

2 through 48 inches • Wafer or Lug

High Performance Butterfly Valve Stud & Bolt Sizing

Valve Size	Thread Size	Wafer Studs				Lug Studs								Lug Bolts							
		Stud		Short Stud		Non-Retainer Side				Retainer Side				Non-Retainer Side				Retainer Side			
		Qty	Length	Qty	Length	Qty	Length	Qty	Length	Qty	Length	Qty	Length	Qty	Length	Qty	Length	Qty	Length	Qty	Length
		2"	5/8 - 11 UNC	4	5.25	-	-	4	2.50	-	-	4	3.00	-	-	4	1.25	-	-	4	1.50
2-1/2"	5/8 - 11 UNC	4	5.75	-	-	4	2.75	-	-	4	3.00	-	-	4	1.50	-	-	4	1.75	-	-
3"	5/8 - 11 UNC	4	5.75	-	-	4	2.75	-	-	4	3.00	-	-	4	1.50	-	-	4	1.75	-	-
4"	5/8 - 11 UNC	8	6.00	-	-	8	3.00	-	-	8	3.25	-	-	8	1.50	-	-	8	2.00	-	-
5"	3/4 - 10 UNC	8	6.50	-	-	8	3.00	-	-	8	3.50	-	-	8	1.50	-	-	8	2.00	-	-
6"	3/4 - 10 UNC	8	6.50	-	-	8	3.25	-	-	8	3.50	-	-	8	1.75	-	-	8	2.00	-	-
8"	3/4 - 10 UNC	8	7.00	-	-	8	3.50	-	-	8	3.75	-	-	8	2.00	-	-	8	2.25	-	-
10"	7/8 - 9 UNC	12	7.75	-	-	12	3.75	-	-	12	4.25	-	-	12	2.00	-	-	12	2.50	-	-
12"	7/8 - 9 UNC	12	8.25	-	-	12	3.75	-	-	12	4.50	-	-	12	2.25	-	-	12	3.00	-	-
14"	1 - 8 UNC	12	9.25	-	-	12	4.50	-	-	12	5.00	-	-	12	2.75	-	-	12	3.00	-	-
16"	1 - 8 UNC	16	9.75	-	-	16	4.75	-	-	16	5.25	-	-	16	3.00	-	-	16	3.25	-	-
18"	1 1/8 - 8 UN	16	10.75	-	-	16	5.25	-	-	16	5.75	-	-	16	3.25	-	-	16	3.75	-	-
20"	1 1/8 - 8 UN	16	11.50	8	*	16	5.50	4	4.50	16	6.25	4	5.25	16	3.50	4	2.50	16	4.25	4	3.25
24"	1 1/4 - 8 UN	16	13.25	8	*	16	6.25	4	5.50	16	7.25	4	6.25	16	4.00	4	3.25	16	5.00	4	4.25
26"	1 1/4 - 8 UN	20	15.25	8	*	20	7.25	4	6.00	20	8.00	4	6.75	20	5.25	4	3.75	20	6.00	4	4.50
28"	1 1/4 - 8 UN	24	15.50	8	*	24	7.50	4	5.75	24	8.25	4	6.75	24	5.25	4	3.75	24	6.25	4	4.50
30"	1 1/4 - 8 UN	24	16.75	8	*	24	8.25	4	6.25	24	8.75	4	6.75	24	6.00	4	4.00	24	6.75	4	4.75
32"	1 1/2 - 8 UN	24	17.75	8	*	24	8.75	4	6.75	24	9.25	4	7.25	24	6.25	4	4.25	24	7.00	4	5.00
36"	1 1/2 - 8 UN	28	19.00	8	*	28	9.50	4	7.50	28	9.75	4	7.50	28	7.25	4	5.25	28	7.25	4	5.25
40"	1 1/2 - 8 UN	32	19.50	8	*	32	9.75	4	7.25	32	9.75	4	7.50	32	7.50	4	5.00	32	7.50	4	5.25
44"	1 1/2 - 8 UN	36	22.00	8	*	36	10.75	4	8.50	36	11.25	4	8.75	36	8.50	4	6.00	36	9.00	4	6.25
48"	1 1/2 - 8 UN	40	22.50	8	*	40	10.50	4	7.75	40	12.00	4	9.25	40	8.25	4	5.50	40	9.50	4	6.75

Class 300

Valve Size	Thread Size	Wafer Studs				Lug Studs								Lug Bolts							
		Stud		Short Stud		Non-Retainer Side				Retainer Side				Non-Retainer Side				Retainer Side			
		Qty	Length	Qty	Length	Qty	Length	Qty	Length	Qty	Length	Qty	Length	Qty	Length	Qty	Length	Qty	Length	Qty	Length
		2"	5/8 - 11 UNC	8	5.50	-	-	8	2.75	-	-	8	3.00	-	-	8	1.25	-	-	8	1.75
2-1/2"	3/4 - 10 UNC	8	6.25	-	-	8	3.00	-	-	8	3.25	-	-	8	1.50	-	-	8	2.00	-	-
3"	3/4 - 10 UNC	8	6.50	-	-	8	3.25	-	-	8	3.50	-	-	8	1.75	-	-	8	2.00	-	-
4"	3/4 - 10 UNC	8	7.00	-	-	8	3.25	-	-	8	3.75	-	-	8	1.75	-	-	8	2.25	-	-
5"	3/4 - 10 UNC	8	7.25	-	-	8	3.50	-	-	8	4.00	-	-	8	2.00	-	-	8	2.50	-	-
6"	3/4 - 10 UNC	12	7.50	-	-	12	3.75	-	-	12	4.00	-	-	12	2.25	-	-	12	2.50	-	-
8"	7/8 - 9 UNC	12	8.75	-	-	12	4.50	-	-	12	4.50	-	-	12	2.75	-	-	12	2.75	-	-
10"	1 - 8 UNC	12	10.00	8	*	12	5.00	4	4.25	12	5.00	4	4.50	12	3.25	4	2.50	12	3.25	4	2.75
12"	1 1/8 - 8 UN	12	10.75	8	*	12	5.25	4	4.50	12	5.75	4	5.25	12	3.25	4	2.75	12	3.75	4	3.25
14"	1 1/8 - 8 UN	16	12.00	8	*	16	6.25	4	4.75	16	5.75	4	4.75	16	4.25	4	2.75	16	3.75	4	2.75
16"	1 1/4 - 8 UN	16	13.25	8	*	16	6.75	4	5.50	16	6.50	4	5.25	16	4.75	4	3.50	16	4.50	4	3.25
18"	1 1/4 - 8 UN	20	14.00	8	*	20	7.00	4	5.50	20	7.25	4	5.75	20	5.00	4	3.50	20	5.00	4	3.50
20"	1 1/4 - 8 UN	20	14.75	8	*	20	7.50	4	5.75	20	7.50	4	5.75	20	5.25	4	3.75	20	5.25	4	3.75
24"	1 1/2 - 8 UN	20	16.50	8	*	20	8.25	4	6.25	20	8.25	4	6.75	20	6.00	4	4.00	20	6.00	4	4.50

• Lengths are based on basic heavy hex nuts, 0.06" thick gaskets, and flange thicknesses per ANSI B 16.5 & B 16.47 Series A.

• A-T Controls recommends using studs to ensure full engagement in tapped holes.

• This table is provided by A-T Controls for reference only, it is the end user's responsibility to select the correct material, grade, and size of fasteners for their application.

• "Short" studs and bolts are required for certain sizes to be used in blind tapped holes at the top and bottom of the valve.

• * For the length of Wafer valve "short" studs, refer to the "short" stud length for Lug valves (Non-Retainer Side & Retainer Side).

2 through 48 inches • Wafer or Lug

Series 200 Butterfly Valves

- Available in sizes 2" to 48".
- Available in Wafer or Lug style body (2" to 30").
- Full flange style body available for 36" to 48" valves.
- Wafer body features four alignment holes.
- Pressure ratings for tight shut-off at temperatures up to the maximum limit of the seat material:
 - 2" to 12" – 200 psi, 125 psi for PTFE seat.
 - 14" to 48" –150 psi.
- Ideal for on-off or throttling services.
- Available with handles (2" to 12"), manual gear operators (2" to 48"), and electric or pneumatic actuators (2" to 48").
- Operator can be mounted parallel or perpendicular to pipe-line.
- Designed to comply with MSS SP-67 and API 609. For exact valve measurements, see dimension table.
- Compatible with ASME 125/150 flanges.
- Valves 2" to 20" meet the intent and have passed the AWWA C-504-87 Section 5 proof of design tests.
- Dead-end capability to 200 psi (2" to 12") and 150 psi (14" to 24") is an available modification for the disc.

