

Butterfly Valve

Figure-CS300L

Grooved End Valve with Lever Lock and Infinitely Variable Handle

Manufactured by: Central Grooved Piping Products
a Subsidiary of Central Sprinkler Company
451 North Cannon Avenue, Lansdale, Pennsylvania 19446
Phone (215) 362-0700 Fax (215) 362-5385



Product Description

Central Butterfly Valves provide for efficient control of fluid flow in piping systems. Flow may be from either direction, and the valves may be positioned in any orientation. The valves are furnished with grooved ends and can be easily adapted to flanged components utilizing our Figure 71 Class 150 flange adapters. The body and disc construction provides for increased strength and durability. The disc seal and body coating are compatible with a variety of chemicals and temperature ranges (contact Central for specific recommendations on seal and body coating selections). A high strength conventional stainless steel upper stem is provided for dependability as compared to iron upper stems provided by others. The surfaces at the upper stem and lower trunnion areas incorporate a reduced dynamic torque and anti-compression set design to ensure low operating torque and seal longevity.

This innovative feature prevents elastomeric failure of the disc encapsulation that is commonly experienced with other manufacturers. This is accomplished by providing uniform compression throughout the opening and closing operation of the disc. Other manufacturers have non-uniform compression, which results in permanent compression set and subsequent splitting of the material and undermining of the seal.



Technical Data

Figure No.: CS300L

Size:
2 1/2", 3", 4", 5", 6", 8", 10", & 12"

Manufacture Source:
Domestic

Materials of Construction:

Body:
Ductile Iron in accordance with ASTM A-536, Grade 65-45-12

Body Coating:
Black PPS (Polyphenylene Sulfide)

Disc:
Ductile Iron in accordance with ASTM A-536, Grade 65-45-12

Disc Seal:
Grade "E" EPDM or Grade "T" Nitrile encapsulated rubber in accordance with ASTM D-2000

Upper Stem:
Type 17-4 PH Stainless Steel

Lower Plug:
C360 Brass

Operator: Lever
2 1/2" - 8" Steel - Black Zinc Plated
10" - 12" Iron - Black Zinc Plated

Bracket:
Steel - Black Zinc Plated

Factory Hydro Test:
100% at 350 psig (2413 kPa) in accordance with MSS-SP-67

Maximum working pressure:
300 psig (2068 kPa)

Temperature Rating:
-30°F (-34°C) to +230°F (110°C)



Installation

In piping systems, butterfly valves should be located where they will be readily accessible for operation, inspection, and maintenance.

When a valve "closes hard", it may be due to debris lodged in the sealing area. This may be corrected by backing-off the lever and closing it again, several times if necessary. The valve should never be forced to seat by adding an extension to the lever as it may distort the valve components or score the sealing surfaces.

IMPORTANT: All replacement parts must be obtained from the manufacturer to assure proper operation of the valve.

To prevent rotation of the valve, it is recommended that the CS300L Butterfly Valve be installed with rigid type couplings, such as the Central Fig. 772 Coupling. If flexible couplings are used, additional support may be needed to prevent rotation.

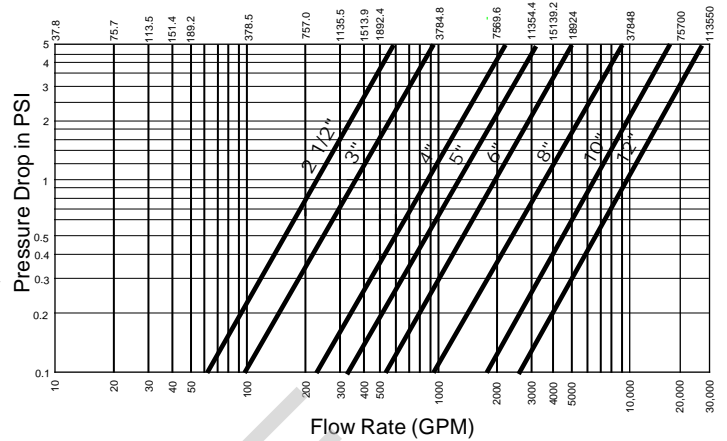
Note: Never disassemble or remove any valve component without verifying that the system is depressurized and drained.

