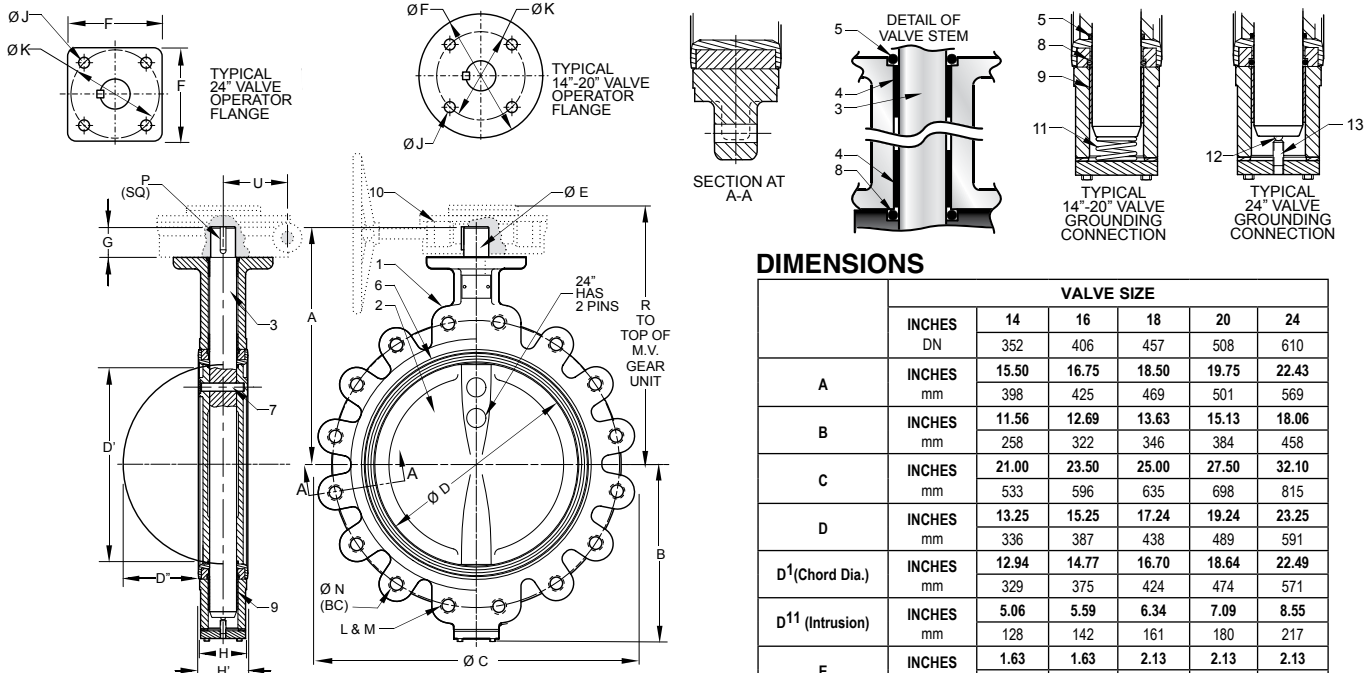




ABS Type Approved;
Cat. A
CFR-46



Tested and Certified by
IAFMPOR&T to NSF/ANSI 372
and NSF/ANSI 61



MATERIALS LIST

ITEM	PART	MATERIALS
1	BODY	CAST IRON ASTM A126 CL. B
2	DISC	ALUMINUM BRONZE ASTM B148
3	STEM	STAINLESS STEEL TYPE 416
4	TOP BEARING	REINFORCED NYLON
5	STEM O-RING	EPDM
6	LINER	EPDM
7	STEM PIN	ANSI 4140 OR AISI 6150
8	LINER O-RING	EPDM
9	LOWER BEARING	REINFORCED NYLON
10	OPERATOR	GEAR OPERATOR
		GEAR OPERATOR WITH MEMORY STOP
		GEAR OPERATOR WITH LOCK
11 14"-20"	GROUNDING SPRING	STAINLESS STEEL TYPE 302
12 24" Only	GROUNDING BALL	AISI-1022
13 24" Only	TENSION SCREW	AISI-1020