Valve Seating Torques (In-Lbs.)

Valve Size	Standard Disc Differential Pressure				Undercut Diff. Press.
	50 PSI ΔP Bushing	100 PSI ΔP Bushing	150 PSI ΔP Bushing	200 PSI ΔP Bushing	75 PSI ΔP Bushing
2"	100	106	111	117	N/A
2½"	150	163	176	189	N/A
3"	207	220	232	244	N/A
4"	290	323	357	390	N/A
5"	423	481	540	598	N/A
6"	599	691	783	875	N/A
8"	1,060	1,183	1,307	1,430	819
10"	1,671	1,872	2,074	2,275	909
12"	2,568	2,795	3,023	3,250	1,445
14"	2,640	3,070	3,500	N/A	2,300
16"	4,260	4,880	5,500	N/A	3,600
18"	6,287	7,243	8,200	N/A	5,500
20"	8,360	9,180	10,000	N/A	6,700
22"	15,427	16,813	18,200	N/A	12,
26"	27,313	29,407	31,500	N/A	10021,

100

All torque values shown on chart are for non-lubricating media (like water) & on-off service.

For dry services use 160% of the published data.

For lubricating services use 85% of the published data.

For sizing of actuators use 125% of published data.

Flow and Temperature Data

Seat Temperature Ratings

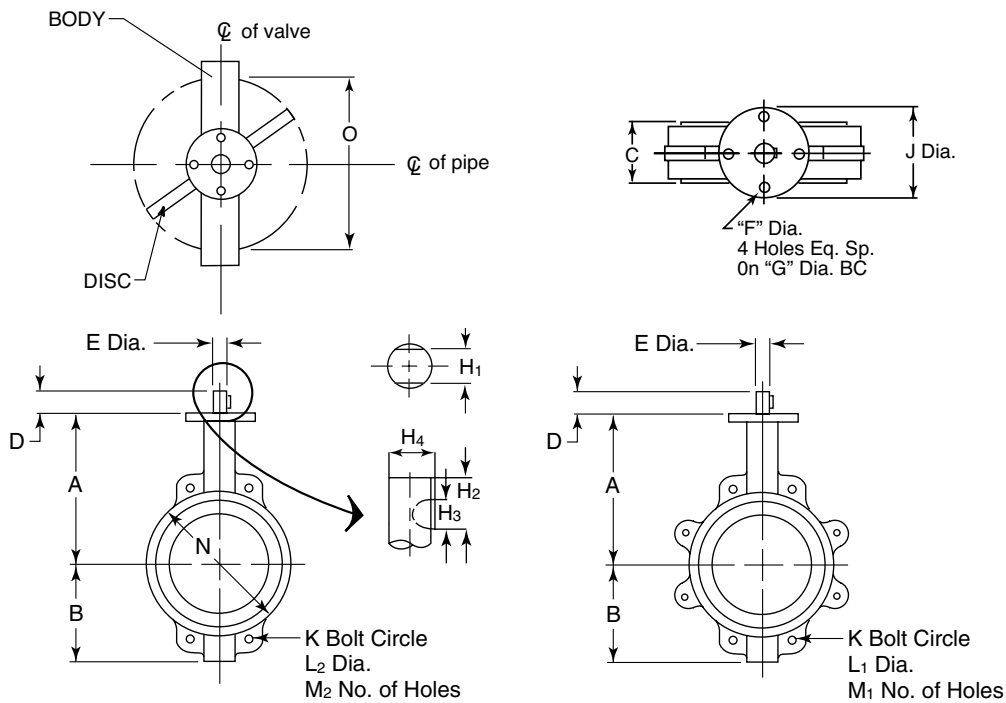
Material	Temperature Ratings °F
Buna-N	+10 to 180
Abrasive Resistant Buna-N	+10 to 180
Neoprene	+20 to 200
EPDM (2"-16")	-30 to 275
EPDM, Food Grade (2"-12")	-30 to 225
Hypalon	0 to 275
Viton®	+10 to 400
PTFE over Buna-N (125 psi, 2"-12")	+40 to 250
PTFE over Buna-N (75 psi, 2"-12")	+40 to 275

Seat materials are capable of withstanding lower temperatures without damage. However, the elastomer becomes hard and torques increase. Some flow media may further restrict the published temperature limits and/or significantly reduce seat life.

C_v Values – Valve Sizing Coefficients (US-GPM @1ΔP)

Size	10°	20°	30°	40°	50°	60°	70°	80°	90°
2"	0.06	3	7	15	27	44	70	105	115
2½"	0.10	6	12	25	45	75	119	178	196
3"	0.20	9	18	39	70	116	183	275	302
4"	0.30	17	36	78	139	230	364	546	600
5"	0.50	29	61	133	237	392	620	930	1022
6"	0.80	45	95	205	366	605	958	1437	1579
8"	2	89	188	408	727	1202	1903	2854	3136
10"	3	151	320	694	1237	2047	3240	4859	5340
12"	4	234	495	1072	1911	3162	5005	7507	8250
14"	6	338	715	1549	2761	4568	7230	10844	11917
16"	8	464	983	2130	3797	6282	9942	14913	16388
18"	11	615	1302	2822	5028	8320	13168	19752	21705
20"	14	791	1674	3628	6465	10698	16931	25396	27908
22"	22	1222	2587	5605	9989	16528	26157	39236	43116
26"	37	2080	4406	9546	17010	28147	44545	66818	73426

