

High Performance Butterfly Valves

Index

Features & Benefits	HP-1
HP1LSS4212 Lug with Lever 2 1/2" - 8"	HP-2
HP3LSS4212 Lug with Lever 2 1/2" - 6"	HP-3
HP1LSS4213 Lug with Gear 2 1/2" - 10"	HP-4
HP1LSS4213 Lug with Gear 12" - 24"	HP-5
HP3LSS4213 Lug with Gear 2 1/2" - 8"	HP-6
HP3LSS4213 Lug with Gear 10" - 16"	HP-7
HP Series Lug with Lever 2 1/2" - 8"	HP-8
HP Series Lug with Gear 2 1/2" - 10" (150#), 2 1/2" - 8" (300#)	HP-9
HP Series Lug with Gear 12" - 24" (150#), 10" - 16" (300#)	HP-10
HP Series Lug with Gear 30" - 48" (150#), 18" - 24" (300#)	HP-11
HP Series Wafer with Lever 3" - 8"	HP-12
HP Series Wafer with Gear 3" - 8"	HP-13
HP Series Wafer with Gear 10" - 18" (150#), 10" - 16" (300#)	HP-14

The information presented on this sheet is correct at time of publication. Milwaukee Valve reserves the right to change design and/or materials without notice. For our Installation, Operation and Maintenance Manual and the most current product information go to www.milwaukeevalve.com.

⚠ State of California Prop 65 **WARNING:** Cancer and Reproductive Harm. For more information visit www.p65warnings.ca.gov.



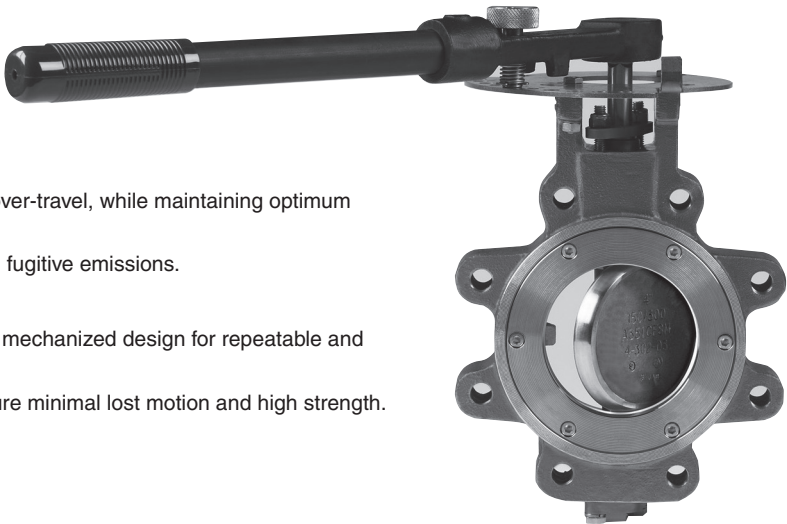
HP Series:

Milwaukee Valve Company

High Performance Butterfly Valves

Features and Benefits

- All valves offer bi-directional bubble-tight sealing at full rated pressure, with lug-bodied valves providing bi-directional dead-end service at full rated pressure.
- The double-offset design provides superior sealing with minimal seat contact and wear.
- The shaft and disc are manufactured as a single piece for maximum strength and Cv.
- The position stop on the disc is internally cast to prevent over-travel, while maintaining optimum disc/seat contact.
- The adjustable stem packing eliminates stem leakage and fugitive emissions.
- The blow-out-proof stem prevents injury and product loss.
- The seat is energized by a combination of pressure and a mechanized design for repeatable and reliable sealing and extended cycle life.
- The stem/disc connection uses a welded taper pin to ensure minimal lost motion and high strength.



Product Range

Sizes: 2-1/2" - 48" Class 150
Sizes: 2-1/2" - 24" Class 300
Body Configuration: Lug or Wafer

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 RTFE
Seat RTFE/Stainless Garter Spring

Specifications

Valve Sizes 2-1/2" through 24"
Flanged Ends Connections per ASME/ANSI B16.5 or B16.47 Series A (sizes 30" - 48").

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

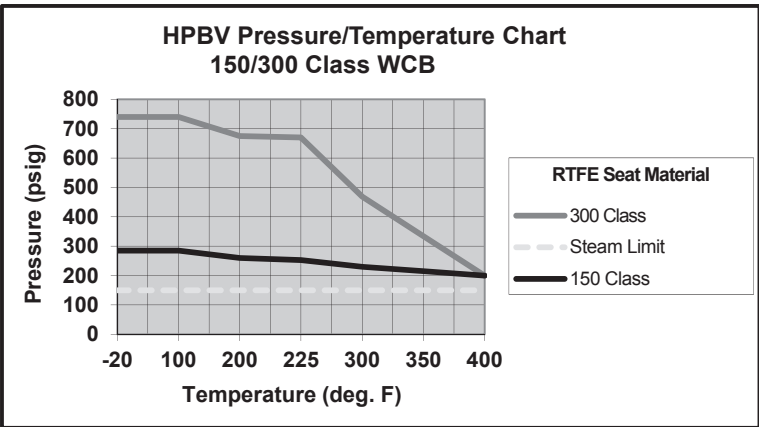
Valve bodies are cast high quality steel, with standard availability in ASTM-A216 WCB CS and ASTM A-351 CF8M SS. Body wall thickness meets ASME/ANSI B16.34 and complies with quality standard for steel castings MSS-SP-55.

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 48" Class 150	2-1/2" through 24" 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										
SERIES	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	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-PTFE G-GRAPHITE	1-BARE STEM 2-LEVER-LOCK 3-GEAR OP	S-Stainless Steel Seat Retainer U-Assembled in USA	025-240
PART NUMBER EXAMPLE										
HP1LCS4111 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										

The information presented on this sheet is correct at time of publication. Milwaukee Valve reserves the right to change design and/or materials without notice. For our Installation, Operation and Maintenance Manual and the most current product information go to www.milwaukeevalve.com.

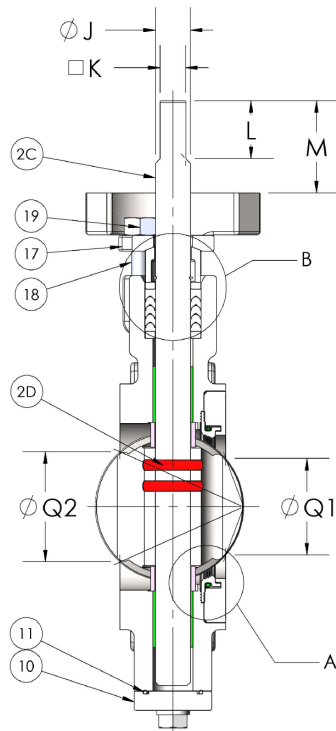
⚠ State of California Prop 65 **WARNING:** Cancer and Reproductive Harm. For more information visit www.p65warnings.ca.gov.



HP1LSS4212 Lug 2 1/2" - 8" with Lever Class 150

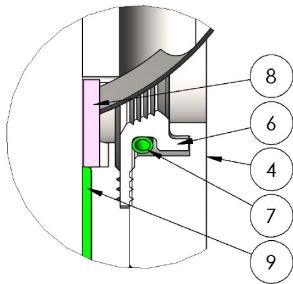


Certified by IAFMO R&T to
NSF/ANSI 61 and NSF/ANSI
372 for low lead requirements

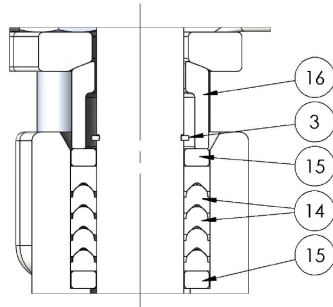


2 1/2" - 8" 150 LB LUG WITH HANDLE			
ITEM NO.	PARTS NAME	MATERIAL	SPECIFICATION
1	BODY	STAINLESS STEEL	ASTM A351 GR. CF8M
2	STEM & DISC ASSEMBLY		
	2B. DISC	STAINLESS STEEL	ASTM A351 GR. CF8M
	2C. STEM	STAINLESS STEEL	17-4PH H1150
	2D. TAPER PIN	18-8 STAINLESS STEEL	COMMERCIAL
3	STEM RETAINER	304 STAINLESS STEEL	COMMERCIAL
4	SEAT RETAINER RING	A. CARBON STEEL	ASTM A515 GR. 70
		B. STAINLESS STEEL	ASTM A240 TY.316
5	SOCKET HEAD CAP SCREW	STAINLESS STEEL	ASTM A193 GR. B8M
6	SEAT	A. PTFE COMMERCIAL	COMMERCIAL
		B. 15% GLS. FLD PTFE	COMMERCIAL
		C. UHMWPE	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	COMMERCIAL
		B. GRAPHITE	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

VALVE SHOWN OPEN

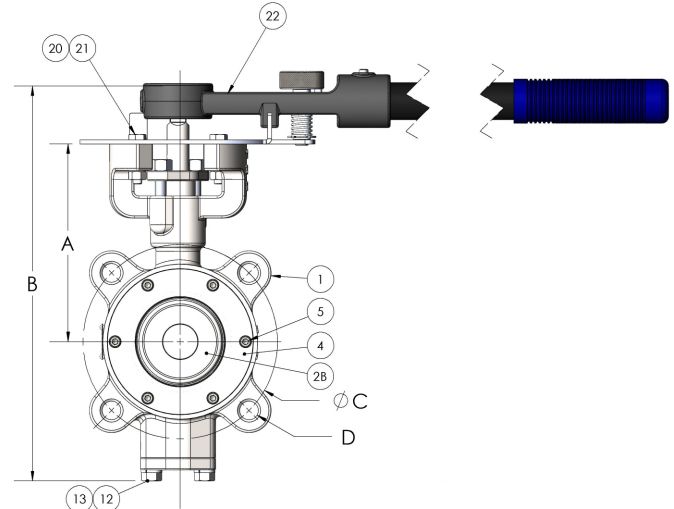
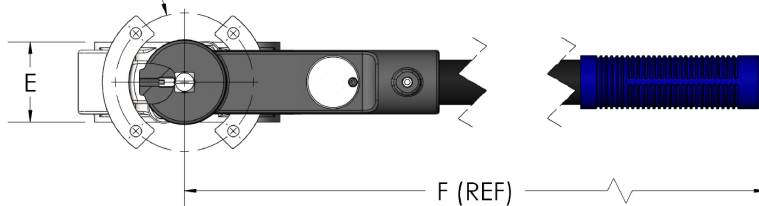


DETAIL A



DETAIL B

(4x) H "B.C."