DIMENSIONS

	VALVE SIZE					
	INCHES	14	16	18	20	24
DN		352	406	457	508	610
A	INCHES	15.50	16.75	18.50	19.75	22.43
	mm	398	425	469	501	569
B	INCHES	11.56	12.69	13.63	15.13	18.06
	mm	258	322	346	384	458
C	INCHES	21.00	23.50	25.00	27.50	32.10
	mm	533	596	635	698	815
D	INCHES	13.25	15.25	17.24	19.24	23.25
	mm	336	387	438	489	591
D ¹ (Chord Dia.)	INCHES	12.94	14.77	16.70	18.64	22.49
	mm	329	375	424	474	571
D ¹¹ (Intrusion)	INCHES	5.06	5.59	6.34	7.09	8.55
	mm	128	142	161	180	217
E	INCHES	1.63	1.63	2.13	2.13	2.13
	mm	41	41	54	54	54
F	INCHES	6.50	6.50	9.50	9.50	7.50
	mm	165	165	241	241	190
G	INCHES	2.00	2.00	3.00	3.00	3.06
	mm	50	50	76	76	77
H (Body)	INCHES	3.06	4.00	4.50	5.00	6.06
	mm	77	101	114	127	153
H ¹ (Liner)	INCHES	3.19	4.13	4.63	5.13	6.19
	mm	81	104	117	130	157
J	INCHES	0.69	0.69	0.81	0.81	0.81
	mm	17	17	20	20	20
K	INCHES	5.25	5.25	7.50	7.50	7.50
	mm	133	133	190	190	190
L	No. of Holes	12	16	16	20	20
M	Thread Size	1-8	1-8	1 1/8-7	1 1/8-7	1 1/4-7
	INCHES	18.75	21.25	22.75	25.00	29.50
N	mm	476	540	577	635	749
	INCHES	0.38	0.38	0.50	0.50	0.50
P (Key Size)	mm	9	9	12	12	12
	INCHES	17.25	18.75	19.63	20.88	25.00
R	mm	438	476	458	530	635
	INCHES	3.13	3.13	4.50	4.50	4.63
U	mm	79	79	114	114	117

***Note:** Lead free refers to the wetted surface of the pipe, fittings and fixtures in potable water systems that have a weighted average lead content ≤ 0.25%. Source: California Health and Safety Code (116875).

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



C

L

2

2

3

E

VALVE SERIES

BODY STYLE

OPERATOR

BODY MATERIAL

DISC MATERIAL

LINER MATERIAL

C - C SERIES

L - LUG BODY
W- WAFER BODY

1 - VALVE ONLY
2 - LEVER HANDLE
3 - GEAR OPERATOR

2 - CAST IRON*

3 - ALUMINUM/BRONZE

E - EPDM

* MILWAUKEE VALVE RESERVES THE
RIGHT TO UPGRADE TO DI BODY
WITHOUT NOTICE FOR NO ADDITIONAL
COST.

BUTTERFLY FEATURES & OPTIONS

STANDARD FEATURES

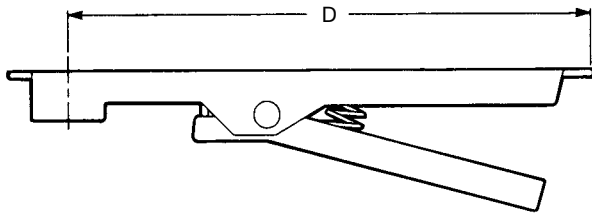
HEAVY DUTY DESIGN
 PHENOLIC CARTRIDGE DESIGN
 LOW TORQUE LINER
 BUBBLE TIGHT SHUT OFF
 LOW TORQUE POLYMER BEARING STD
 DEAD END SERVICE (LUG ONLY)
 FIELD REPAIRABLE

EXTENDED NECK BODY
 LOW PROFILE DISC
 BLOWOUT PROOF STEMS
 STAINLESS STEEL STEMS (416)
 BI-DIRECTIONAL SHUT OFF (EXCEPT AS NOTED)
 VACUUM RATINGS TO 29" OF MERCURY