Butterfly Valve - CS300L

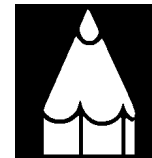
PERFORMANCE

CS300L Sizes 2½", 3", 4", 5", 6", 8", 10", & 12"

Flow Rate (LPM)



Note: It is good piping practice to apply a safety factor of 15 to 20% to the values in the above table.

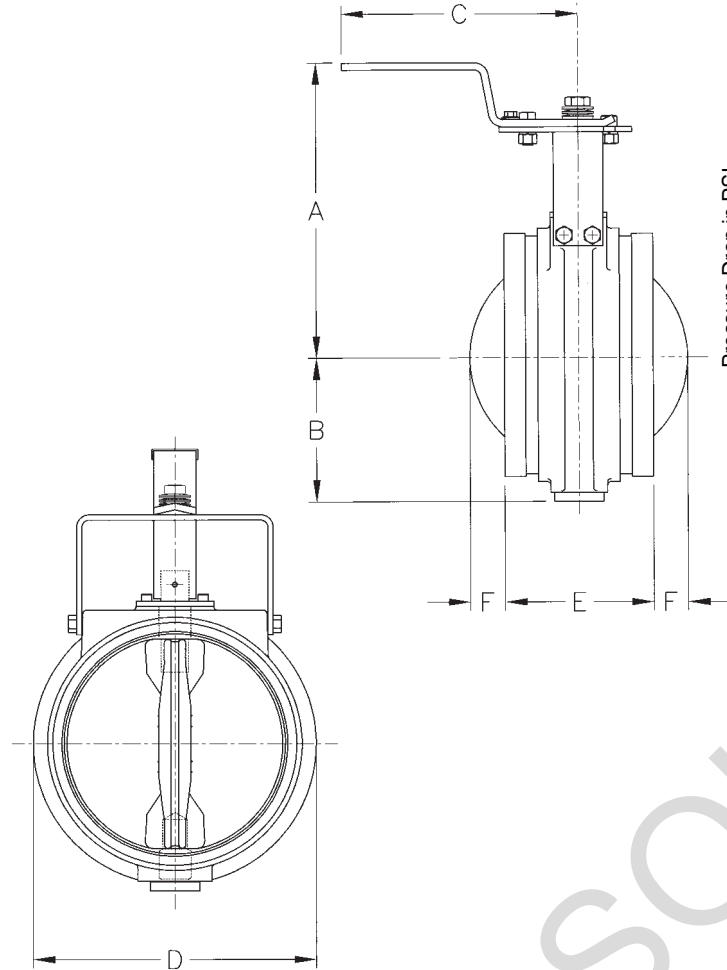


Ordering Information

Ordering Information: When placing an order, indicate the full product name. Please specify the quantity, figure number, type of disc seal, EPDM "E" or Nitrile "T", and size.

Availability & Service: Central Grooved Piping products are available throughout the U.S., Canada, and internationally, through a network of Central distribution centers. You may write directly to Central, or call (215) 362-0700 for the distributor nearest you.