2.5" CLASS 150 HP LUG SHOWN

2.5" - 8" 150 LB LUG WITH HANDLE																
VALVE SIZE	VALVE DIMENSIONS						TOP WORKS		STEM CONNECTION						CORE DIMS	
	"A" HEIGHT	"B" HEIGHT	"C" B.C.	"D" TAP	# OF HOLES	"E" FACE	"F"	"H" B.C.	"J" Ø STEM	"K" SQUARE	"L" LENGTH	"L2"	"M" LENGTH	"N" KEYWAY	ØQ1	ØQ2
2.5"	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
3"	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
4"	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
5"	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
6"	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
8"	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

The information presented on this sheet is correct at time of publication. Milwaukee Valve reserves the right to change design and/or materials without notice. For our Installation, Operation and Maintenance Manual and the most current product information go to www.milwaukeevalve.com.

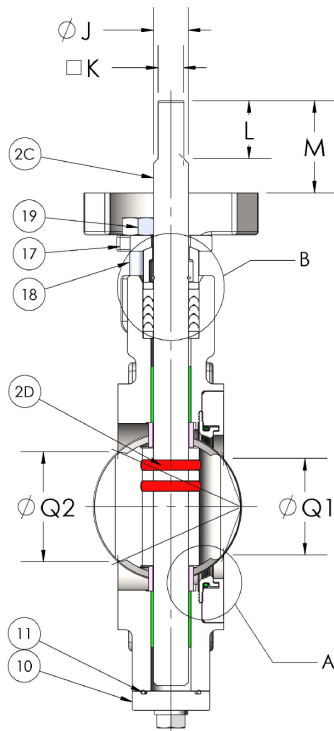
⚠ State of California Prop 65 **WARNING:** Cancer and Reproductive Harm. For more information visit www.p65warnings.ca.gov.



HP3LSS4212 Lug 2 1/2" - 6" with Lever Class 300

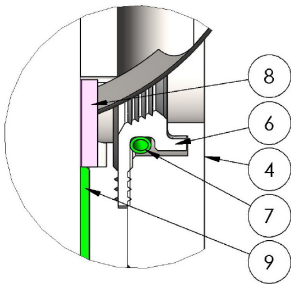


Certified by IAPMO R&T to
NSF/ANSI 61 and NSF/ANSI
372 for low lead requirements

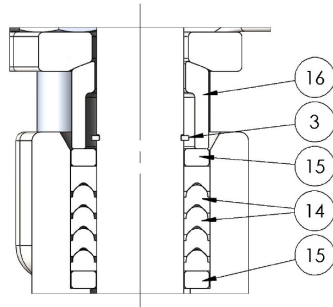


2 1/2" - 6" 300 LB LUG WITH HANDLE			
ITEM NO.	PARTS NAME	MATERIAL	SPECIFICATION
1	BODY	STAINLESS STEEL	ASTM A351 GR. CF8M
2	STEM & DISC ASSEMBLY		
	2B. DISC	STAINLESS STEEL	ASTM A351 GR. CF8M
	2C. STEM	STAINLESS STEEL	17-4PH H1150
	2D. TAPER PIN	18-8 STAINLESS STEEL	COMMERCIAL
3	STEM RETAINER	304 STAINLESS STEEL	COMMERCIAL
4	SEAT RETAINER RING	A. CARBON STEEL	ASTM A515 GR. 70
		B. STAINLESS STEEL	ASTM A240 TY.316
5	SOCKET HEAD CAP SCREW	STAINLESS STEEL	ASTM A193 GR. B8M
6	SEAT	A. PTFE COMMERCIAL	COMMERCIAL
		B. 15% GLS. FLD PTFE	COMMERCIAL
		C. UHMWPE	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	COMMERCIAL
		B. GRAPHITE	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

VALVE SHOWN OPEN

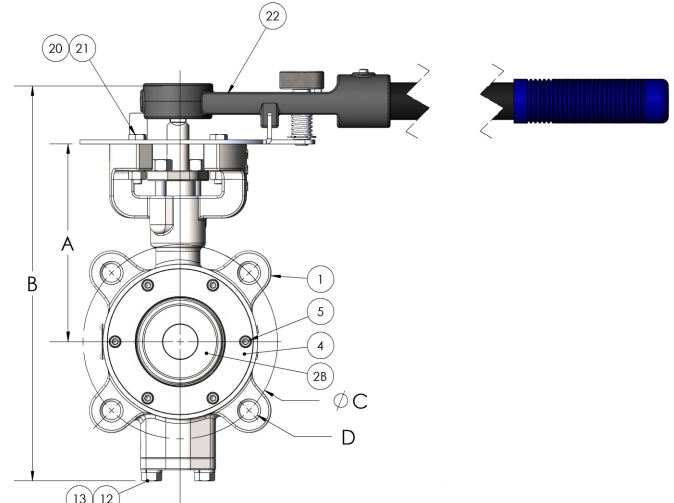
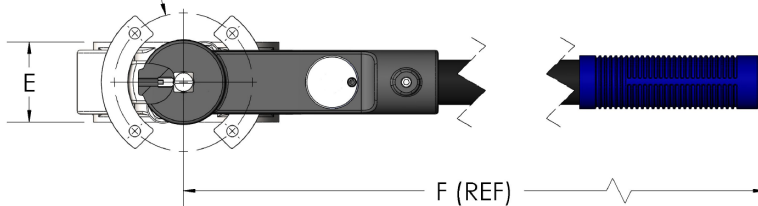


DETAIL A



DETAIL B

(4x) H "B.C."



2.5" CLASS 150 HP LUG SHOWN

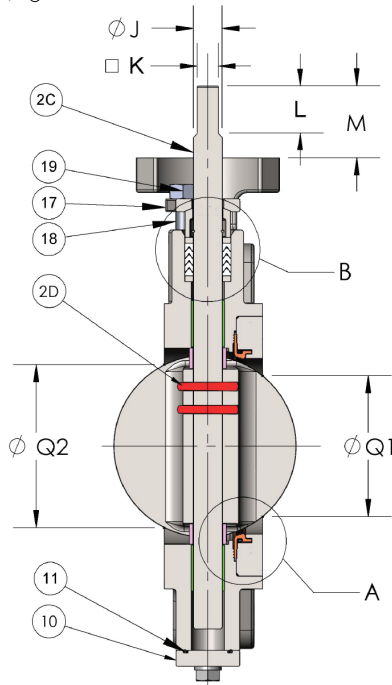
2.5" - 6" 300 LB LUG WITH HANDLE																
VALVE SIZE	VALVE DIMENSIONS						TOP WORKS			STEM CONNECTION						CORE DIMS ØQ1 ØQ2 Bolt Ø
	"A" HEIGHT	"B" HEIGHT	"C" B.C.	"D" TAP	# OF HOLES	"E" FACE	"F"	"H" B.C.	"J" Ø STEM	"K" SQUARE	"L" LENGTH	"L2"	"M" LENGTH	"N" KEYWAY		
2.5"	5.59	12.01	5.88	3/4-10	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"	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"	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"	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"	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

The information presented on this sheet is correct at time of publication. Milwaukee Valve reserves the right to change design and/or materials without notice. For our Installation, Operation and Maintenance Manual and the most current product information go to www.milwaukeevalve.com.

⚠ State of California Prop 65 **WARNING:** Cancer and Reproductive Harm. For more information visit www.p65warnings.ca.gov.

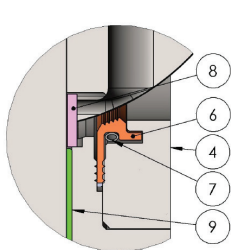


HP1LSS4213 Lug 2 1/2" - 10" with Gear Class 150

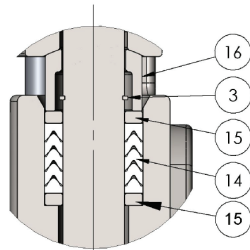


VALVE SHOWN OPEN

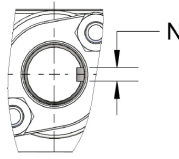
2 1/2" - 10" 150 LB LUG WITH GEAR			
ITEM NO.	PARTS NAME	MATERIAL	SPECIFICATION
1	BODY	STAINLESS STEEL	ASTM A351 GR. CF8M
2	STEM & DISC ASSEMBLY		
	2B. DISC	STAINLESS STEEL	ASTM A351 GR. CF8M
	2C. STEM	STAINLESS STEEL	17-4PH H1150
	2D. TAPER PIN	18-8 STAINLESS STEEL	COMMERCIAL
3	STEM RETAINER	304 STAINLESS STEEL	COMMERCIAL
4	SEAT RETAINER RING	STAINLESS STEEL	ASTM A240 TY.316
5	SOCKET HEAD CAP SCREW	STAINLESS STEEL	ASTM A193 GR. B8M
6	SEAT	15% GLS. FLD PTFE	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	PTFE 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 194 GR. 8M
20	SOCKET HEAD CAP SCREW	STAINLESS STEEL	ASTM A193 GR. B8M
21	SPLIT LOCKWASHER	STAINLESS STEEL	COMMERCIAL
22	MOUNTING PLATE	STAINLESS STEEL	COMMERCIAL
23	GEAR OPERATOR		



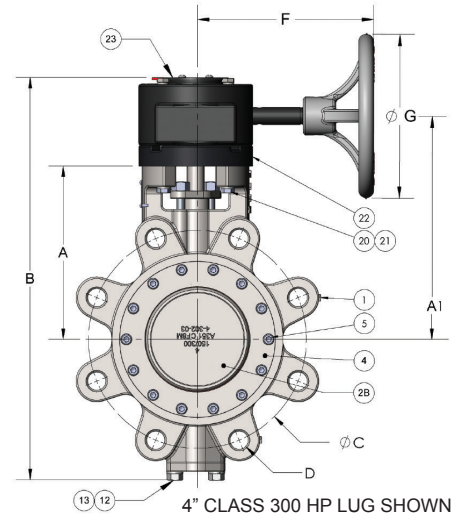
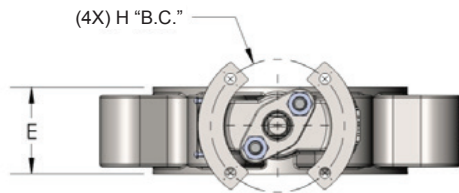
DETAIL A