OPERATORS

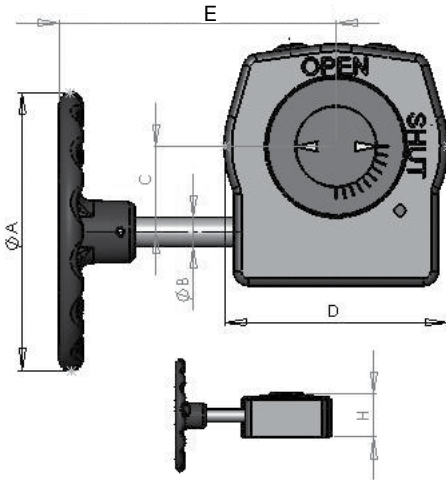
MANUAL

10 POSITION, PAD LOCKABLE, DUCTILE IRON LEVER HANDLE –STD, EPOXY COATING OPTIONAL.



VALVE SIZE	PART NUMBER	T-DIMENSION (inches)
2, 2-1/2, 3	84016-LL	9.50
4, 5	84016-RL	11.00
6	84016-SL	11.00
8	84016-UL	15.00
10, 12	84016-WL	15.00

WEATHER RESISTENT GEAR OPERATOR, CAST IRON, MEMORY STOP AND LOCKING DEVICE OPTIONAL.



VALVE SIZE	PART NUMBER	GEAR RATIO	ØA	ØB	C	D	E	H
2-3	8115-24N-L	24:1	6.00	0.63	1.80	4.20	8.80	2.30
4-5	8115-24N-R	24:1	6.00	0.63	1.80	4.20	8.80	2.30
6	8115-24N-S	24:1	6.00	0.63	1.80	4.20	8.80	2.30
8	8115-30N-U	30:1	9.00	0.75	2.60	6.03	8.50	3.23
10-12	8115-30N-W	30:1	9.00	0.75	2.60	6.03	8.50	3.23
14-16	8115-48N-16	50:1	12.00	0.75	3.10	6.97	13.40	3.46
18-20	8115-65N-20	80:1	12.00	1.00	4.93	10.30	12.60	4.63
24	8115-78N-24	120:1	16.00	1.00	4.93	10.30	12.60	6.00

ACTUATORS

PNEUMATIC OPERATORS
 DOUBLE ACTING OPERATORS
 SPRING-RETURN ACTUATORS
 SOLENOID VALVES
 ACTUATOR BRACKETS
 LIMIT SWITCHES
 VALVE POSITIONERS

120 VOLT AC AND DC VOLTAGES
 NEMA 4 AND 7 HOUSING
 4-20 mA DC VALVE POSITIONERS
 ACTUATOR BRACKETS
 EXTRA LIMIT SWITCHES
 ELECTRIC ACTUATORS

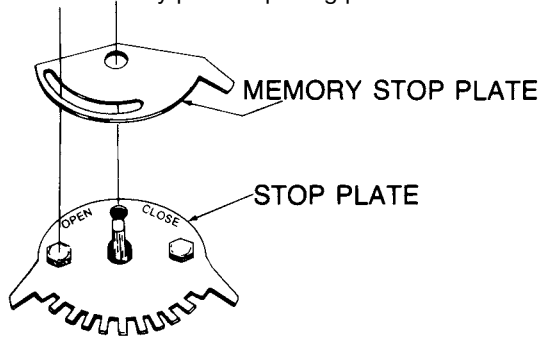
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OPTIONS & ACCESSORIES

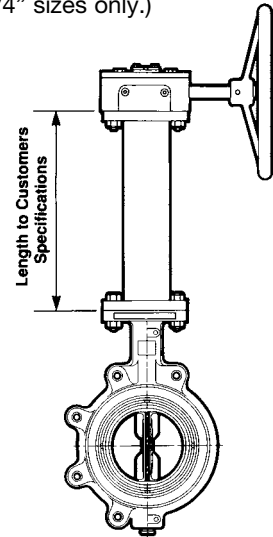
MEMORY STOP

The "MS" Memory Stop provides an adjustable stop when the valve is used in a balancing application. The Memory Stop can be set to any preset opening point.



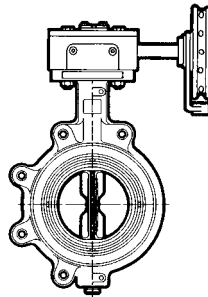
STEM EXTENSION

Provides means of operation at a required distance away from the valve body. Manual or automatic, actuators are easily adapted to mounting flange on the extension. To order, specify distance from valve mounting-flange to base of operator. (Please note: Butterball® extension stems are available in 1-1/4" and 2-1/4" sizes only.)