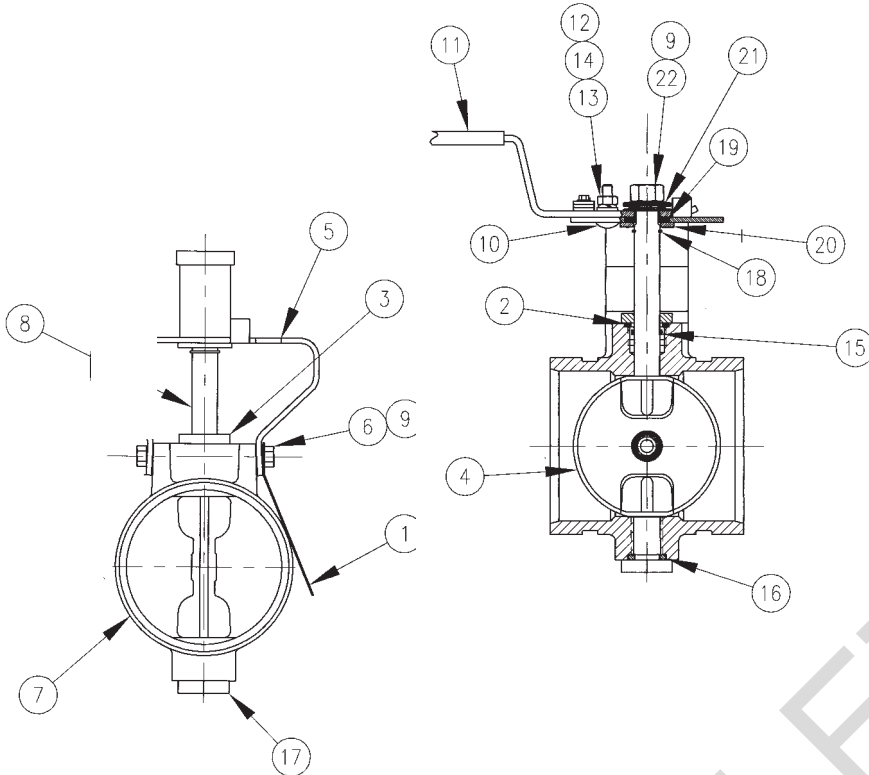
Warranty: Central will repair and/or replace any products found to be defective in material or workmanship within a period of one year from the date of shipment. Please refer to the current price list for further details of this warranty.



Size	A Inches mm	B Inches mm	C Inches mm	D Inches mm	E Inches mm	F Inches mm	Weight lbs. Kg
2½"	5.90 149.9	1.93 49.0	7.22 183.4	2.88 73.0	3.81 96.8	N/A*	6 2.7
3"	6.22 158.0	2.56 65.0	7.22 183.4	3.50 88.9	3.81 96.8	N/A*	8 3.6
4"	7.30 185.4	2.90 73.7	10.26 260.6	4.75 120.7	4.56 115.8	N/A*	15 6.8
5"	8.15 207.0	3.85 97.8	10.26 260.6	6.25 158.8	5.81 147.6	N/A*	23 10.4
6"	8.55 217.2	4.28 108.7	10.26 260.6	6.75 171.5	5.81 147.6	N/A*	28 12.7
8"	10.43 264.9	5.15 130.8	14.76 374.9	10.00 254.0	5.25 133.4	1.22 31.0	44 20.0
10"	12.15 308.6	6.31 160.3	20.00 508.0	12.00 304.8	6.25 158.8	1.75 44.5	73 33.1
12"	13.31 338.1	7.40 188.0	20.00 508.0	14.25 362.0	6.50 165.1	2.62 66.5	89 40.4

