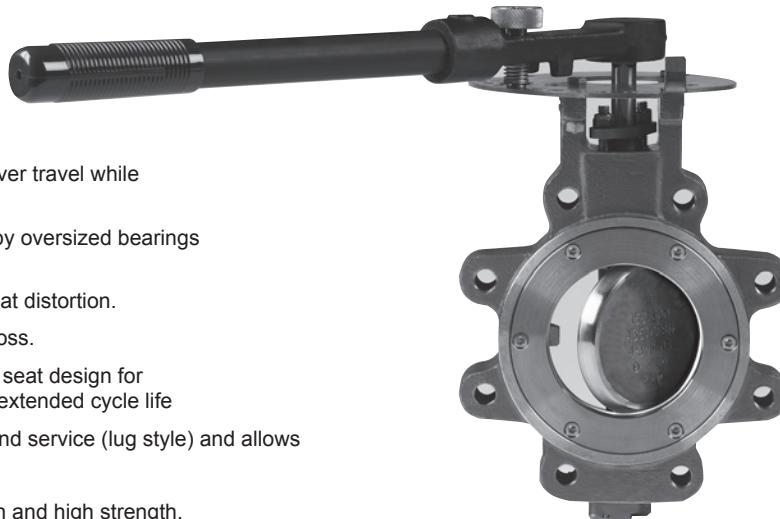
The information presented on this sheet is correct at the time of publication. Milwaukee Valve / Hammond Valve reserves the right to change design, and/or material specifications without notice. For the most current information access [www.milwaukeevalve.com](http://www.milwaukeevalve.com) or [www.hammondvalve.com](http://www.hammondvalve.com)



# HP Series: Milwaukee Valve Company High Performance Butterfly Valves

## Features and Benefits

- Double offset geometry to provide superior sealing with minimal seat contact and wear.
- Machined, tapered seat provides 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 prevents injury and product loss.
- Combination mechanical and pressure energized seat design for repeatable and reliable sealing performance and extended cycle life
- Sealing retaining ring designed for double dead end service (lug style) and allows easy removal for seat replacement.
- Stem/disc connection ensures minimal lost motion and high strength.



## Product Range

Size Class: 2-1/2"-24", ASME/ANSI Class 150 & 300

Body Configuration: Wafer and Lug

## Operators Available

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

## Material of Standard Construction

Body	Carbon Steel or CF8M 316 Stainless Steel
Disc	CF8M 316 Stainless Steel
Stem	17-4 PH Stainless Steel
Bearing	Stainless backed PTFE
Seat	PTFE/Stainless Garter Spring

## Specifications

Valve Sizes 2-1/2" through 24"

Flanged Ends Connections per ASME/ANSI B16.5.

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

Valve bodies are cast high quality steel, with standard availability in ASTM-A216 WCB CS and ASTM A-351 CF8M SS. Body wall thickness meets ASME/ANSI B16.34 and complies with quality standard for steel castings MSS-SP-55.

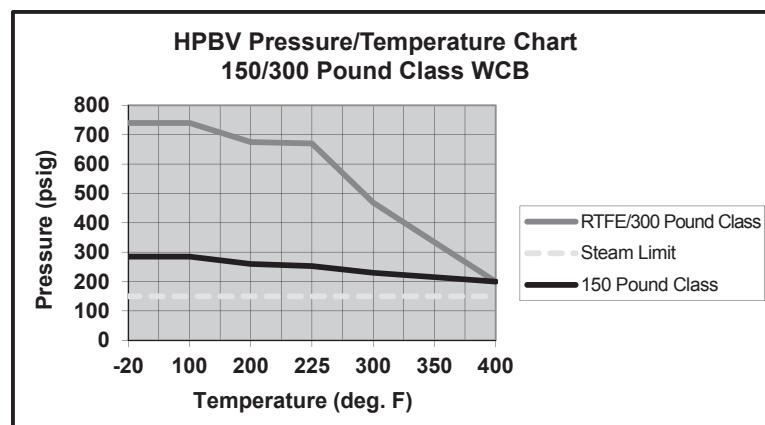
High performance valve meets the requirements of MSS-SP-68 for double offset design.

Valve pressure tests meet MSS-SP-61.

Valve testing and inspection meet API 598.

Tagging meets the requirements of MSS-SP-25 and API 609B.

## H.P. Lug Pattern



## Pressure Ratings\*

(Cold Working Pressure)

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

\*Valve is rated @150 PSI steam for on & off application and 50 PSI modulating service. (Limit Range 30°-70° - No Dwell In Near Closed Position.)

HOW TO ORDER MILWAUKEE VALVES HP SERIES HIGH PERFORMANCE BUTTERFLY VALVE										
ANSI CLASS	BODY STYLE	BODY MATERIAL	DISC MATERIAL	STEM MATERIAL	SEAT MATERIAL	STEM PACKING	OPERATOR	EXT. OPTIONS	SIZE	
XX	X	X	X	X	X	X	X	XX	XXX	
HP	1-150 3-300	L-LUG W-WAFER	C-WCB S-CF8M	S-CF8M	4-17-4 SS 5-316 SS	1-PTFE 2-RPTFE 4-UHMWPE	1-BARE STEM 2-LEVER-LOCK 3-GEAR OP 4-ELECTRIC 5-PNEUMATIC 6-Epoxy Ctd. Gear Op 7-Epoxy Ctd. Lever-Lock	A-Assemble Dry C-Chlorine Clean E-Extended Mounting L-Locking O-Oxygen Clean (Consult Factory) S-Stainless Steel Seat Retainer U-Assembled in USA	025-240	
PART NUMBER EXAMPLE										
HP1LC4111 040 = 4 INCH, HIGH PERFORMANCE, CLASS 150, LUG PATTERN, CARBON STEEL BODY, 17-4 STEM, PTFE SEAT, PTFE PACKING, BARE STEM WITH NO EXT. OPTIONS										

Rev. 4

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