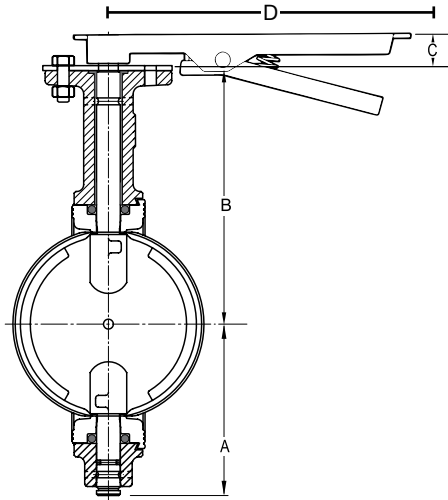


CHAINWHEEL

The chain wheel provides for remote operation of the valve in high, normally out-of-reach locations. Attaches to the gear operator easily for quick valve open/close response. Sprocket rim is aluminum; chain is steel. Specify the handwheel diameter ("A" dimension) and chain length. Chainwheel sold separately.

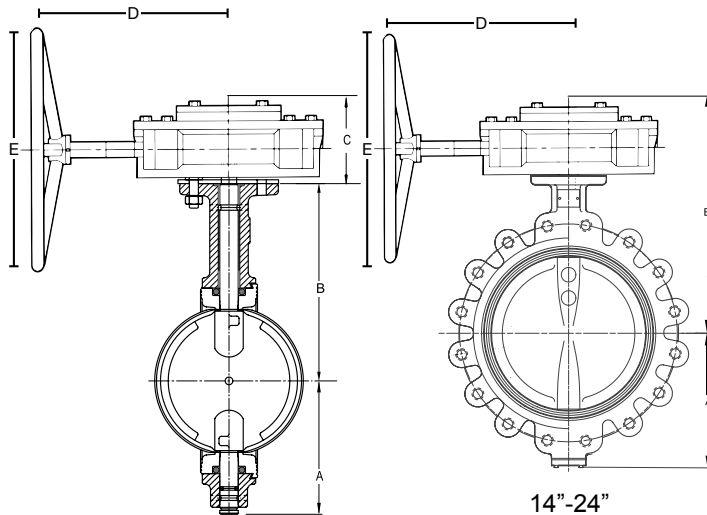


Butterfly Height With Lever or Gear Operator Wafer and Lug Styles



2"-12"

Butterfly with Lever Handle						
Size		A	B	C	D	Height
2"	INCHES	3.06	5.50	1.13	9.50	9.69
2 1/2"	INCHES	3.31	6.00	1.13	9.50	10.44
3"	INCHES	3.75	6.25	1.13	9.50	11.13
4"	INCHES	4.25	7.00	1.13	11.00	12.38
5"	INCHES	4.94	7.53	1.13	11.00	13.60
6"	INCHES	5.56	8.00	1.13	11.00	14.69
8"	INCHES	5.56	9.38	1.50	15.00	16.44
10"	INCHES	7.88	10.56	1.50	15.00	19.94
12"	INCHES	9.25	12.06	1.50	15.00	22.81



2"-12"

14"-24"

Butterfly with Gear Operator							
Size		A	B	C	D	E	Height
2"	INCHES	3.06	5.50	2.30	8.80	6.00	10.86
2 1/2"	INCHES	3.31	6.00	2.30	8.80	6.00	11.61
3"	INCHES	3.75	6.25	2.30	8.80	6.00	12.30
4"	INCHES	4.25	7.00	2.30	8.80	6.00	13.55
5"	INCHES	4.94	7.53	2.30	8.80	6.00	14.77
6"	INCHES	5.56	8.00	2.30	8.80	6.00	15.86
8"	INCHES	5.56	9.38	3.23	8.50	9.00	18.17
10"	INCHES	7.88	10.56	3.23	8.50	9.00	21.67
12"	INCHES	9.25	12.06	3.23	8.50	9.00	24.54
14"	INCHES	11.56	17.25	-	13.40	12.00	28.81
16"	INCHES	12.69	18.75	-	13.40	12.00	31.44
18"	INCHES	13.63	19.63	-	12.60	12.00	33.26
20"	INCHES	15.13	20.88	-	12.60	12.00	36.01
24"	INCHES	18.06	25.00	-	12.60	16.00	43.06

Note: 30"-48" Please see specification sheet.

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