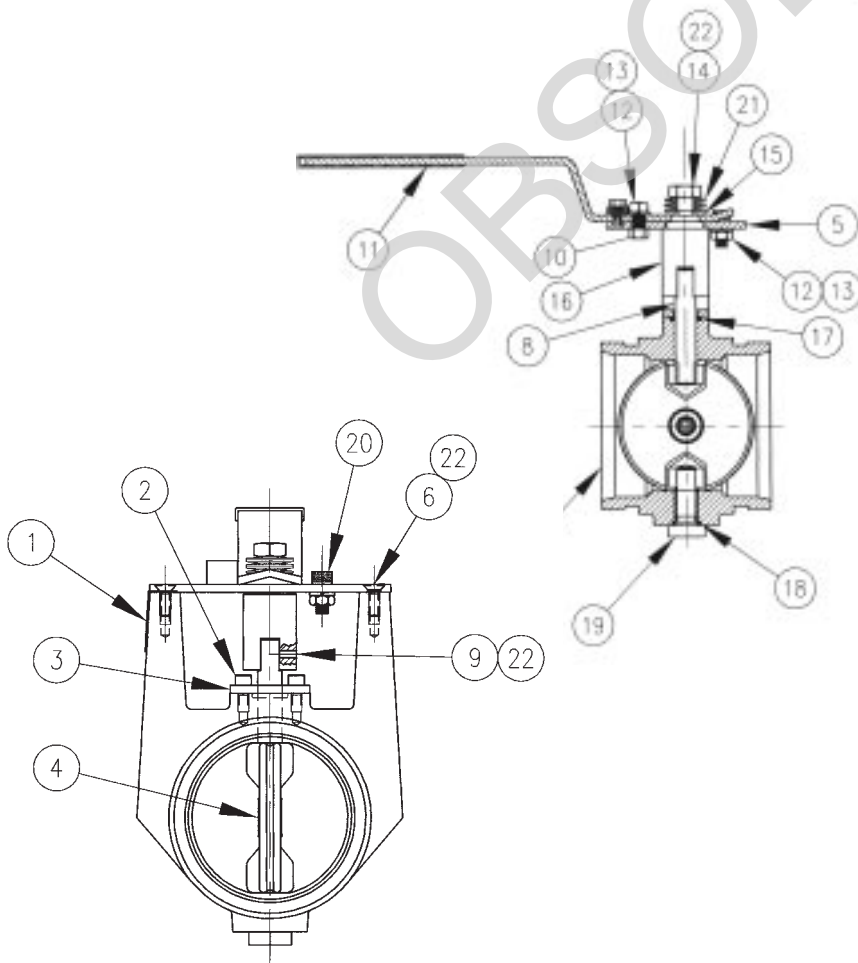
* END OF DISC DOES NOT EXTEND BEYOND VALVE BODY

2 1/2" and 3" CS300L W/ LEVER



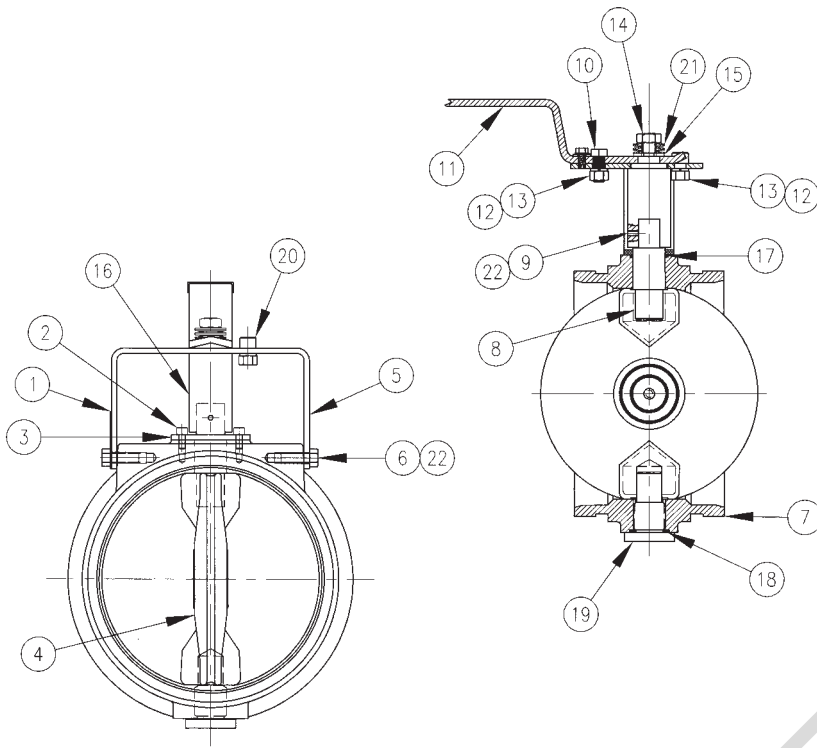
Det. No.	Part	Material	Qty.
1	Name Plate	Aluminum	1
2	O-Ring	EPDM	1
3	Packing Nut	Brass	1
4	Disc	EPDM Molded Ductile Iron	1
5	Bracket	Steel, Black Zinc Plated	1
6	1/4" Flat Hd. Tap Screw	Steel, Zinc Plated	4
7	Body	PPS Coated Ductile Iron	1
8	Shaft	Stainless Steel	1
9	Adhesive	Thread Sealant	AR
10	#10 Sq. Neck Bolt	Steel, Zinc Plated	1
11	Lever Sub-Assembly		1
12	#10 Nut	Steel, Zinc Plated	1
13	#10 Flat Washer	Steel, Zinc Plated	4
14	#10 Lockwasher	Steel, Zinc Plated	1
15	O-Ring	EPDM	1
16	O-Ring	EPDM	1
17	Plug	Brass	1
18	Snap Ring	Steel, Zinc Plated	1
19	Flat Washer	Steel, Zinc Plated	1
20	1/2" Flat Washer	Steel, Zinc Plated	1
21	3/8" Belleville Spring	Steel, Zinc Plated	3
22	3/8" Hex Nut	Steel, Zinc Plated	1