Dimensional Data

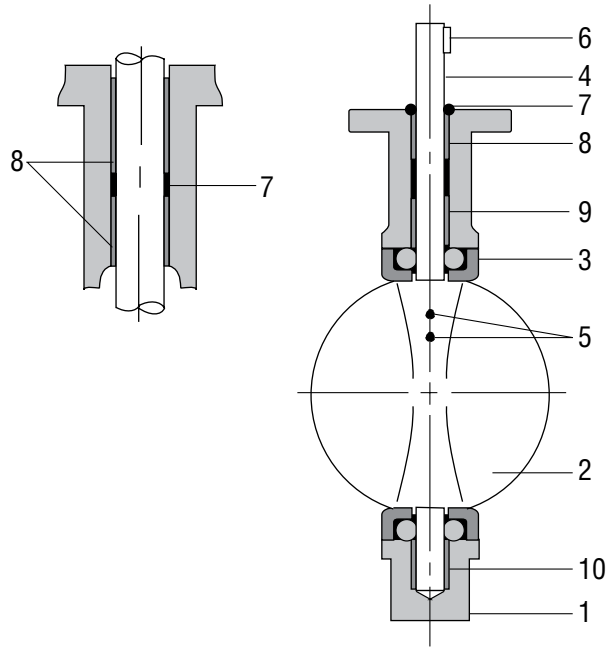


Dimensions

Valve Size	A	B	C	D	E	F	G	H ₁	H ₂	H ₃	H ₄	J	K	300# K	L ₁ *	300# L ₁ *	L ₂ *	M ₁ *	300# M ₁ *	M ₂ *	N	WAFER	300# LUG	LUG	O	
2" 50	in. 6 3/8 mm 161.93	3 1/4 82.55	1 3/4 44.45	1 1/4 31.75	1/2 12.70	17/64 6.75	2 1/4 57.15	1/8	5/8	1/2	9/16	3 1/4 82.55	4 3/4 120.65	5 127.00	5/8-11	5/8-11	11/16 17.46	4	8	4	4	101.60	6 lbs. 2.72 kg	9 lbs. 4.09 kg	9 lbs. 4.09 kg	1.26 32.0
2 1/2" 65	in. 6 7/8 mm 174.63	3 3/4 95.25	1 7/8 47.63	1 1/4 31.75	1/2 12.70	17/64 6.75	2 1/4 57.15	1/8	5/8	1/2	9/16	3 1/4 82.55	5 1/2 139.70	5 7/8 149.23	5/8-11	3/4-10	11/16 17.46	4	8	4	4 3/4	120.65	7 lbs. 3.18 kg	13 lbs. 5.90 kg	13 lbs. 5.90 kg	1.83 46.5
3" 75	in. 7 1/8 mm 180.98	4 101.60	1 7/8 47.63	1 1/4 31.75	1/2 12.70	17/64 6.75	2 1/4 57.15	1/8	5/8	1/2	9/16	3 1/4 82.55	6 152.40	6 5/8 168.28	5/8-11	3/4-10	11/16 17.46	4	8	4	5 1/8	130.18	10 lbs. 4.54 kg	14 lbs. 6.36 kg	14 lbs. 6.36 kg	2.54 64.5
4" 100	in. 7 7/8 mm 200.03	4 7/8 123.83	2 1/8 53.98	1 1/4 31.75	5/8 15.88	13/32 10.32	2 3/4 69.85	3/16	7/8	3/4	3/4	3 7/8 98.43	7 1/2 190.50	7 7/8 200.03	5/8-11	3/4-10	1 1/16 17.46	8	8	4	6 3/4	171.45	13 lbs. 5.90 kg	19 lbs. 8.63 kg	24 lbs. 10.90 kg	3.54 89.9
5" 125	in. 8 3/8 mm 212.73	5 3/8 136.53	2 1/4 57.15	1 1/4 31.75	3/4 19.05	13/32 10.32	2 3/4 69.85	3/16	1	3/4	13/16	3 7/8 98.43	8 1/2 215.90	9 3/4 234.95	3/4-10	3/4-10	13/16 20.64	8	8	4	7 3/4	196.85	18 lbs. 8.17 kg	22 lbs. 9.99 kg	29 lbs. 13.17 kg	4.36 110.7
6" 150	in. 8 7/8 mm 225.43	5 7/8 149.23	2 1/4 57.15	1 1/4 31.75	3/4 19.05	13/32 10.32	2 3/4 69.85	3/16	1	3/4	13/16	3 7/8 98.43	9 1/2 241.30	10 5/8 269.88	3/4-10	3/4-10	13/16 20.64	8	12	4	8 5/8	219.08	21 lbs. 9.53 kg	31 lbs. 14.07 kg	38 lbs. 17.25 kg	5.74 145.8
8" 200	in. 10 1/4 mm 260.35	7 3/4 196.85	2 1/2 63.50	1 3/4 44.45	7/8 22.23	9/16 14.29	3 1/2 88.90	3/16	1	3/4	1	4 3/4 120.65	11 3/4 298.45	13 330.20	3/4-10	7/8-9	13/16 20.64	8	12	4	10 9/15	268.29	34 lbs. 15.44 kg	49 lbs. 22.25 kg	67 lbs. 30.42 kg	7.63 193.8
10" 250	in. 11 1/2 mm 292.10	8 3/4 209.55	2 3/4 69.85	1 3/4 44.45	1 1/8 28.58	9/16 14.29	3 1/2 88.90	1/4	1 1/8	1	1 1/4	5 127.00	14 1/4 361.95	15 1/4 387.35	7/8-9	1-8	15/16 23.81	12	16	4	13 1/18	331.79	45 lbs. 20.43 kg	72 lbs. 32.69kg	100 lbs. 45.40 kg	9.54 242.3
12" 300	in. 13 1/4 mm 336.55	9 3/4 247.65	3 1/8 79.38	1 3/4 44.45	1 1/4 31.75	9/16 14.29	4 1/4 107.95	1/4	1 3/8	1	1 3/8	6 152.40	17 431.80	17 3/4 431.80	7/8-9	1 1/8-7	15/16 23.81	12	16	4	16 1/8	409.58	74 lbs. 33.60 kg	105 lbs. 47.67 kg	144 lbs. 65.38 kg	11.5 292.1
14" 350	in. 14 1/2 mm 368.30	11 279.40	3 1/8 79.38	1 3/4 44.45	1 1/4 31.75	9/16 14.29	4 1/4 107.95	1/4	1 3/8	1	1 3/8	5 1/2 139.70	18 3/4 476.25	-	1-8	-	-	12	-	-	17 1/8	434.98	109 lbs. 49.49 kg	178 lbs. 80.81 kg	-	12.81 325.4
16" 400	in. 15 3/4 mm 400.05	12 304.80	3 1/2 88.90	2 50.80	1 5/16 33.34	13/16 20.64	6 1/4 158.75	5/16	1 7/8	1 3/4	1 7/16	8 1/8 206.38	21 1/4 539.75	-	1-8	-	-	16	-	-	20	508.00	135 lbs. 61.29 kg	224 lbs. 101.70 kg	-	15 381.0
18" 450	in. 16 5/8 mm 422.28	15 381.00	4 1/4 107.95	2 50.80	1 5/8 41.28	13/16 20.64	6 1/4 158.75	3/8	1 5/8	1 1/2	1 5/8	8 203.20	22 3/4 577.85	-	1 1/8-7	-	-	16	-	-	21 3/8	542.93	190 lbs. 86.27 kg	265 lbs. 120.31 kg	-	16.87 428.5
20" 500	in. 18 7/8 mm 479.43	15 1/4 387.35	5 1/16 128.95	2 3/4 63.50	1 5/8 41.28	13/16 20.64	6 1/4 158.75	3/8	1 13/16	1 1/2	1 3/4	8 203.20	25 635.00	-	1 1/8-7	-	-	20	-	-	23 5/16	592.14	316 lbs. 143.47 kg	455 lbs. 206.57 kg	-	18.69 474.7
22" 550	in. 22 1/8 mm 561.98	18 457.20	6 1/8 155.58	2 3/4 69.85	3 76.20	7/8 22.23	8 1/2 215.90	1/2	2 1/2	2 1/4	2 1/4	11 1/4 285.75	29 1/2 749.30	-	1 1/4-7	-	-	20	-	-	27 7/8	708.03	506 lbs. 229.74 kg	702 lbs. 318.71 kg	-	22.57 573.3

*L₁ and *M₁ refer to Lug style valves, L₂ and M₂ refer to Wafer style. "C" Dimension is listed with elastomer in the relaxed condition. Approximately 1/8" total compression is required for proper sealing with pipe flanges. Valves are designed for installation between ASME B16.1 Class 125 (Iron) and B16.5 Class 150 (Steel) flanges. Gaskets are not needed, and should not be used, since the seat face seals against the mating flange. If the valve is to be installed in plastic or fiberglass flanges, flange rings, or Van Stone style flanges, consult your Jenkins agent or the factory for additional information. "O" dimension is the disc clearance dimension. Jenkins recommends that a blind flange be used on end of line service applications.

Materials of Construction



Top bushing detail for 8" and larger valves

Bill of Materials 2"– 30"

Item	Description	Materials	Optional Materials
1	Body	Cast Iron	Ductile Iron
2	Disc	Ductile Iron	Aluminum Bronze, SS, Monel
3*	Seat	Buna-N or EPDM	Neoprene, Hypalon, Viton, PTFE
4	Shaft	416 Stainless Steel	316 Stainless Steel, Monel
5*	Taper Pin	316 Stainless Steel	Monel
6	Key	Carbon Steel	No option available
7*	O-Ring	Buna-N	No option available
8	Bushing	PTFE	Luberized Bronze
9	Bushing	PTFE	Luberized Bronze
10	Bushing	PTFE	Luberized Bronze

¹ENP plated for 2" - 12" valves.

*Recommended spare parts.