DETAIL B



8" KEY DETAIL



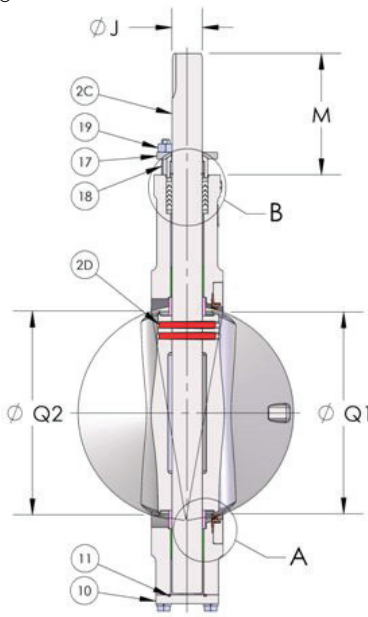
2 1/2" - 10" 150 LB LUG WITH GEAR																			
	VALVE DIMENSIONS							HANDWHEEL	TOP WORKS	STEM CONNECTION							CHORD DIMS		BOLT Ø
VALVE SIZE	"A" HEIGHT	"A1" HEIGHT	"B" HEIGHT	"C" B.C.	"D" TAP	# OF HOLES	"E" FACE	"F"	"G" DIA	"H" B.C.	"J" Ø STEM	"K" SQUARE	"L" LENGTH	"L2"	"M" LENGTH	"N" KEYWAY	ØQ1	ØQ2	
2.5" 150	5.59	7.40	12.72	5.50	5/8-11	4	1.88	6.37	6	3.25	0.62	0.46	1.02	N/A	1.64	N/A	1.72	1.97	0.27
3" 150	5.59	7.40	12.72	6.00	5/8-11	4	1.88	6.37	6	3.25	0.62	0.46	1.02	N/A	1.72	N/A	2.28	2.47	0.27
4" 150	6.25	8.06	14.25	7.50	5/8-11	8	2.13	6.37	6	3.25	0.62	0.46	1.02	N/A	1.56	N/A	3.06	3.53	0.27
5" 150	7.69	10.30	18.70	8.50	3/4-10	8	2.13	6.02	9	4.25	0.87	0.64	1.04	N/A	1.69	N/A	4.35	4.46	0.44
6" 150	7.69	10.30	18.70	9.50	3/4-10	8	2.25	6.02	9	4.25	0.87	0.64	1.04	N/A	1.69	N/A	5.13	5.43	0.44
8" 150	9.51	12.01	21.67	11.75	3/4-10	8	2.63	7.93	12	4.75	1.12	N/A	N/A	1.50	1.86	0.25	7.10	7.37	0.56
10" 150	10.54	13.04	23.15	14.25	7/8-9	12	2.81	7.93	12	4.75	1.12	N/A	N/A	1.50	1.81	0.25	9.30	9.38	0.56

The information presented on this sheet is correct at time of publication. Milwaukee Valve reserves the right to change design and/or materials without notice. For our Installation, Operation and Maintenance Manual and the most current product information go to www.milwaukeevalve.com.

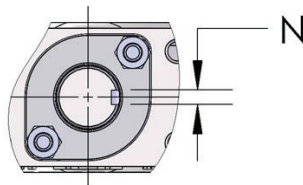
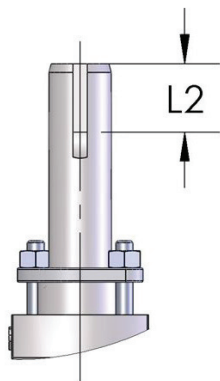
⚠ State of California Prop 65 **WARNING:** Cancer and Reproductive Harm. For more information visit www.p65warnings.ca.gov.



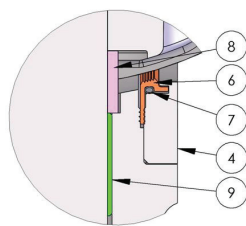
HP1LSS4213 Lug 12"- 24" with Gear Class 150



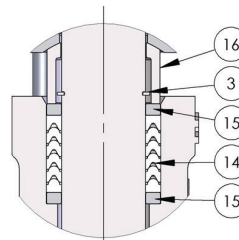
VALVE SHOWN OPEN



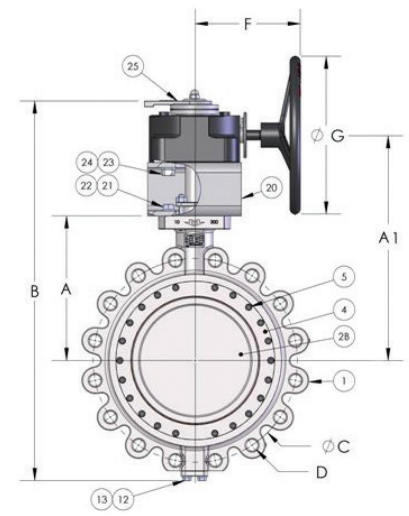
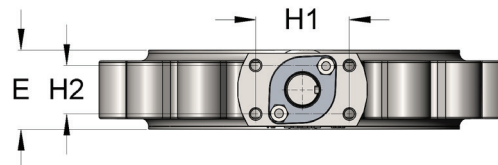
12" - 24" 150 LB LUG WITH GEAR			
ITEM NO.	PARTS NAME	MATERIAL	SPECIFICATION
1	BODY	STAINLESS STEEL	ASTM A351 GR. CF8M
2	STEM & DISC ASSEMBLY		
	2B. DISC	STAINLESS STEEL	ASTM A351 GR. CF8M
	2C. STEM	STAINLESS STEEL	17-4PH H1150
	2D. TAPER PIN	18-8 STAINLESS STEEL	COMMERCIAL
3	STEM RETAINER	304 STAINLESS STEEL	COMMERCIAL
4	SEAT RETAINER RING	A. CARBON STEEL	ASTM A515 GR. 70
		B. STAINLESS STEEL	ASTM A240 TY.316
5	SOCKET HEAD CAP SCREW	STAINLESS STEEL	ASTM A193 GR. B8M
6	SEAT	A. PTFE COMMERCIAL	COMMERCIAL
		B. 15% GLS. FLD PTFE	COMMERCIAL
		C. UHMWPE	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	COMMERCIAL
		B. GRAPHITE	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 194 GR. 8M
20	MOUNTING PLATE	STAINLESS STEEL	COMMERCIAL
21	HEX HEAD CAP SCREW	STAINLESS STEEL	ASTM A193 GR. B8M
22	SPLIT LOCKWASHER	STAINLESS STEEL	COMMERCIAL
23	HEX HEAD CAP SCREW	STAINLESS STEEL	ASTM A193 GR. B8M
24	SPLIT LOCKWASHER	STAINLESS STEEL	COMMERCIAL
25	GEAR OPERATOR		



DETAIL A



DETAIL B



10" 300 LUG SHOWN

12" - 24" 150 LB LUG WITH GEAR																		
	VALVE DIMENSIONS								HANDWHEEL	TOP WORKS		STEM CONNECTION				CHORD DIMS		BOLT Ø
VALVE SIZE	"A" HEIGHT	"A1" HEIGHT	"B" HEIGHT	"C" B.C	"D" TAP	# OF HOLES	"E" FACE	"F"	"G" DIA	"H1"	"H2"	"J" ØSTEM	"L2" LENGTH	"M" LENGTH	"N"	ØQ1	ØQ2	
12"	11.62	17.67	30.40	17.00	7/8-9	12	3.19	7.85	12	3.88	2.00	1.37	1.50	5.51	0.31	10.36	10.48	
14"	12.00	18.36	31.74	18.75	1-8	12	3.63	8.36	12	4.50	2.00	1.50	1.50	5.50	0.38	11.69	11.76	
16"	14.00	20.11	35.96	21.25	1-8	16	4.00	10.96	20	5.75	2.50	2.00	2.38	6.02	0.50	13.65	13.72	
18"	15.00	21.09	38.12	22.75	1-1/8-8	16	4.47	11.95	20	5.75	2.50	2.25	2.38	6.02	0.50	15.65	15.72	
20"	17.00	24.19	40.03	25.00	1-1/8-8	20	5.00	16.54	16	5.75	2.50	2.50	2.38	6.48	0.63	17.57	17.64	
24"	19.50	25.69	49.30	29.50	1-1/4-8	20	6.06	16.54	16	6.00	4.00	3.00	2.50	6.52	0.75	20.38	20.46	

The information presented on this sheet is correct at time of publication. Milwaukee Valve reserves the right to change design and/or materials without notice. For our Installation, Operation and Maintenance Manual and the most current product information go to www.milwaukeevalve.com.

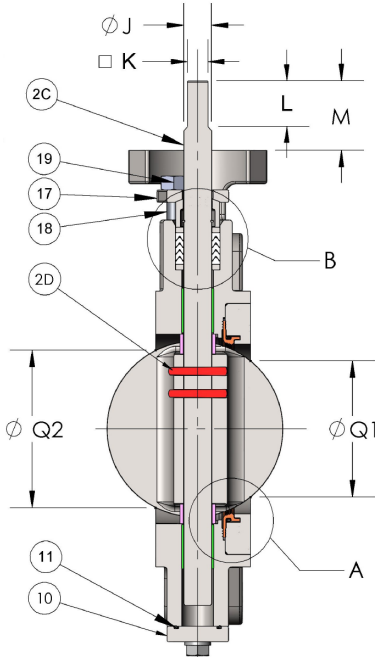
⚠ State of California Prop 65 **WARNING:** Cancer and Reproductive Harm. For more information visit www.p65warnings.ca.gov.



HP3LSS4213 Lug 2 1/2" - 8" with Gear Class 300

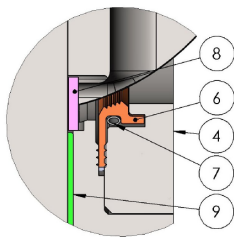


Certified by IAFMO R&T to
NSF/ANSI 61 and NSF/ANSI
372 for low lead requirements

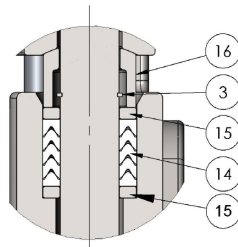


VALVE SHOWN OPEN

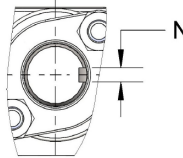
2 1/2" - 8" 300 LB LUG WITH GEAR			
ITEM NO.	PARTS NAME	MATERIAL	SPECIFICATION
1	BODY	STAINLESS STEEL	ASTM A351 GR. CF8M
STEM & DISC ASSEMBLY			
2	2B. DISC	STAINLESS STEEL	ASTM A351 GR. CF8M
	2C. STEM	STAINLESS STEEL	17-4PH H1150
	2D. TAPER PIN	18-8 STAINLESS STEEL	COMMERCIAL
3	STEM RETAINER	304 STAINLESS STEEL	COMMERCIAL
4	SEAT RETAINER RING	A. CARBON STEEL	ASTM A515 GR. 70
		B. STAINLESS STEEL	ASTM A240 TY.316
5	SOCKET HEAD CAP SCREW	STAINLESS STEEL	ASTM A193 GR. B8M
6	SEAT	A. PTFE COMMERCIAL	COMMERCIAL
		B. 15% GLS. FLD PTFE	COMMERCIAL
		C. UHMWPE	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	COMMERCIAL
		B. GRAPHITE	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	MOUNTING PLATE	STAINLESS STEEL	COMMERCIAL
23	GEAR OPERATOR		