4", 5", and 6" CS300L W/ LEVER



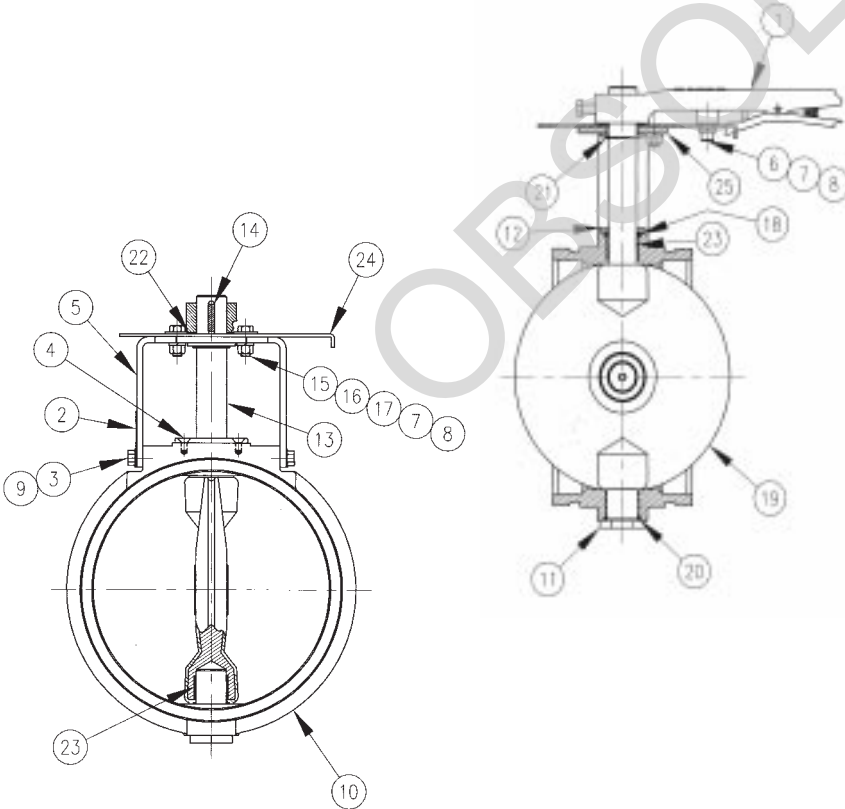
Det. No.	Part	Material	Qty.
1	Name Plate	Aluminum	1
2	1/4" Fillister Hd. Tap Screw	Steel, Zinc Plated	2
3	Bearing Plate	Brass	1
4	Disc	EPDM Molded Ductile Iron	1
5	Bracket	Steel, Black Zinc Plated	1
6	1/4" Flat Hd. Tap Screw	Steel, Zinc Plated	2
7	Body	PPS Coated Ductile Iron	1
8	Shaft	Stainless Steel	1
9	Set Screw	Steel, Zinc Plated	1
10	5/16" Hex Hd. Screw	Steel, Zinc Plated	1
11	Lever Sub-Assembly		1
12	5/16" Nut	Steel, Zinc Plated	2
13	5/16" Lockwasher	Steel, Zinc Plated	2
14	1/2" Jam Nut	Steel, Zinc Plated	1
15	1/2" Flat Washer	Steel, Zinc Plated	1
16	Coupling	Steel, Black Zinc Plated	1
17	O-Ring	EPDM	1
18	O-Ring	EPDM	1
19	Plug	Brass	1
20	5/16" Cap Screw Soc. Head	Steel, Zinc Plated	1
21	1/2" Belleville Spring	Steel, Zinc Plated	5
22	Adhesive	Thread Sealant	AR