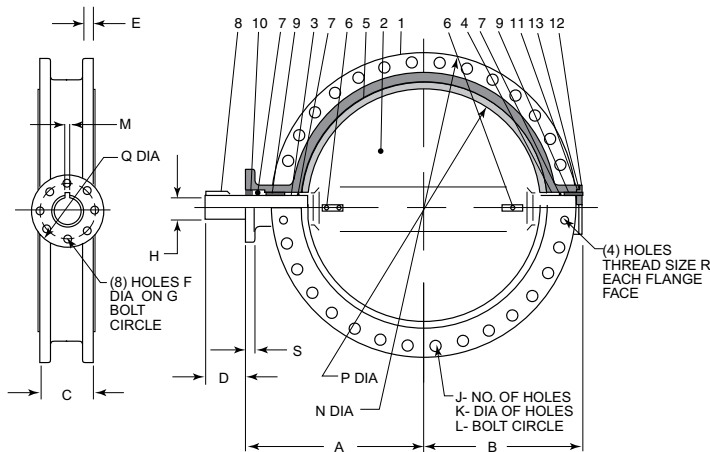
Technical Data: 36 through 48 Inches

Dimensions

	36"		42"		48"	
	inches	mm	inches	mm	inches	mm
A	26 7/8	682.63	11 3/4	806.45	37	940.70
B	24 3/4	628.65	28 1/4	717.55	34	864.00
C	8 1/8	206.38	10	254.00	10.88	276.40
D	5 5/8	142.88	6 1/2	165.10	5.90	150.00
E	1 5/8	41.28	2	50.80	2.76	70.00
F	1 3/16	20.64	13/16	20.64	0.87	22.00
G	8 1/2	215.90	12 1/2	317.50	11.73	298
H	4	101.60	4 1/2	114.30	4.13	105.00
J	28	812.80	36	1045.03	44	1277.26
K	1 5/8	41.28	1 5/8	41.28	1.62	41.30
L	42 3/4	1,058.85	49 1/2	1257.75	56	1422.40
M	1" Sq.	25.4 Sq.	1" Sq.	25.4 Sq.	1.1 Sq.	28 Sq.
N	46	1,168.40	53	1346.58	59.49	1511
P	35 3/4	908.05	41 1/4	1047.75	45.67	1160
Q	10 7/8	276.23	18 3/4	476.25	13.78	350
R	1 1/2-6	-	1/2-6	-	1/2-6	-
S	1 1/4	31.75	1 1/4	31.75	-	-

Weights

Size		Wafer	Lug
2"	lbs.	6	7
	kg.	2.72	3.18
2 1/2"	lbs.	7	8
	kg.	3.18	3.63
3"	lbs.	10	14
	kg.	4.54	6.35
4"	lbs.	13	26
	kg.	5.90	11.79
5"	lbs.	18	28
	kg.	8.16	12.70
6"	lbs.	20	31
	kg.	9.07	14.06
8"	lbs.	32	49
	kg.	14.51	22.23
10"	lbs.	42	72
	kg.	19.05	32.66
12"	lbs.	70	105
	kg.	31.75	47.63
14"	lbs.	95	155
	kg.	43.09	70.31
16"	lbs.	117	195
	kg.	53.07	88.45
18"	lbs.	165	230
	kg.	74.84	104.33
20"	lbs.	275	396
	kg.	124.74	179.62
22"	lbs.	440	610
	kg.	199.58	276.70
26"	lbs.	740	1050
	kg.	335.66	476.27
38"	lbs.	1660	-
	kg.	754	-
42"	lbs.	-	-
	kg.	-	-



C_v Valves - Valve Sizing Coefficients (US-1@ΔP)

Size	10°	20°	30°	40°	50°	60°	70°	80°	90°
36"	260	3050	6730	12740	20220	32500	52500	79600	87500
42"	350	4095	9040	17108	27150	43640	70500	106890	117500

Valve Seating Torques (In-Lbs)

Valve Size	Standard Disc Differential Pressure			Undercut Diff. Press. 75 PSI
	50 PSI	100 PSI	150 PSI	
36"	54,667	57,035	59,400	39,600
42"	82,460	86,034	89,600	60,000
48"	Consult factory			

Bill of Materials 36"***

Item	Description	Materials	Optional Materials
1	Body	Ductile iron	No option available
2	Disc	Ductile Iron	Aluminum Bronze, 316 Stainless Steel, Monel
3	Upper Shaft	416 Stainless Steel	316 Stainless Steel, Monel
4	Lower Shaft	416 Stainless Steel	316 Stainless Steel, Monel
5	Seat	Buna-N or EPDM	Viton, Hypalon
6	Taper Pin	316 Stainless Steel	316 Stainless Steel, Monel
7*	O-Ring	Buna-N	No option available
8	Key	Carbon Steel	No option available
9	Bushing	PTFE	No option available
10	Bushing	Luberized Bronze	No option available
11	Thrust Washer	Luberized Bronze	No option available
12	End Plate	Ductile	No option available
13*	O-Ring	Buna-N	No option available

*Recommended spare parts.

**Consult factory for 42" & 48" technical data.

Torque, Flow and Temperature Data

- Available in sizes 2" to 24".
- Pressure Rating: 285 psi at 100°F. Pressure/Temperature rating above 100°F corresponds to ASME B16.5 Class 150 for steel flanges.
- Available in Wafer or Lug style body.
- Wafer body features four alignment holes.
- Available in ASME Class 300 Lug Body bolt pattern (2" to 12").
- Ideal for on-off or throttling services.
- Available with handles (2" to 6"), manual gear operators, electric actuators and pneumatic actuators (2" to 24").
- Compatible with ASME B16.1 Class 125 (Iron) and ASME B16.5 Class 150/300 (Steel) flanges.
- Dead-end capability to 200 psi (2" to 12") and 150 psi (14" to 24") is an available option.

Valve Seating Torques (In-Lbs.)

Valve Size	Standard Disc Differential Pressure				
	50 PSI	100 PSI	150 PSI	200 PSI	285 PSI
2"	139	148	156	164	178
2 1/2"	195	207	218	230	250
3"	264	278	293	307	331
4"	371	401	431	461	512
5"	579	627	676	725	808
6"	875	946	1016	1087	1206
8"	1476	1559	1642	1726	1867
10"	2451	2613	2775	2937	3213
12"	3900	4111	4323	4534	4893
14"	5189	5467	5744	6022	6494
16"	10,985	11,569	12,154	12,738	13,732
18"	13,946	14,688	15,431	16,173	17,434
20"	14,695	15,478	16,260	17,043	18,373
22"	29,738	31,321	32,903	34,486	37,176

Seat Temperature Ratings

Material	Temperature Rating °F
Buna-N	+10 to 180
EPDM (2"-16")	-30 to 275
EPDM (18"-24")	-30 to 275
Abrasive Resistant Buna-N	+10 to 180
Neoprene	+20 to 200
Hypalon	0 to 275
Viton	+10 to 275
High Temperature Viton	+10 to 400

Seat materials are capable of withstanding lower temperatures without damage. However, the elastomer becomes hard and torques increase. Some flow media may further restrict the published temperature limits and/or significantly reduce seat life.

All torque values shown on chart are for "wet" (water and other non-lubricating media) on-off service. For "dry" service (non-lubricating, dry gas media), multiply values by 1.15. For "lubed" service (clean, non-abrasive lubricating media), multiply values by 0.85. For sizing valves with actuators, use 285PSI Torque valves and multiply by 1.25.

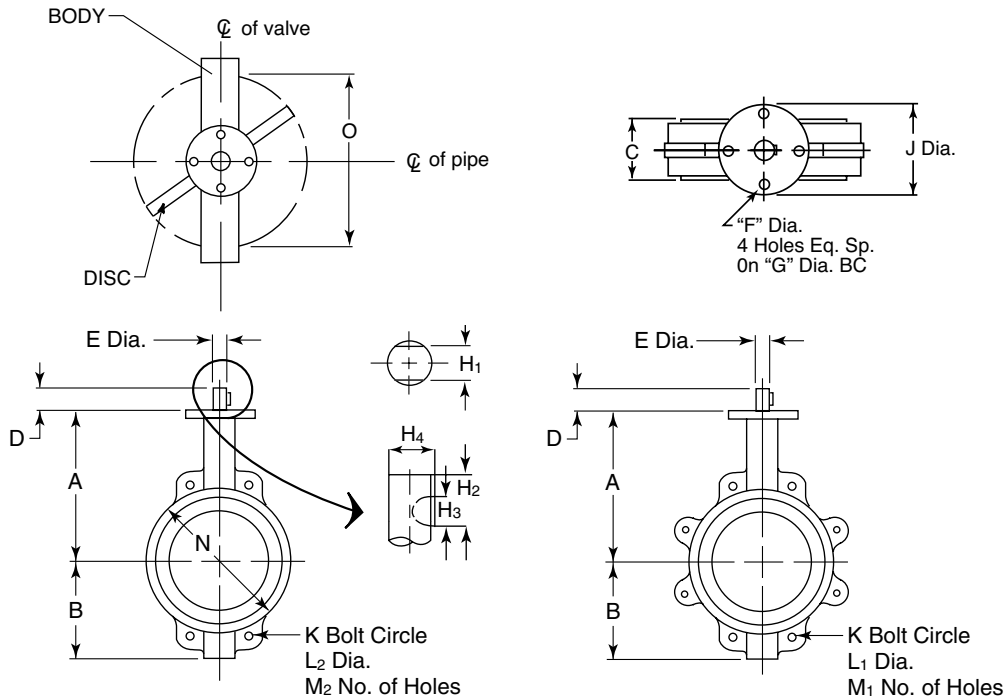
C_v Values – Valve Sizing Coefficients (US-GPM™ 1ΔP)