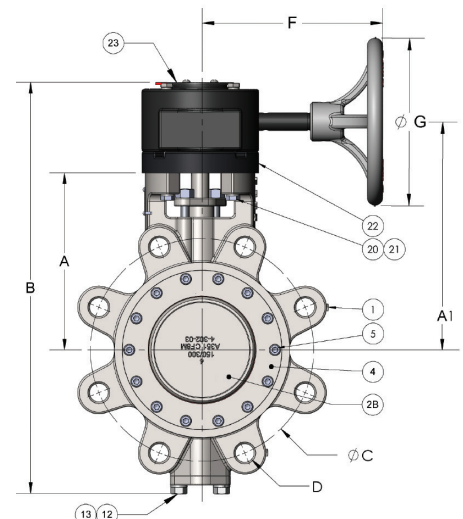
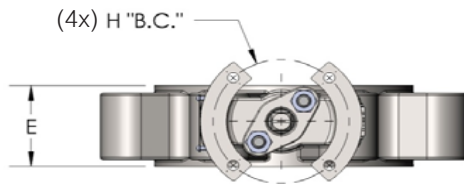
DETAIL A



DETAIL B



8" KEY DETAIL



4" CLASS 300 HP LUG SHOWN

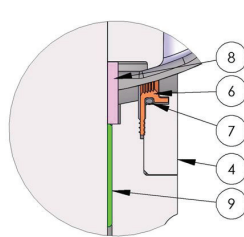
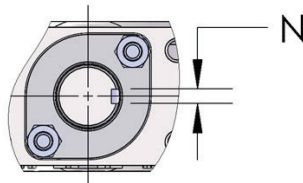
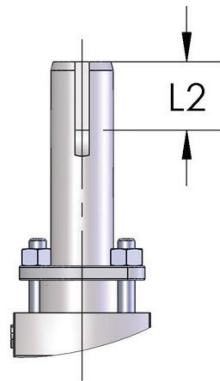
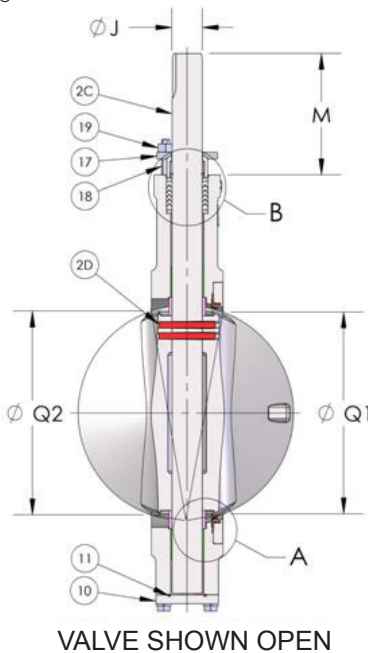
2.5" - 8" 300 LB LUG WITH GEAR																			
VALVE DIMENSIONS								HANDWHEEL		TOP WORKS		STEM CONNECTION						CORE DIMS	
VALVE SIZE	"A" HEIGHT	"A1" HEIGHT	"B" HEIGHT	"C" B.C.	"D" TAP	# OF HOLES	"E" FACE	"F"	"G" DIA	"H" B.C.	"J" Ø STEM	"K" SQUARE	"L" LENGTH	"L2"	"M" LENGTH	"N" KEYWAY	ØQ1	ØQ2	Bolt Ø
2.5"	5.59	7.40	13.59	5.88	3/4-10	8	1.88	6.37	6	3.25	0.62	0.46	1.02	N/A	1.64	N/A	1.72	1.97	0.27
3"	5.59	7.40	13.45	6.63	3/4-10	8	1.88	6.37	6	3.25	0.62	0.46	1.02	N/A	1.72	N/A	2.28	2.47	0.27
4"	6.25	8.06	14.53	7.88	3/4-10	8	2.13	6.37	6	3.25	0.62	0.46	1.02	N/A	1.56	N/A	3.06	3.53	0.27
5"	7.69	10.30	18.70	9.25	3/4-10	8	2.13	6.02	9	4.25	0.87	0.64	1.04	N/A	1.69	N/A	4.35	4.46	0.44
6"	7.69	10.30	19.73	10.63	3/4-10	12	2.31	6.02	9	4.25	0.87	0.64	1.04	N/A	1.69	N/A	5.33	5.39	0.44
8"	9.51	12.01	21.67	13.00	7/8-9	12	2.88	7.93	12	4.75	1.12	N/A	N/A	1.50	1.86	0.25	7.10	7.20	0.56

The information presented on this sheet is correct at time of publication. Milwaukee Valve reserves the right to change design and/or materials without notice. For our Installation, Operation and Maintenance Manual and the most current product information go to www.milwaukeevalve.com.

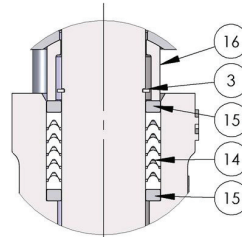
⚠ State of California Prop 65 **WARNING:** Cancer and Reproductive Harm. For more information visit www.p65warnings.ca.gov.



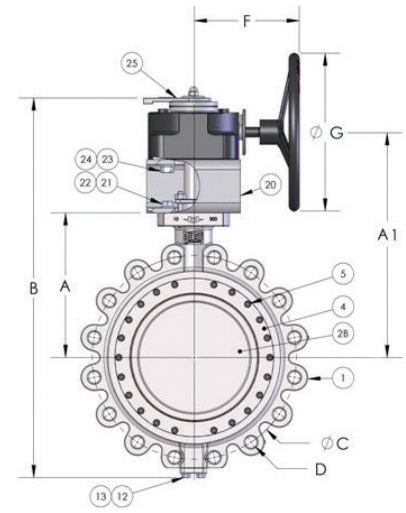
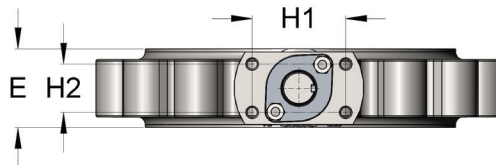
HP3LSS4213 Lug 10"- 16" with Gear Class 300



DETAIL A



DETAIL B



10" CLASS 300 LUG SHOWN

10" - 16" 300 LB LUG WITH GEAR			
ITEM NO.	PARTS NAME	MATERIAL	SPECIFICATION
1	BODY	STAINLESS STEEL	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	ASTM A515 GR. 70
		B. STAINLESS STEEL	ASTM A240 TY.316
5	SOCKET HEAD CAP SCREW	STAINLESS STEEL	ASTM A193 GR. B8M
6	SEAT	A. PTFE COMMERCIAL	COMMERCIAL
		B. 15% GLS. FLD PTFE	COMMERCIAL
		C. UHMWPE	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	COMMERCIAL
		B. GRAPHITE	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 194 GR. 8M
20	MOUNTING PLATE	STAINLESS STEEL	COMMERCIAL
21	HEX HEAD CAP SCREW	STAINLESS STEEL	ASTM A193 GR. B8M
22	SPLIT LOCKWASHER	STAINLESS STEEL	COMMERCIAL
23	HEX HEAD CAP SCREW	STAINLESS STEEL	ASTM A193 GR. B8M
24	SPLIT LOCKWASHER	STAINLESS STEEL	COMMERCIAL
25	GEAR OPERATOR		

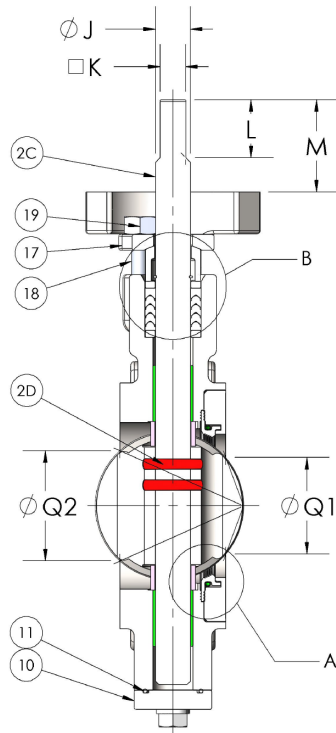
10" - 16" 300 LB LUG WITH GEAR																		
VALVE SIZE	VALVE DIMENSIONS								HANDWHEEL	TOP WORKS		STEM CONNECTION				CHORD DIMS		BOLT Ø
	"A" HEIGHT	"A1" HEIGHT	"B" HEIGHT	"C" B.C	"D" TAP	# OF HOLES	"E" FACE	"F"		"H1"	"H2"	"J" ØSTEM	"L2" LENGTH	"M" LENGTH	"N"	ØQ1	ØQ2	
10"	10.81	16.86	28.40	15.25	1-8	16	3.25	7.85	12	3.88	2.00	1.37	1.50	5.51	0.31	9.16	9.25	1/2" - 13"
12"	11.62	17.98	31.18	17.75	1-1/8-8	16	3.63	8.63	12	4.50	2.00	1.50	1.50	5.88	0.38	10.25	10.34	1/2" - 13"
14"	13.50	19.61	35.12	20.25	1-1/8-8	20	4.63	10.96	20	5.75	2.50	2.00	2.38	6.02	0.50	11.39	11.49	1/2" - 13"
16"	15.00	21.09	38.12	22.50	1-1/4-8	20	5.25	11.95	20	5.75	2.50	2.25	2.38	6.02	0.50	13.26	13.36	1/2" - 13"

The information presented on this sheet is correct at time of publication. Milwaukee Valve reserves the right to change design and/or materials without notice. For our Installation, Operation and Maintenance Manual and the most current product information go to www.milwaukeevalve.com.

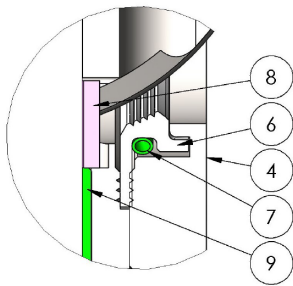
⚠ State of California Prop 65 **WARNING:** Cancer and Reproductive Harm. For more information visit www.p65warnings.ca.gov.



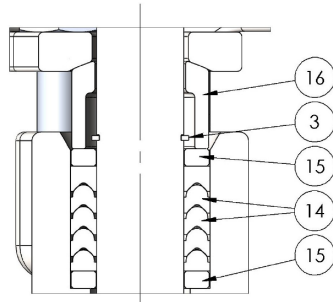
HP Series Lug 2 1/2" - 8" with Lever



VALVE SHOWN OPEN

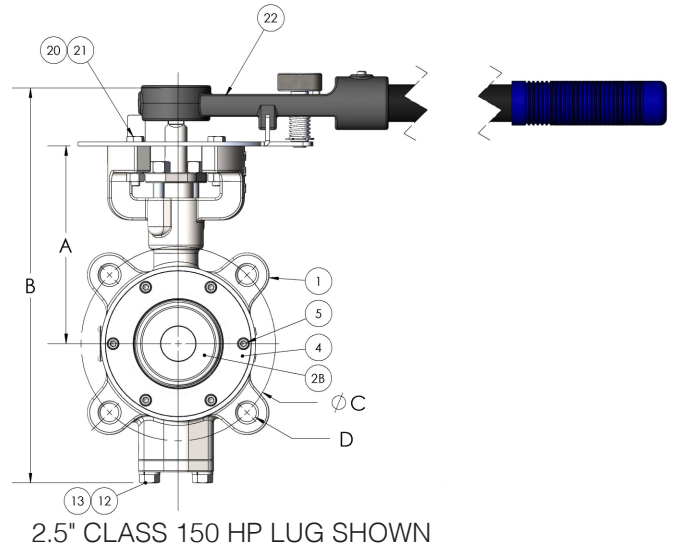
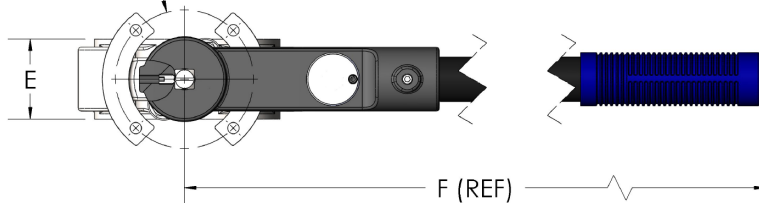


DETAIL A



DETAIL B

(4x) H "B.C."



2.5" CLASS 150 HP LUG SHOWN

2-1/2" - 6" 150/300 LB & 8" 150 LB LUG WITH HANDLE			
ITEM NO.	PARTS NAME	MATERIAL	SPECIFICATION
1	BODY	A. CARBON STEEL	ASTM A216 GR. WCB
		B. STAINLESS STEEL	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	ASTM A515 GR. 70
		B. STAINLESS STEEL	ASTM A240 TY.316
5	SOCKET HEAD CAP SCREW	STAINLESS STEEL	ASTM A193 GR. B8M
6	SEAT	A. PTFE COMMERCIAL	COMMERCIAL
		B. 15% GLS. FLD. PTFE	COMMERCIAL
		C. UHMWPE	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	COMMERCIAL
		B. GRAPHITE	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

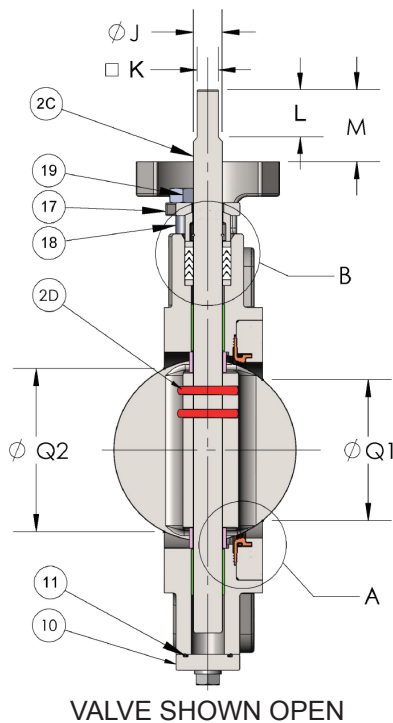
2.5" - 6" 150/300LB & 8" 150LB LUG WITH HANDLE																	
	VALVE DIMENSIONS							TOP WORKS		STEM CONNECTION					CORE DIMS		Bolt Ø
VALVE SIZE	"A" HEIGHT	"B" HEIGHT	"C" B.C.	"D" TAP	# OF HOLES	"E" FACE	"F"	"H" B.C.	"J" ØSTEM	"K" SQUARE	"L" LENGTH	"L2" N/A	"M" LENGTH	"N" KEYWAY	ØQ1	ØQ2	
2.5" 150 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	
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	
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	
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	
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	
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	
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	
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	
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	
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	
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	

The information presented on this sheet is correct at time of publication. Milwaukee Valve reserves the right to change design and/or materials without notice. For our Installation, Operation and Maintenance Manual and the most current product information go to www.milwaukeevalve.com.
 ⚠️ State of California Prop 65 **WARNING:** Cancer and Reproductive Harm. For more information visit www.p65warnings.ca.gov.

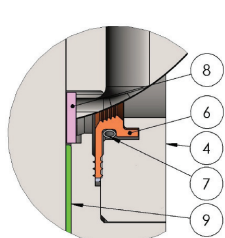


HP Series Lug 2 1/2" - 10" (Class 150) with Gear

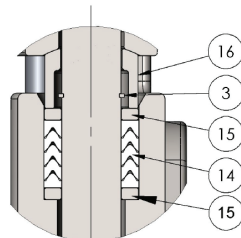
HP Series Lug 2 1/2" - 8" (Class 300) with Gear



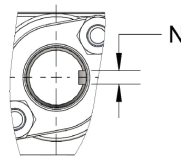
2 1/2" - 8" 150/300 LB & 10" 150 LB LUG WITH GEAR			
ITEM NO.	PARTS NAME	MATERIAL	SPECIFICATION
1	BODY	A. CARBON STEEL	ASTM A216 GR. WCB
		B. STAINLESS STEEL	ASTM A351 GR. CF8M
2	STEM & DISC ASSEMBLY		
	2B. DISC	STAINLESS STEEL	ASTM A351 GR. CF8M
	2C. STEM	STAINLESS STEEL	17-4PH H1150
	2D. TAPER PIN	18-8 STAINLESS STEEL	COMMERCIAL
3	STEM RETAINER	304 STAINLESS STEEL	COMMERCIAL
4	SEAT RETAINER RING	A. CARBON STEEL	ASTM A515 GR. 70
		B. STAINLESS STEEL	ASTM A240 TY.316
5	SOCKET HEAD CAP SCREW	STAINLESS STEEL	ASTM A193 GR. B8M
6	SEAT	A. PTFE COMMERCIAL	COMMERCIAL
		B. 15% GLS. FLD. PTFE	COMMERCIAL
		C. UHMWPE	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	COMMERCIAL
		B. GRAPHITE	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 194 GR. 8M
20	SOCKET HEAD CAP SCREW	STAINLESS STEEL	ASTM A193 GR. B8M
21	SPLIT LOCKWASHER	STAINLESS STEEL	COMMERCIAL
22	MOUNTING PLATE	STAINLESS STEEL	COMMERCIAL
23	GEAR OPERATOR		



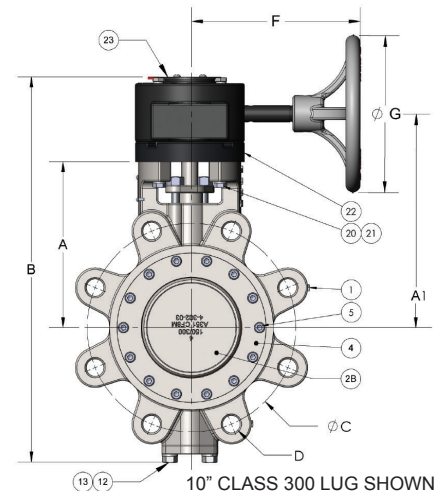
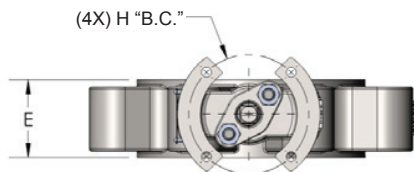
DETAIL A



DETAIL B



8" KEY DETAIL



2 1/2" - 8" 150/300 LB & 10" 150 LB LUG WITH GEAR																			
VALVE SIZE	VALVE DIMENSIONS							HANDWHEEL		TOP WORKS		STEM CONNECTION					CHORD DIMS		BOLT Ø
	"A" HEIGHT	"A1" HEIGHT	"B" HEIGHT	"C" B.C.	"D" TAP	# OF HOLES	"E" FACE	"F"	"G" DIA	"H" B.C.	"J" Ø STEM	"K" SQUARE	"L" LENGTH	"L2"	"M" LENGTH	"N" KEYWAY	ØQ1	ØQ2	
2.5" 150 LUG	5.59	7.40	12.72	5.50	5/8-11	4	1.88	6.37	6	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	7.40	13.59	5.88	3/4-10	8	1.88	6.37	6	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	7.40	12.72	6.00	5/8-11	4	1.88	6.37	6	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	7.40	13.45	6.63	3/4-10	8	1.88	6.37	6	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	8.06	14.25	7.50	5/8-11	8	2.13	6.37	6	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	8.06	14.53	7.88	3/4-10	8	2.13	6.37	6	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	10.30	18.70	8.50	3/4-10	8	2.13	6.02	9	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	10.30	18.70	9.25	3/4-10	8	2.13	6.02	9	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	10.30	18.70	9.50	3/4-10	8	2.25	6.02	9	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	10.30	19.73	10.63	3/4-10	12	2.31	6.02	9	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	12.01	21.67	11.75	3/4-10	8	2.63	7.93	12	4.75	1.12	N/A	N/A	1.50	1.86	0.25	7.10	7.37	0.56
8" 300 LUG	9.51	12.01	21.67	13.00	7/8-9	12	2.88	7.93	12	4.75	1.12	N/A	N/A	1.50	1.86	0.25	7.10	7.20	0.56
10" 150 LUG	10.54	13.04	23.15	14.25	7/8-9	12	2.81	7.93	12	4.75	1.12	N/A	N/A	1.50	1.81	0.25	9.30	9.38	0.56

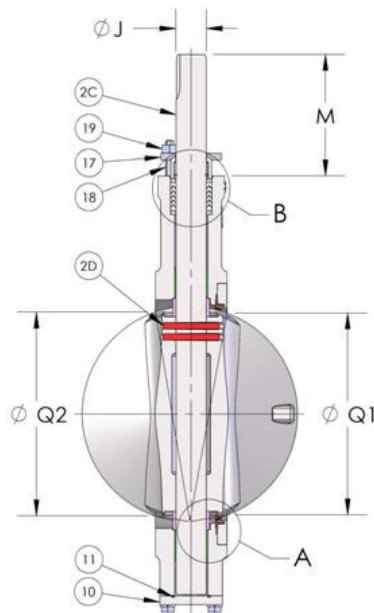
The information presented on this sheet is correct at time of publication. Milwaukee Valve reserves the right to change design and/or materials without notice. For our Installation, Operation and Maintenance Manual and the most current product information go to www.milwaukeevalve.com.

⚠ State of California Prop 65 **WARNING:** Cancer and Reproductive Harm. For more information visit www.p65warnings.ca.gov.