Size	10°	20°	30°	40°	50°	60°	70°	80°	90°
2"	0.06	3	7	15	27	44	70	105	115
2 1/2"	0.10	6	12	25	45	75	119	178	196
3"	0.20	9	18	39	70	116	183	275	302
4"	0.30	17	36	78	139	230	364	546	600
5"	0.50	29	61	133	237	392	620	930	1022
6"	0.80	34	94	153	257	422	706	1154	1320
8"	2	56	154	251	422	693	1158	1892	2165
10"	3	87	238	385	654	1073	1794	2931	3353
12"	4	153	417	681	1145	1879	3142	5132	5827
14"	6	183	500	816	1372	2252	3765	6150	7037
16"	8	271	740	1208	2031	3333	5573	9104	10,416
18"	11	318	867	1417	2382	3909	6535	10,676	12,215
20"	14	415	1133	1851	3112	5107	8538	13,948	15,959
22"	22	543	1482	2421	4069	6678	11,165	18,240	20,869

¹ENP plated for 2" - 12" valves.

*Recommended spare parts.

Dimensional Data

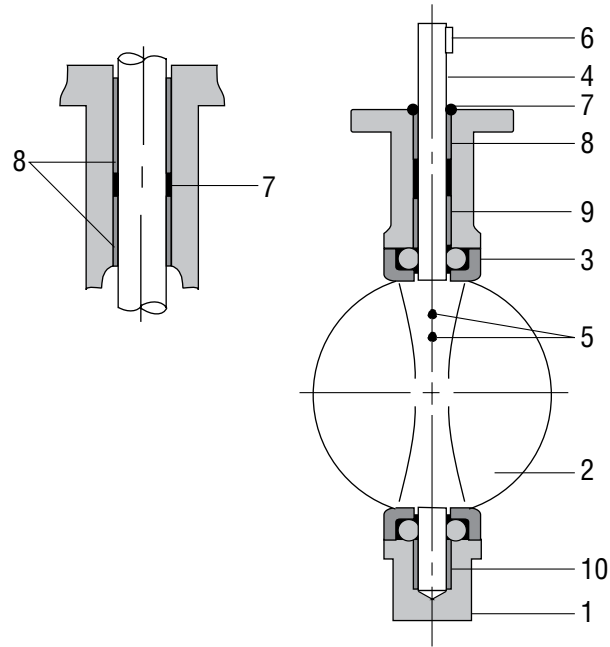


Dimensions

Valve Size		A	B	C	D	E	F	G	H ₁	H ₂	H ₃	H ₄	J	K	300# K	300# L ₁ *	300# L ₂ *	300# M ₁ *	300# M ₂ *	N	WAFER	300# LUG	LUG	O		
2"	50	in. 6 3/8	3 1/4	1 3/4	1 1/4	1/2	17/64	2 1/4	1/8	5/8	1/2	9/16	3 1/4	4 3/4	5	5/8-11	5/8-11	11/16	4	8	4	6 lbs.	9 lbs.	9 lbs.	1.26	
		mm 161.93	82.55	44.45	31.75	12.70	6.75	57.15					82.55	120.65	127.00		17.46	17.46				2.72 kg	4.09 kg	4.09 kg	32.0	
2 1/2"	65	in. 6 7/8	3 3/4	1 7/8	1 1/4	1/2	17/64	2 1/4	1/8	5/8	1/2	9/16	3 1/4	5 1/2	5 7/8	5/8-11	3/4-10	11/16	4	8	4	4 3/4	7 lbs.	13 lbs.	13 lbs.	1.83
		mm 174.63	95.25	47.63	31.75	12.70	6.75	57.15					82.55	139.70	149.23		17.46	17.46				3.18 kg	5.90 kg	5.90 kg	46.5	
3"	75	in. 7 1/8	4	1 7/8	1 1/4	1/2	17/64	2 1/4	1/8	5/8	1/2	9/16	3 1/4	6	6 5/8	5/8-11	3/4-10	11/16	4	8	4	5 1/8	10 lbs.	14 lbs.	14 lbs.	2.54
		mm 180.98	101.60	47.63	31.75	12.70	6.75	57.15					82.55	152.40	168.28		17.46	17.46				4.54 kg	6.36 kg	6.36 kg	64.5	
4"	100	in. 7 7/8	4 7/8	2 1/8	1 1/4	5/8	13/32	2 3/4	3/16	7/8	3/4	3/4	3 7/8	7 1/2	7 7/8	5/8-11	3/4-10	11/16	8	8	4	6 3/4	13 lbs.	19 lbs.	24 lbs.	3.54
		mm 200.03	123.83	53.98	31.75	15.88	10.32	69.85					98.43	190.50	200.03		17.46	17.46				5.90 kg	8.63 kg	10.90 kg	89.9	
5"	125	in. 8 3/8	5 3/8	2 1/4	1 1/4	3/4	13/32	2 3/4	3/16	1	3/4	13/16	3 7/8	8 1/2	9 1/4	3/4-10	3/4-10	13/16	8	8	4	7 3/4	18 lbs.	22 lbs.	29 lbs.	4.36
		mm 212.73	136.53	57.15	31.75	19.05	10.32	69.85					98.43	215.90	234.95		20.64	20.64				8.17 kg	9.99 kg	13.17 kg	110.7	
6"	150	in. 8 7/8	5 7/8	2 1/4	1 1/4	3/4	13/32	2 3/4	3/16	1	3/4	13/16	3 7/8	9 1/2	10 5/8	3/4-10	3/4-10	13/16	8	12	4	8 5/8	21 lbs.	31 lbs.	38 lbs.	5.74
		mm 225.43	149.23	57.15	31.75	19.05	10.32	69.85					98.43	241.30	269.88		20.64	20.64				9.53 kg	14.07 kg	17.25 kg	145.8	
8"	200	in. 10 1/4	7 3/4	2 1/2	1 3/4	7/8	9/16	3 1/2	3/16	1	3/4	1	4 3/4	11 3/4	13	3/4-10	7/8-9	13/16	8	12	4	10 9/15	34 lbs.	49 lbs.	67 lbs.	7.63
		mm 260.35	196.85	63.50	44.45	22.23	14.29	88.90					120.65	298.45	330.20		20.64	20.64				15.44 kg	22.25 kg	30.42 kg	193.8	
10"	250	in. 11 1/2	8 3/4	2 3/4	1 3/4	1 1/8	9/16	3 1/2	1/4	1 3/8	1	1 1/4	5	14 1/4	15 1/4	7/8-9	1-8	15/16	12	16	4	13 1/18	45 lbs.	72 lbs.	100 lbs.	9.54
		mm 292.10	209.55	69.85	44.45	28.58	14.29	88.90					127.00	361.95	387.35		23.81	23.81				20.43 kg	32.69 kg	45.40 kg	242.3	
12"	300	in. 13 1/4	9 3/4	3 1/8	1 3/4	1 1/4	9/16	4 1/4	1/4	1 3/8	1	1 3/8	6	17	17 3/4	7/8-9	1 1/8-7	15/16	12	16	4	16 1/8	74 lbs.	105 lbs.	144 lbs.	11.5
		mm 336.55	247.65	79.38	44.45	31.75	14.29	107.95					152.40	431.80	431.80		23.81	23.81				409.58	33.60 kg	47.67 kg	65.38 kg	292.1
14"	350	in. 14 1/2	11	3 1/8	1 3/4	1 1/4	9/16	4 1/4	1/4	1 3/8	1	1 3/8	5 1/2	18 3/4	-	1-8	-	-	-	-	4	17 1/8	109 lbs.	178 lbs.	-	12.81
		mm 368.30	279.40	79.38	44.45	31.75	14.29	107.95					139.70	476.25	-	-	-	-	-	-	-	434.98	49.49 kg	80.81 kg	-	325.4
16"	400	in. 15 3/4	12	3 1/2	2	1 5/16	13/16	6 1/4	5/16	1 7/8	1 3/4	1 7/16	8 1/8	21 1/4	-	1-8	-	-	-	-	4	20	135 lbs.	224 lbs.	-	15
		mm 400.05	304.80	88.90	50.80	33.34	20.64	158.75					206.38	539.75	-	-	-	-	-	-	-	508.00	61.29 kg	101.70 kg	-	381.0
18"	450	in. 16 5/8	15	4 1/4	2	1 5/8	13/16	6 1/4	3/8	1 5/8	1 1/2	1 5/8	8	22 3/4	-	1 1/8-7	-	-	-	-	4	21 3/8	190 lbs.	265 lbs.	-	16.87
		mm 422.28	381.00	107.95	50.80	41.28	20.64	158.75					203.20	577.85	-	-	-	-	-	-	-	542.93	86.27 kg	120.31 kg	-	428.5
20"	500	in. 18 7/8	15 1/4	5 1/16	2 3/4	1 5/8	13/16	6 1/4	3/8	1 3/16	1 1/2	1 3/4	8	25	-	1 1/8-7	-	-	-	-	4	23 5/18	316 lbs.	455 lbs.	-	18.69
		mm 479.43	387.35	128.95	63.50	41.28	20.64	158.75					203.20	635.00	-	-	-	-	-	-	-	592.14	143.47 kg	206.57 kg	-	474.7
22"	550	in. 22 1/8	18	6 1/8	2 3/4	3	7/8	8 1/2	1/2	2 1/2	2 1/4	2 1/4	11 1/4	29 1/2	-	1 1/4-7	-	-	-	-	4	27 7/8	506 lbs.	702 lbs.	-	22.57
		mm 561.98	457.20	155.58	69.85	76.20	22.23	215.90					285.75	749.30	-	-	-	-	-	-	-	229.74 kg	318.71 kg	-	573.3	