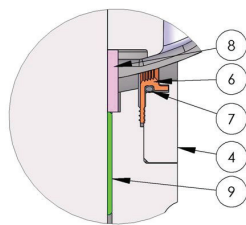
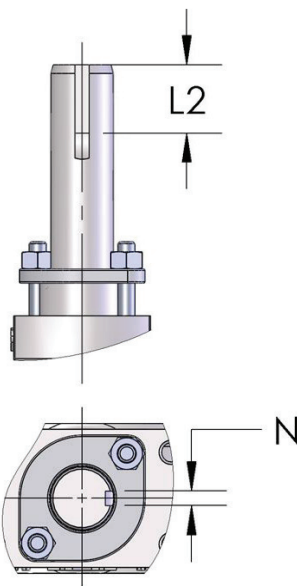


HP Series Lug 12"- 24" (Class 150) with Gear

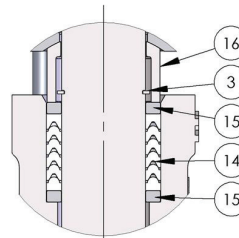
HP Series Lug 10"- 16" (Class 300) with Gear



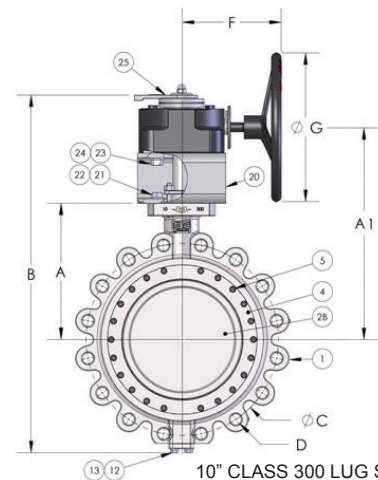
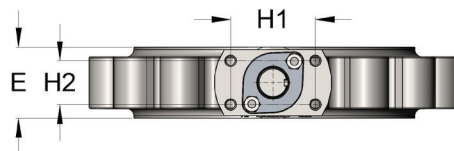
VALVE SHOWN OPEN



DETAIL A



DETAIL B



10" CLASS 300 LUG SHOWN

12" - 24" 150 LB & 10" - 16" 300 LB LUG WITH GEAR			
ITEM NO.	PARTS NAME	MATERIAL	SPECIFICATION
1	BODY	A. CARBON STEEL	ASTM A216 GR. WCB
		B. STAINLESS STEEL	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	ASTM A515 GR. 70
		B. STAINLESS STEEL	ASTM A240 TY.316
5	SOCKET HEAD CAP SCREW	STAINLESS STEEL	ASTM A193 GR. B8M
6	SEAT	A. PTFE COMMERCIAL	COMMERCIAL
		B. 15% GLS. FLD. PTFE	COMMERCIAL
		C. UHMWPE	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	COMMERCIAL
		B. GRAPHITE	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 194 GR. 8M
20	MOUNTING PLATE	STAINLESS STEEL	COMMERCIAL
21	HEX HEAD CAP SCREW	STAINLESS STEEL	ASTM A193 GR. B8M
22	SPLIT LOCKWASHER	STAINLESS STEEL	COMMERCIAL
23	HEX HEAD CAP SCREW	STAINLESS STEEL	ASTM A193 GR. B8M
24	SPLIT LOCKWASHER	STAINLESS STEEL	COMMERCIAL
25	GEAR OPERATOR		

12" - 24" 150 LB & 10" - 16" 300 LB LUG WITH GEAR																		
VALVE SIZE	VALVE DIMENSIONS							HANDWHEEL	TOP WORKS		STEM CONNECTION				CHORD DIMS		BOLT Ø	
	"A" HEIGHT	"A1" HEIGHT	"B" HEIGHT	"C" B.C	"D" TAP	# OF HOLES	"E" FACE	"F"	"G" DIA	"H1"	"H2"	"J" ØSTEM	"L2" LENGTH	"M" LENGTH	"N"	ØQ1	ØQ2	
10"- 300 LUG	10.81	16.86	28.40	15.25	1-8	16	3.25	7.85	12	3.88	2.00	1.37	1.50	5.51	0.31	9.16	9.25	1/2" - 13"
12"- 150 LUG	11.62	17.67	30.40	17.00	7/8-9	12	3.19	7.85	12	3.88	2.00	1.37	1.50	5.51	0.31	10.36	10.48	1/2" - 13"
12"- 300 LUG	11.62	17.98	31.18	17.75	1-1/8-8	16	3.63	8.63	12	4.50	2.00	1.50	1.50	5.88	0.38	10.25	10.34	1/2" - 13"
14"- 150 LUG	12.00	18.36	31.74	18.75	1-8	12	3.63	8.36	12	4.50	2.00	1.50	1.50	5.50	0.38	11.69	11.76	1/2" - 13"
14"- 300 LUG	13.50	19.61	35.12	20.25	1-1/8-8	20	4.63	10.96	20	5.75	2.50	2.00	2.38	6.02	0.50	11.39	11.49	1/2" - 13"
16"- 150 LUG	14.00	20.11	35.96	21.25	1-8	16	4.00	10.96	20	5.75	2.50	2.00	2.38	6.02	0.50	13.65	13.72	1/2" - 13"
16"- 300 LUG	15.00	21.09	38.12	22.50	1-1/4-8	20	5.25	11.95	20	5.75	2.50	2.25	2.38	6.02	0.50	13.26	13.36	1/2" - 13"
18"- 150 LUG	15.00	21.09	38.12	22.75	1-1/8-8	16	4.47	11.95	20	5.75	2.50	2.25	2.38	6.02	0.50	15.65	15.72	1/2" - 13"
20"- 150 LUG	17.00	24.19	40.03	25.00	1-1/8-8	20	5.00	16.54	16	5.75	2.50	2.50	2.38	6.48	0.63	17.57	17.64	1/2" - 13"
24"- 150 LUG	19.50	25.69	49.30	29.50	1-1/4-8	20	6.06	16.54	16	6.00	4.00	3.00	2.50	6.52	0.75	20.38	20.46	3/4" - 10"

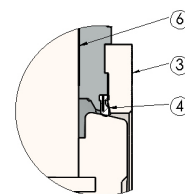
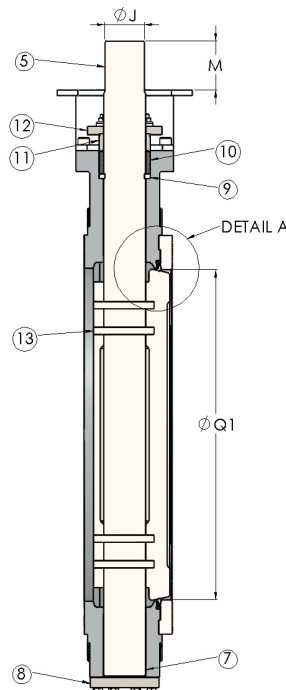
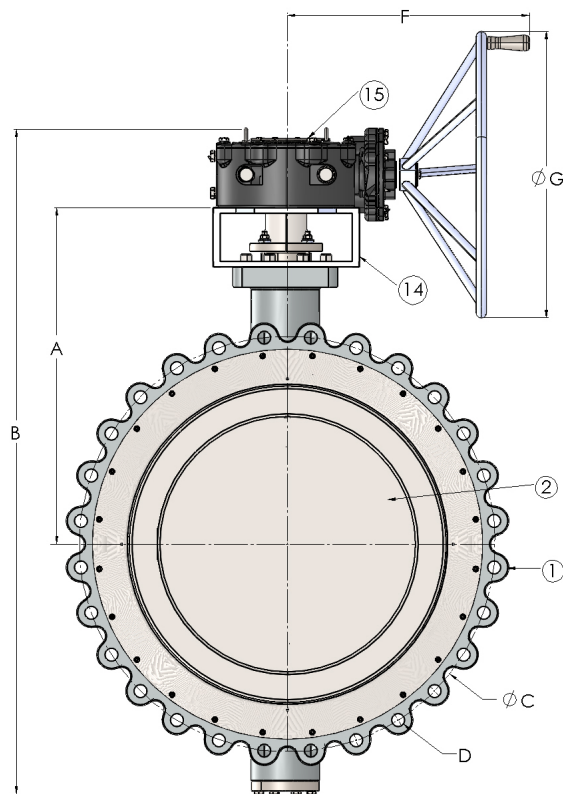
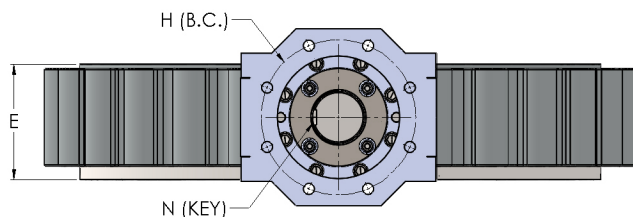
The information presented on this sheet is correct at time of publication. Milwaukee Valve reserves the right to change design and/or materials without notice. For our Installation, Operation and Maintenance Manual and the most current product information go to www.milwaukeevalve.com.

⚠ State of California Prop 65 **WARNING:** Cancer and Reproductive Harm. For more information visit www.p65warnings.ca.gov.



HP Series Lug 30"- 48" (Class 150) with Gear

HP Series Lug 18"- 24" (Class 300) with Gear



DETAIL A

Notes:

1. Seat Retainer side should always be installed facing upstream pressure. See flow arrow located on mounting bracket.
2. Can be used in uni-directional dead-end service.

ITEM NO.	PARTS NAME	MATERIAL	SPECIFICATION
1	BODY	CARBON STEEL	ASTM A216 WCB
		STAINLESS STEEL	ASTM A351 CF8M
2	DISC	STAINLESS STEEL	ASTM A351 CF8M
3	SEAT RETAINER RING	CARBON STEEL	ASTM A36
		STAINLESS STEEL	ASTM A240 316
4	SEAT	RTFE	COMMERCIAL
5	STEM	STAINLESS STEEL	17-4 PH
6	UPPER BEARING	METALOPLAST	COMMERCIAL
7	LOWER BEARING	METALOPLAST	COMMERCIAL
8	BOTTOM COVER	CARBON STEEL	ASTM A36
9	THRUST BEARING	BRASS	COMMERCIAL
10	PACKING	PTFE	COMMERCIAL
		GRAPHITE	COMMERCIAL
11	GLAND	BRASS	COMMERCIAL
12	GLAND FLANGE	CARBON STEEL	ASTM A36
13	TAPER PIN	STAINLESS STEEL	17-4 PH
14	BRACKET	CARBON STEEL	ASTM A36
15	GEAR OPERATOR		

30"-48" CLASS 150 LUG WITH GEAR														
	VALVE DIMENSIONS							HANDWHEEL	TOP WORKS		STEM CONNECTION			CHORD
VALVE SIZE	"A" HEIGHT	"B" HEIGHT	"C" B.C.	"D" TAP	# HOLES	"E" FACE	"F"	"G" Ø	"H" B.C.	BOLT Ø	"J" STEM Ø	"M" LENGTH	"N" KEY	ØQ1
30" - CL 150	29.13	57.72	36.00	1-1/4"-8UN	28	7.48	20.67	24.8	10.0	0.709	2.56	4.13	0.71 x 0.43	27.17
36" - CL 150	33.66	67.60	42.75	1-1/2"-8UN	32	7.99	21.85	28.0	11.73	0.905	3.54	5.12	0.87 x 0.55	33.20
42" - CL 150	38.20	75.77	49.50	1-1/2"-8UN	36	9.88	22.64	28.0	11.73	0.905	4.33	5.12	1.10 x 0.63	39.14
48" - CL 150	40.94	84.96	56.00	1-1/2"-8UN	44	10.87	26.62	31.5	14.01	1.299	4.72	5.71	1.26 x 0.71	45.22

18"-24" CLASS 300 LUG WITH GEAR														
	VALVE DIMENSIONS							HANDWHEEL	TOP WORKS		STEM CONNECTION			CHORD
VALVE SIZE	"A" HEIGHT	"B" HEIGHT	"C" B.C.	"D" TAP	# HOLES	"E" FACE	"F"	"G" Ø	"H" B.C.	BOLT Ø	"J" STEM Ø	"M" LENGTH	"N" KEY	ØQ1
18" - CL 300	19.88	40.51	24.75	1-1/4"-8UN	24	5.87	16.77	19.68	6.50	0.906	2.36	2.95	0.71 x 0.43	15.75
20" - CL 300	21.46	42.64	27.00	1-1/4"-8UN	24	6.26	15.83	15.75	6.50	0.906	2.56	3.74	0.71 x 0.43	17.62
24" - CL 300	24.76	50.00	32.00	1-1/2"-8UN	24	7.13	17.91	22.05	8.07	0.709	2.95	4.13	0.79 x 0.47	21.63

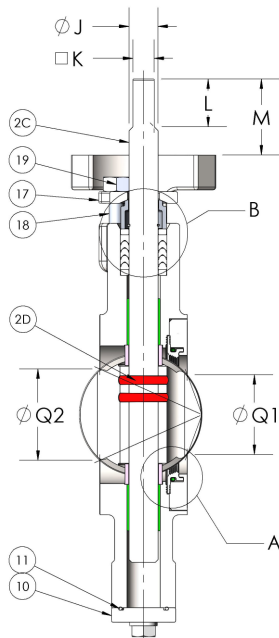
The information presented on this sheet is correct at time of publication. Milwaukee Valve reserves the right to change design and/or materials without notice. For our Installation, Operation and Maintenance Manual and the most current product information go to www.milwaukeevalve.com.

⚠ State of California Prop 65 **WARNING:** Cancer and Reproductive Harm. For more information visit www.p65warnings.ca.gov.

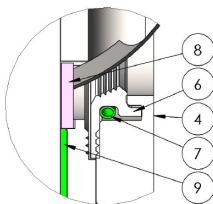
MILWAUKEE VALVE



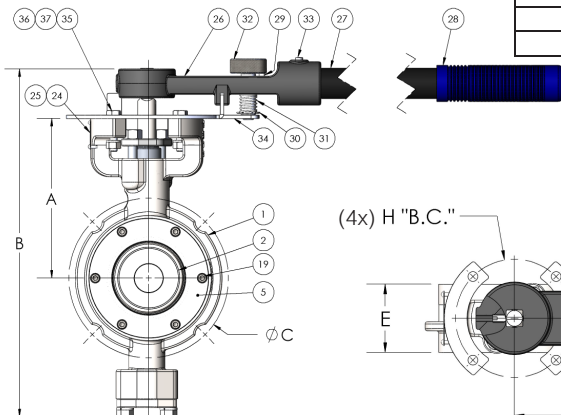
HP Series Wafer 3" - 8" with Lever



VALVE SHOWN OPEN

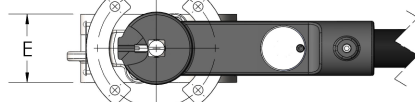


DETAIL A

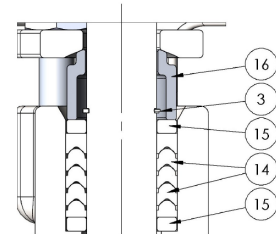


3" 150 / 300
WAVER SHOWN

(4x) H "B.C."



F (REF)



DETAIL B

3" - 8" 150/300 LB Wafer With Handle			
ITEM No.	PARTS NAME	MATERIAL	SPECIFICATION
1	150 WAVER BODY	A. CARBON STEEL B. STAINLESS STEEL	ASTM A216 GR. WCB ASTM A351 GR. CF8M
2	MACHINED DISC	STAINLESS STEEL	ASTM A351 GR. CF8M
3	STEM	STAINLESS STEEL	17-4 PH COND. H1150
4	TAPER PIN	18-8 STAINLESS STEEL	COMMERCIAL
5	SEAT RETAINER RING	A. CARBON STEEL B. STAINLESS STEEL	ASTM A515 GR. 70 ASTM A240 TY.316
6	SEAT	A. PTFE COMMERCIAL B. 15% GLASS FILLED TEFLON C. UHMWPE	COMMERCIAL COMMERCIAL COMMERCIAL
7	BOTTOM CAP	STAINLESS STEEL	ASTM A351 GR. CF8M
8	STEM RETAINER	304 STAINLESS STEEL	COMMERCIAL
9	GLAND FOLLOWER	STAINLESS STEEL	ASTM A351 GR. CF8M
10	GLAND RETAINER	STAINLESS STEEL	ASTM A351 GR. CF8M
11	DISC SPACER	316 STAINLESS STEEL	COMMERCIAL
12	MALE ADAPTER	PTFE	COMMERCIAL
13	V-RING	PTFE	COMMERCIAL
14	FEMALE ADAPTER	PTFE	COMMERCIAL
15	PACKING WASHER	304 STAINLESS STEEL	COMMERCIAL
16	O-RING	VITON	COMMERCIAL
17	BEARING	STAINLESS STEEL - PTFE LINED	COMMERCIAL
18	SEAT SPRING	STAINLESS STEEL	COMMERCIAL
19	SOCKET HEAD CAP SCREW	STAINLESS STEEL	ASTM A193 GR B8M
20	WASHER, SPLIT	STAINLESS STEEL	COMMERCIAL
21	HEX HEAD CAP SCREW	STAINLESS STEEL	ASTM 193 GR. B8M
22	STUD	STAINLESS STEEL	ASTM A193 GR. B8M
23	HEAVY HEX NUT	STAINLESS STEEL	ASTM A194 GR. 8M
24	HPBV NAMEPLATE MILWAUKEE	ALUMINUM	COMMERCIAL
25	DRIVE SCREW, TY. U, #2x.25	STAINLESS STEEL, TY. 18-8	COMMERCIAL
26	4" HANDLE	DUCTILE IRON	COMMERCIAL
27	HANDLE PIPE	CARBON STEEL	COMMERCIAL
28	GRIP	VINYL	COMMERCIAL
29	ROLL PIN	STAINLESS STEEL	COMMERCIAL
30	E-CLIP	STAINLESS STEEL	COMMERCIAL
31	SPRING	STAINLESS STEEL	COMMERCIAL
32	LOCK KNOB	STAINLESS STEEL	COMMERCIAL
33	SOCKET SET SCREW	STAINLESS STEEL	COMMERCIAL
34	NOTCH PLATE	STAINLESS STEEL	COMMERCIAL
35	HEX HEAD CAP SCREW	CARBON STEEL - ZINC PLATED	COMMERCIAL
36	STD. HEX NUT	STAINLESS STEEL	COMMERCIAL
37	1/4" LOCKWASHER	STAINLESS STEEL	COMMERCIAL

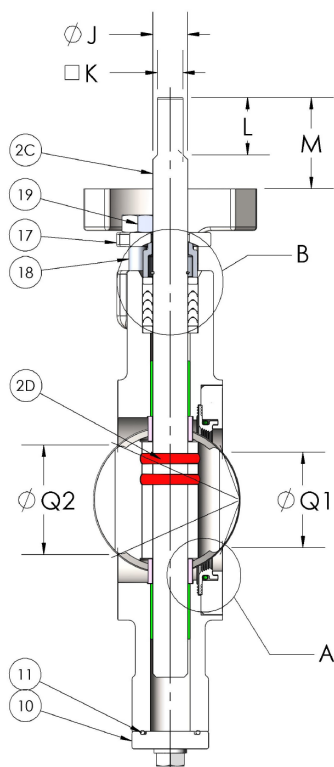
3" - 6" 150/300LB & 8" 150LB WAFER WITH LEVER															
	VALVE DIMENSIONS					TOP WORKS	STEM CONNECTION						CORE DIMS		Bolt Ø
VALVE SIZE	"A" HEIGHT	"B" HEIGHT	"C" B.C	"E" FACE	"F"	"H" B.C	"J" ØSTEM	"K" SQUARE	"L" LENGTH	"L2"	"M" LENGTH	"N"	ØQ1	ØQ2	
3" 150/300 WAFER	5.59	11.24	6.00	1.88	16.87	3.25	0.62	0.46	1.02	N/A	1.72	N/A	2.28	2.47	0.27
4" 150/300 WAFER	6.25	12.77	7.50	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 WAFER	7.69	15.65	8.50	2.13	19.87	4.25	0.87	0.64	1.04	N/A	1.69	N/A	4.35	4.47	0.44
5" 300 WAFER	7.69	15.65	9.25	2.13	19.87	4.25	0.87	0.64	1.04	N/A	1.69	N/A	4.35	4.47	0.44
6" 150 WAFER	7.69	15.51	9.50	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 WAFER	7.69	15.32	9.50	2.25	19.87	4.25	0.87	0.64	1.04	N/A	1.69	N/A	5.33	5.43	0.44
8" 150 WAFER	9.51	19.27	11.75	2.63	22.85	4.75	1.12	N/A	N/A	1.50	1.86	0.25	7.10	7.37	0.56

The information presented on this sheet is correct at time of publication. Milwaukee Valve reserves the right to change design and/or materials without notice. For our Installation, Operation and Maintenance Manual and the most current product information go to www.milwaukeevalve.com.

⚠ State of California Prop 65 **WARNING:** Cancer and Reproductive Harm. For more information visit www.p65warnings.ca.gov.