*L₁ and *M₁ refer to Lug style valves, L₂ and M₂ refer to Wafer style. "C" Dimension is listed with elastomer in the relaxed condition. Approximately 1/8" total compression is required for proper sealing with pipe flanges. Valves are designed for installation between ASME B16.1 Class 125 (Iron) and B16.5 Class 150 (Steel) flanges. Gaskets are not needed, and should not be used, since the seat face seals against the mating flange. If the valve is to be installed in plastic or fiberglass flanges, flange rings, or Van Stone style flanges, consult your Jenkins agent or the factory for additional information. "O" dimension is the disc clearance dimension. Jenkins recommends that a blind flange be used on end of line service applications.

Materials of Construction

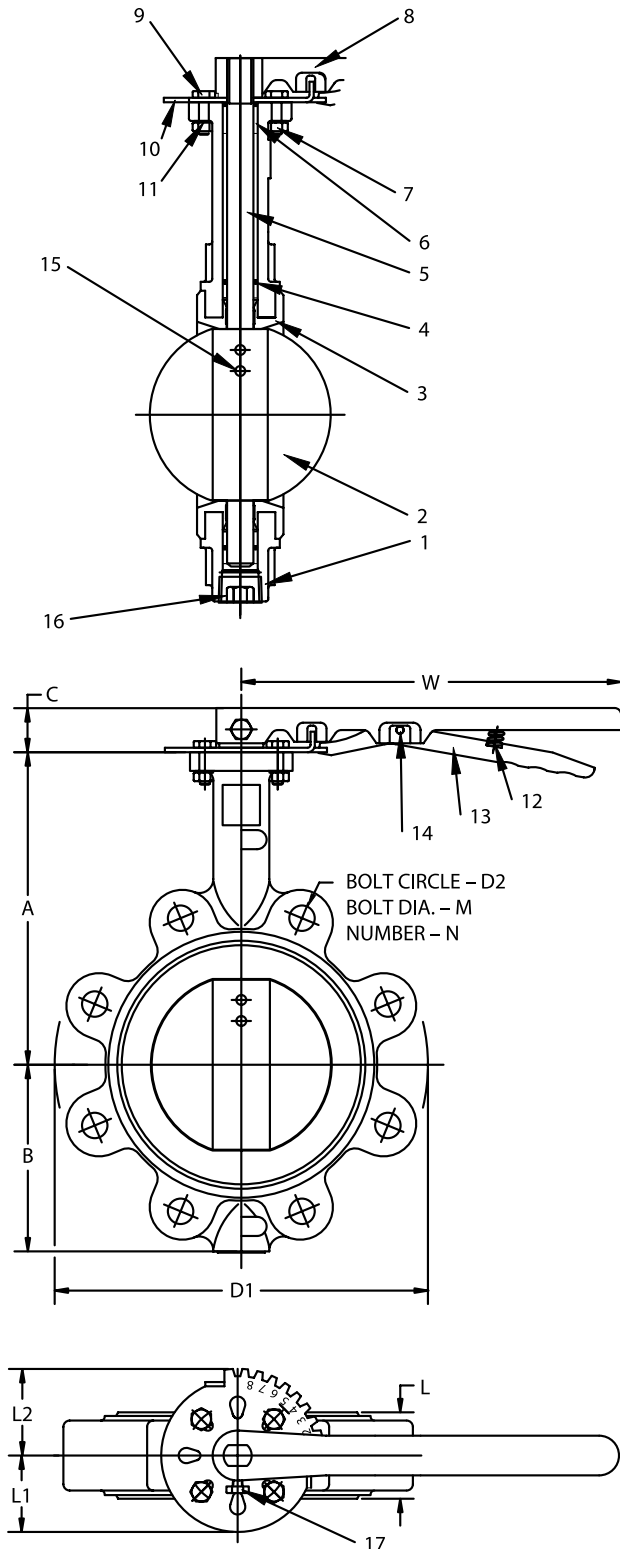


Top bushing detail for 8" and larger valves

Bill of Materials

Item	Description	Materials	Optional Materials
1	Body	Ductile Iron	No option available
2	Disc	Ductile Iron	Aluminum Bronze, 316 Stainless Steel, Monel with Abranon Coating
3	Seat	Buna-N or EPDM	Neoprene, Hypalon, Abrasion Resistant Buna-N, Viton (2"-24"), High Temperature Viton (2"-12")
4	Shaft	416 Stainless Steel	2"-12": 17-4 PH, Monel 14"-24": 316 Stainless Steel, Monel
5	Taper Pin	316 Stainless Steel	Monel
6	Key	Carbon Steel	No option available
7	O-Ring	Buna-N	No option available
8	Bushing	PTFE	No option available
9	Bushing	PTFE	No option available
10	Bushing	PTFE	No option available

200 CWP • Lug Body • Lever Operated



Materials of Construction

No.	Description	Material	ASTM Spec.
1	Body	Cast Iron	A-126 CL. B
2	Disc	Aluminum Bronze	B-148 Alloy C95400
3	Molded-In Liner	EPDM	
4	O-Ring	Buna-N	
5	Shaft	416SS	A-582 Type 416
6	Bushing	PTFE	
7	Nut	Carbon Steel	A-575 AISI 1018
8	Handle	DI	
9	Bolt	Carbon Steel	
10	Indicator Plate	Carbon Steel	
11	Washer	Carbon Steel	
12	Spring	SS	
13	Latch	DI	
14	Roll Pin	Carbon Steel	
15	Taper Pin	SS	
16	Plug	Carbon Steel	
17	Screw	Carbon Steel	

NOTES:

1. "L" dimension is elastomer shown is relaxed condition. Approximately $\frac{1}{8}$ " total compression required for seal.
2. Line flange dimensions comply with ASME B16.1.
3. Body's mounting flange complies with ISO5211.
4. Order parts by item number, valve size and figure number.
5. Meets MSS SP-25, API 609, MSS SP-67.

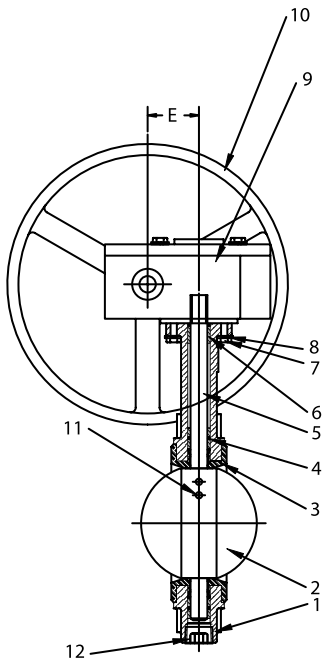
Dimensions

Size	A	B	C	L	L1	L2	W
2	6.37	3.15	1.25	1.815	2	2.50	10.50
2½	6.87	3.50	1.25	1.933	2	2.50	10.50
3	7.12	3.75	1.25	1.929	2	2.50	10.50
4	7.12	4.50	1.25	2.177	2	2.50	10.50
5	8.37	5.00	1.25	2.315	2	2.50	10.50
6	8.87	5.46	1.25	2.327	2	2.50	10.50
8	10.25	7.77	1.75	2.524	3	3.681	14.00
10	11.50	8.00	1.75	2.799	3	3.681	14.00
12	13.25	9.53	1.75	3.189	3	3.681	14.00

Size	D1	D2	M	N
2	6.09	4.75	0.69	4
2½	7.06	5.50	0.69	4
3	7.50	6.00	0.69	4
4	8.65	7.50	0.69	8
5	10.00	8.50	0.81	8
6	11.25	9.50	0.81	8
8	13.37	11.75	0.81	8
10	16.00	14.25	0.94	12
12	18.81	17.00	0.94	12

Inches

200 CWP • Lug Body • Handwheel Gear Operated

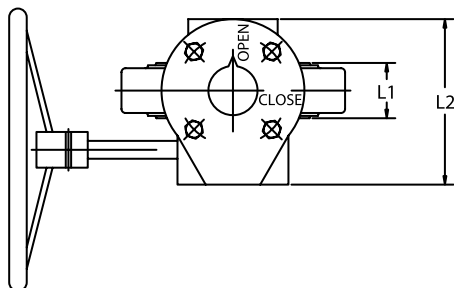
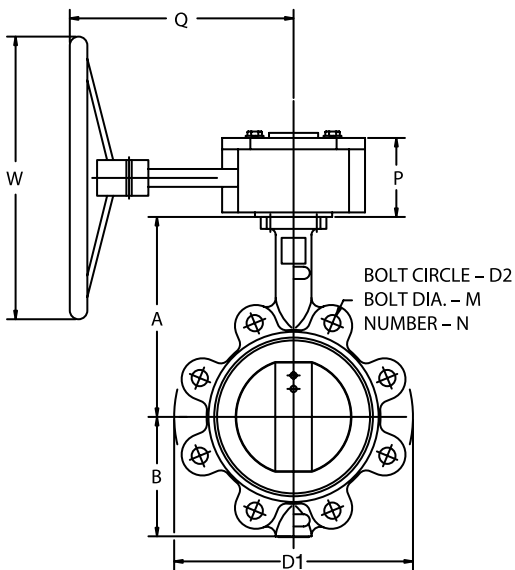


Materials of Construction

No.	Description	Material	ASTM Spec.
1	Body	Cast Iron	A-126 CL. B
2	Disc	Aluminum Bronze	B-148 Alloy C95400
3	Molded-In Liner	EPDM	
4	O-Ring	Buna-N	
5	Shaft	416 SS	A-582 Type 416
6	Bushing	PTFE	
7	Bolt	Carbon Steel	
8	Washer	Carbon Steel	
9	Gear Box		
10	Handwheel	CI	
11	Taper Pin	316 SS	
12	Plug	Carbon Steel	

NOTES:

- "L" dimension is elastomer shown in relaxed condition. Approximately 1/8" total compression required for seal.
- Line flange dimensions comply with ASME B16.1.
- Body's mounting flange complies with ISO5211.
- Order parts by item number, valve size and figure number.
- Meets MSS SP-25, API 609, MSS SP-67.



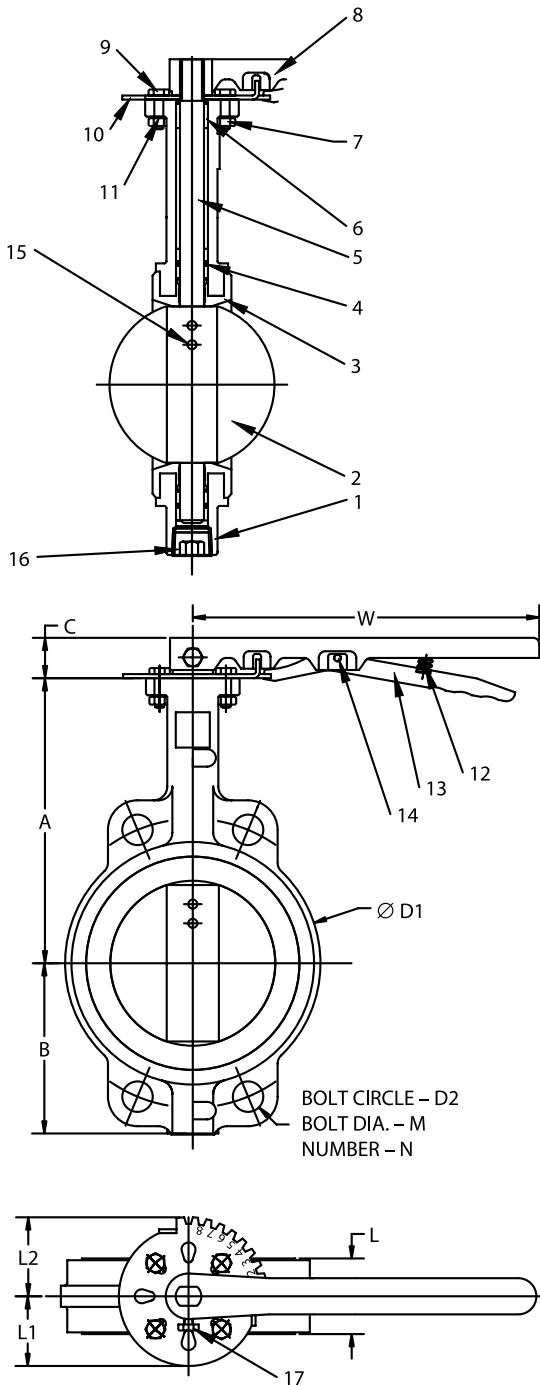
Dimensions

Size	A	B	D1	D2	E	L1	L2
2	6.37	3.15	4.00	4.75	1.77	1.815	5
2½	6.87	3.50	4.75	5.50	1.77	1.933	5
3	7.12	3.75	5.12	6.00	1.77	1.929	5
4	7.12	4.50	6.75	7.50	1.77	2.177	5
5	8.37	5.00	7.75	8.50	2.14	2.315	6.016
6	8.87	5.46	8.62	9.50	2.14	2.327	6.016
8	10.25	7.77	10.56	11.75	2.67	2.524	6.732
10	11.50	8.00	13.06	14.25	2.67	2.799	6.732
12	13.25	9.53	16.12	17.00	2.67	3.189	6.732

Size	M	N	P	Q	W
2	0.69	4	2.953	9.370	11.81
2½	0.69	4	2.953	9.370	11.81
3	0.69	4	2.953	9.370	11.81
4	0.69	8	2.953	9.370	11.81
5	0.81	8	3.307	9.370	11.81
6	0.81	8	3.307	9.370	11.81
8	0.81	8	3.307	8.898	11.81
10	0.94	12	3.307	8.898	11.81
12	0.94	12	3.307	8.898	11.81

Inches

200 CWP • Wafer Body • Lever Operated



Materials of Construction

No.	Description	Material	ASTM Spec.
1	Body	Cast Iron	A-126 CL. B
2	Disc	Aluminum Bronze	B-148 Alloy C95400
3	Molded-In Liner	EPDM	
4	O-Ring	Buna-N	
5	Shaft	416 SS	A-582 Type 416
6	Bushing	PTFE	
7	Nut	Carbon Steel	A-575 AISI 1018
8	Handle	DI	
9	Bolt	Carbon Steel	
10	Indicator Plate	Carbon Steel	
11	Washer	Carbon Steel	
12	Spring	SS	
13	Latch	DI	
14	Roll Pin	Carbon Steel	
15	Taper Pin	300 Series SS	
16	Plug	Carbon Steel	
17	Screw	Carbon Steel	

NOTES:

1. "L" dimension is elastomer shown in relaxed condition. Approximately $\frac{1}{8}$ " total compression required for seal.
2. Line flange dimensions comply with ASME B16.1.
3. Body's mounting flange complies with ISO5211.
4. Order parts by item number, valve size and figure number.
5. Meets MSS SP-25, API 609, MSS SP-67.