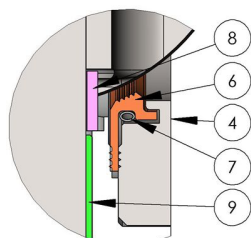


HP Series Wafer 3" - 8" with Gear Class 150 and 300

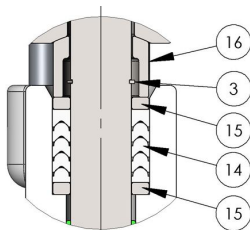


VALVE SHOWN OPEN

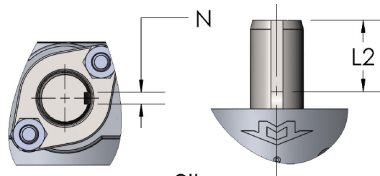
3" - 8" 150/300 LB WAFER WITH GEAR			
ITEM NO.	PARTS NAME	MATERIAL	SPECIFICATION
1	BODY	A. CARBON STEEL	ASTM A216 GR. WCB
		B. STAINLESS STEEL	ASTM A351 GR. CF8M
2	STEM & DISC ASSEMBLY		
	2B. DISC	STAINLESS STEEL	ASTM A351 GR. CF8M
	2C. STEM	STAINLESS STEEL	17-4PH H1150
	2D. TAPER PIN	18-8 STAINLESS STEEL	COMMERCIAL
3	STEM RETAINER	304 STAINLESS STEEL	COMMERCIAL
4	SEAT RETAINER RING	A. CARBON STEEL	ASTM A515 GR. 70
		B. STAINLESS STEEL	ASTM A240 TY.316
5	SOCKET HEAD CAP SCREW	STAINLESS STEEL	ASTM A193 GR. B8M
6	SEAT	A. PTFE COMMERCIAL	COMMERCIAL
		B. 15% GLS. FLD. PTFE	COMMERCIAL
		C. UHMWPE	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	COMMERCIAL
		B. GRAPHITE	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	MOUNTING PLATE	STAINLESS STEEL	COMMERCIAL
23	GEAR OPERATOR	-	-



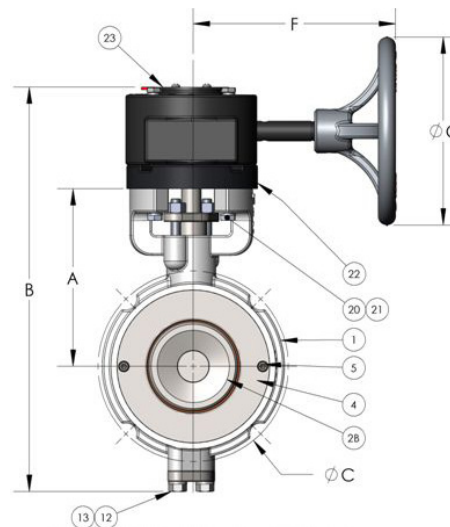
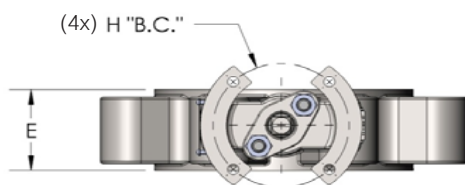
DETAIL A



DETAIL B



8" KEY DETAIL



3" CLASS 150/300 HP WAFER SHOWN

3" - 8" 150/300LB WAFER WITH GEAR																	
	VALVE DIMENSIONS					HANDWHEEL	TOP WORKS	STEM CONNECTION						CORE DIMS			Bolt Ø
VALVE SIZE	"A" HEIGHT	"B" HEIGHT	"C" B.C.	"E" FACE	"F"	"G" DIA	"H" B.C.	"J" ØSTEM	"K" SQUARE	"L" LENGTH	"L2"	"M" LENGTH	"N"	ØQ1	ØQ2		
3" 150/300 WAFER	5.59	12.72	6.00	1.88	6.37	6	3.25	0.62	0.46	1.02	N/A	1.72	N/A	2.28	2.47	0.27	
4" 150/300 WAFER	6.25	14.25	7.50	2.13	6.37	6	3.25	0.62	0.46	1.02	N/A	1.56	N/A	3.06	3.53	0.27	
5" 150 WAFER	7.69	18.83	8.50	2.13	6.02	9	4.25	0.87	0.64	1.04	N/A	1.70	N/A	4.35	4.47	0.44	
5" 300 WAFER	7.69	16.94	9.25	2.13	6.52	9	4.25	0.87	0.64	1.04	N/A	1.70	N/A	4.35	4.47	0.44	
6" 150 WAFER	7.69	18.69	9.50	2.25	6.02	9	4.25	0.87	0.64	1.04	N/A	1.70	N/A	5.33	5.43	0.44	
6" 300 WAFER	7.69	18.50	9.50	2.25	6.02	9	4.25	0.87	0.64	1.04	N/A	1.67	N/A	5.33	5.43	0.44	
8" 150 WAFER	9.51	21.67	11.75	2.63	7.93	12	4.75	1.12	N/A	N/A	1.50	1.86	0.25	7.10	7.37	0.44	
8" 300 WAFER	9.51	21.67	13.00	2.88	7.93	12	4.75	1.12	N/A	N/A	1.50	1.86	0.25	7.10	7.20	0.56	

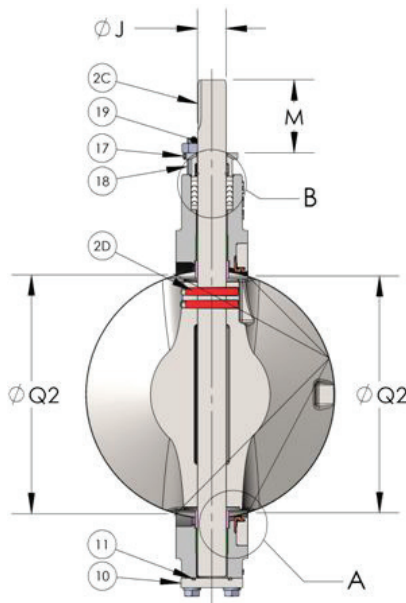
The information presented on this sheet is correct at time of publication. Milwaukee Valve reserves the right to change design and/or materials without notice. For our Installation, Operation and Maintenance Manual and the most current product information go to www.milwaukeevalve.com.

⚠ State of California Prop 65 **WARNING:** Cancer and Reproductive Harm. For more information visit www.p65warnings.ca.gov.

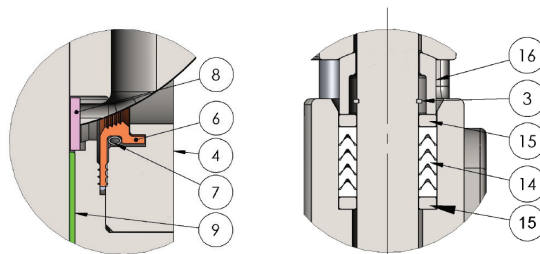
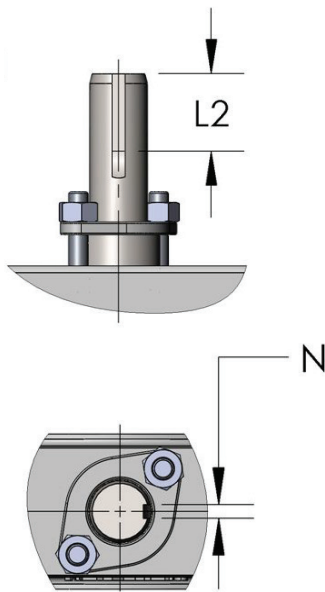


HP Series Wafer 10"- 18" (Class 150) with Gear

HP Series Wafer 10"- 16" (Class 300) with Gear

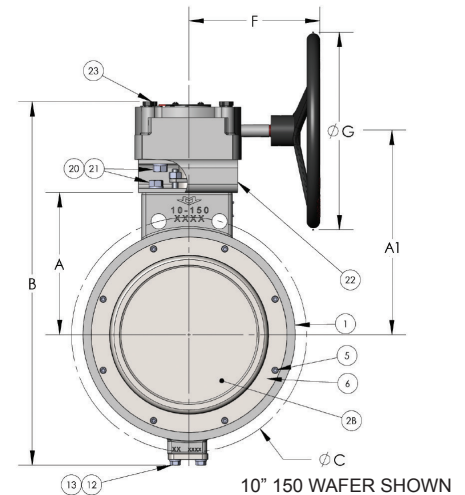
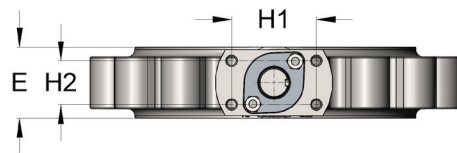


VALVE SHOWN OPEN



DETAIL A

DETAIL B



10" 150 WAFER SHOWN

10" - 16" 150/300 LB & 18" 150 LB WAFER WITH GEAR			
ITEM NO.	PARTS NAME	MATERIAL	SPECIFICATION
1	BODY	A. CARBON STEEL	ASTM A216 GR. WCB
		B. STAINLESS STEEL	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	ASTM A515 GR. 70
		B. STAINLESS STEEL	ASTM A240 TY.316
5	SOCKET HEAD CAP SCREW	STAINLESS STEEL	ASTM A193 GR. B8M
6	SEAT	A. PTFE COMMERCIAL	COMMERCIAL
		B. 15% GLS. FLD. PTFE	COMMERCIAL
		C. UHMWPE	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	COMMERCIAL
		B. GRAPHITE	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 194 GR. 8M
20	SOCKET HEAD CAP SCREW	STAINLESS STEEL	ASTM A193 GR. B8M
21	SPLIT LOCKWASHER	STAINLESS STEEL	COMMERCIAL
22	MOUNTING PLATE	STAINLESS STEEL	COMMERCIAL
23	GEAR OPERATOR		

10" - 16" 150/300 LB & 18" 150 LB WAFER WITH GEAR																
VALVE SIZE	VALVE DIMENSIONS						HANDWHEEL	TOP WORKS		STEM CONNECTION			CHORD DIMS		BOLT Ø	
	"A" HEIGHT	"A1" HEIGHT	"B" HEIGHT	"C" B.C	"E" FACE	"F"	"G" DIA	"H1"	"H2"	"J" ØSTEM	"L2"	"M" LENGTH	"N"	ØQ1	ØQ2	
10"- 150 WAFER	8.34	14.29	22.06	14.25	2.81	7.93	12	3.88	1.38	1.12	1.50	3.72	0.25	9.30	9.38	1/2" - 13"
10"- 300 WAFER	10.81	16.86	28.40	15.25	3.25	7.85	12	3.88	2.00	1.37	1.50	5.51	0.31	9.16	9.25	1/2" - 13"
12"- 150 WAFER	11.62	17.67	29.27	17.00	3.19	7.85	12	3.88	2.00	1.37	1.50	5.51	0.31	10.36	10.48	1/2" - 13"
12"- 300 WAFER	11.59	17.64	31.18	17.75	3.63	8.36	12	4.50	2.00	1.50	1.50	5.92	0.38	10.25	10.34	1/2" - 13"
14"- 150 WAFER	12.00	18.36	31.74	18.75	3.63	8.36	12	4.50	2.00	1.50	1.50	5.50	0.38	11.68	11.76	1/2" - 13"
14"- 300 WAFER	13.50	19.61	35.12	20.25	4.63	10.96	20	5.75	2.50	2.00	2.38	6.02	0.50	11.39	11.49	1/2" - 13"
16"- 150 WAFER	14.00	20.11	35.96	21.25	4.00	10.96	20	5.75	2.50	2.00	2.38	6.02	0.50	13.65	13.72	1/2" - 13"
16"- 300 WAFER	15.00	21.09	38.12	22.50	5.25	11.95	20	5.75	2.50	2.25	2.38	6.02	0.50	13.26	13.33	1/2" - 13"
18"- 150 WAFER	15.00	21.09	37.74	22.75	4.50	11.95	20	5.75	2.50	2.25	2.38	6.02	0.50	15.63	15.71	1/2" - 13"

The information presented on this sheet is correct at time of publication. Milwaukee Valve reserves the right to change design and/or materials without notice. For our Installation, Operation and Maintenance Manual and the most current product information go to www.milwaukeevalve.com.

⚠ State of California Prop 65 **WARNING:** Cancer and Reproductive Harm. For more information visit www.p65warnings.ca.gov.