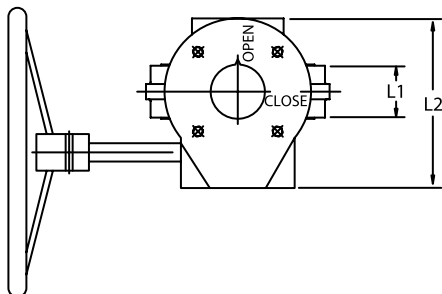
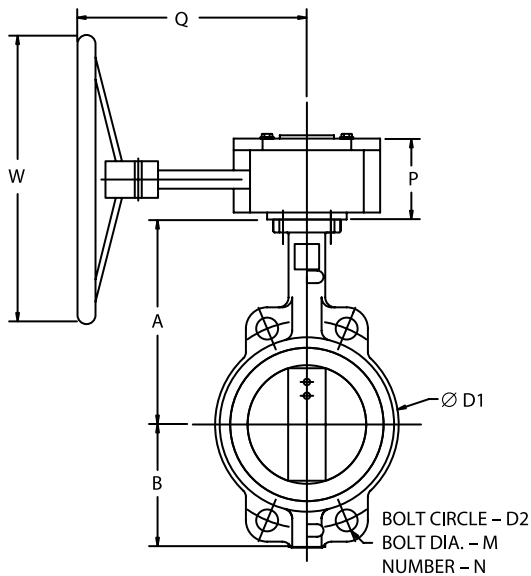
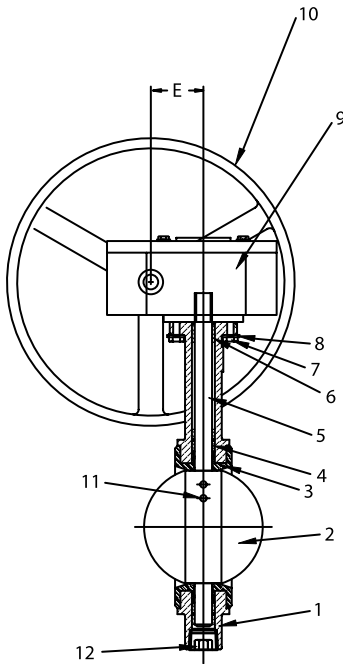
Dimensions

Size	A	B	C	L	L1	L2	W
2	6.37	3.15	1.25	1.815	2	2.50	10.50
2½	6.87	3.50	1.25	1.933	2	2.50	10.50
3	7.12	3.75	1.25	1.929	2	2.50	10.50
4	7.12	4.50	1.25	2.177	2	2.50	10.50
5	8.37	5.00	1.25	2.315	2	2.50	10.50
6	8.87	5.46	1.25	2.327	2	2.50	10.50
8	10.25	7.77	1.75	2.524	3	3.681	14.00
10	11.50	8.00	1.75	2.799	3	3.681	14.00
12	13.25	9.53	1.75	3.189	3	3.681	14.00

Size	D1	D2	M	N
2	4.00	4.75	0.69	4
2½	4.75	5.50	0.69	4
3	5.12	6.00	0.69	4
4	6.75	7.50	0.69	8
5	7.75	8.50	0.81	8
6	8.62	9.50	0.81	8
8	10.56	11.75	0.81	8
10	13.06	14.25	0.94	12
12	16.12	17.00	0.94	12

Inches

200 CWP • Wafer Body • Handwheel Gear Operated



Materials of Construction

No.	Description	Material	ASTM Spec.
1	Body	Cast Iron	A-126 CL. B
2	Disc	Aluminum Bronze	B-148 Alloy C95400
3	Molded-In Liner	EPDM	
4	O-Ring	Buna-N	
5	Shaft	416 SS	A-582 Type 416
6	Bushing	PTFE	
7	Bolt	Carbon Steel	
8	Washer	Carbon Steel	
9	Gear Box		
10	Handwheel	CI	
11	Taper Pin	300 Series SS	
12	Plug	Carbon Steel	

NOTES:

1. "L" dimension is elastomer shown in relaxed condition. Approximately 1/8" total compression required for seal.
2. Line flange dimensions comply with ASME B16.1.
3. Body's mounting flange complies with ISO5211.
4. Order parts by item number, valve size and figure number.
5. Meets MSS SP-25, API 609, MSS SP-67.

Dimensions

Size	A	B	D1	D2	E	L1	L2
2	6.37	3.15	4.00	4.75	1.77	1.815	5
2½	6.87	3.50	4.75	5.50	1.77	1.933	5
3	7.12	3.75	5.12	6.00	1.77	1.929	5
4	7.12	4.50	6.75	7.50	1.77	2.177	5
5	8.37	5.00	7.75	8.50	2.14	2.315	6.016
6	8.87	5.46	8.62	9.50	2.14	2.327	6.016
8	10.25	7.77	10.56	11.75	2.67	2.524	6.732
10	11.50	8.00	13.06	14.25	2.67	2.799	6.732
12	13.25	9.53	16.12	17.00	2.67	3.189	6.732

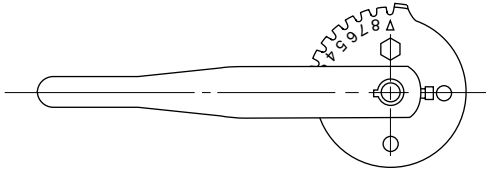
Size	M	N	P	Q	W
2	0.69	4	2.953	6.220	5.906
2½	0.69	4	2.953	6.220	5.906
3	0.69	4	2.953	6.220	5.906
4	0.69	4	2.953	6.220	5.906
5	0.81	4	3.307	9.375	11.81
6	0.81	4	3.307	9.375	11.81
8	0.81	4	3.307	8.898	11.81
10	0.94	4	3.307	8.898	11.81
12	0.94	4	3.307	8.898	11.81

Inches

Options and Accessories

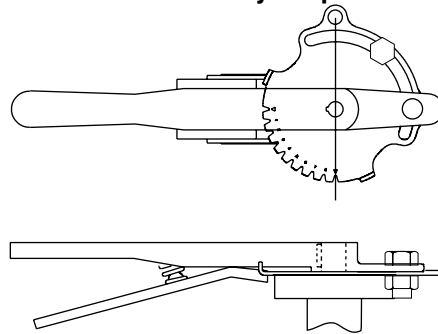
Handle Features/Options:

Standard



The standard handle functions with a ten-position indicator plate to assist in throttling or to provide shutoff.

Memory Stop



Extended plates with radial slots are optional for memory stop applications. In these cases, bolts and nuts are furnished and special handles are used as shown.

Gear Operator Options:

1. MEMORY STOP FOR GEAR OPERATORS

A memory stop suitable for visual position indication may be provided; however, a more positive stop on the input side of the gear operator is available in the traveling nut stop for nonvisual position indication.

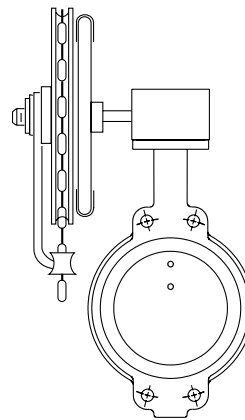
2. OPERATING NUT FOR GEAR OPERATOR

An operating nut may be supplied on the gear shaft, in place of a handwheel.

3. CHAINWHEELS

Some overhead installations require the convenience of chainwheels to enable operation from a lower elevation level.

CHAINWHEELS



Direct-mounted chainwheels are available. Another option, utilizing an adjustable sprocket rim and guide which is fastened to a round handwheel, may be furnished.

4. EXTENSION STEMS

Installations may require extension stems to elevate the operating location of a valve.

Extension stems as illustrated may be supplied for operation by either lever, gear, or actuator.

EXTENSION STEMS