8" CS300L W/ LEVER



Det. No.	Part	Material	Qty.
1	Name Plate	Aluminum	1
2	1/4" Fillister Hd. Tap Screw	Steel, Zinc Plated	2
3	Bearing Plate	Brass	1
4	Disc	EPDM Molded Ductile Iron	1
5	Bracket	Steel, Black Zinc Plated	1
6	3/8" Hex Hd. Tap Screw	Steel, Zinc Plated	4
7	Body	PPS Coated Ductile Iron	1
8	Shaft	Stainless Steel	1
9	Set Screw	Steel, Zinc Plated	1
10	3/8" Hex Hd. Cap Screw	Steel, Zinc Plated	2
11	Lever Sub-Assembly		1
12	3/8" Nut	Steel, Zinc Plated	2
13	3/8" Lockwasher	Steel, Zinc Plated	2
14	1/2" Jam Nut	Steel, Zinc Plated	1
15	Spacer	Steel, Zinc Plated	2
16	Coupling	Steel, Black Zinc Plated	1
17	O-Ring	EPDM	1
18	O-Ring	EPDM	1
19	Plug	Brass	1
20	3/8" Cap Screw Soc. Head	Steel, Zinc Plated	1
21	1/2" Bellville Spring	Steel, Zinc Plated	5
22	Adhesive	Thread Sealant	AR

10" and 12" CS300L W/ LEVER



Det. No.	Part	Material	Qty.
1	Hand Lever Sub-Assembly		1
2	Name Plate	Aluminum	1
3	3/8" Hex Hd. Tap Screw	Steel, Zinc Plated	4
4	1/4" Flat Hd. Tap Screw	Steel, Zinc Plated	2
5	Bracket	Steel, Black Zinc Plated	1
6	3/8" Soc. Hd. Screw	Steel, Zinc Plated	1
7	3/8" Spring Lockwasher	Steel, Zinc Plated	3
8	3/8" Narrow Flat Washer	Steel, Zinc Plated	2
9	Adhesive	Thread Sealant	AR
10	Body	PPS Coated Ductile Iron	1
11	Plug	Brass	1
12	Bearing Plate	Brass	1
13	Shaft	Stainless Steel	1
14	Shaft Key	Steel, Zinc Plated	1
15	3/8" Hex Hd. Screw	Steel, Zinc Plated	2
16	3/8" Flat Washer	Steel, Zinc Plated	2
17	3/8" Hex Nut	Steel, Zinc Plated	2
18	O-Ring	EPDM	1
19	Disc	EPDM Molded Ductile Iron	1
20	O-Ring	EPDM	1
21	Snap Ring	Steel, Zinc Plated	1
22	Washer	Steel, Zinc Plated	1
23	Bearing Shaft	Teflon	2
24	Lever Indicating Plate	Steel, Zinc Plated	1
25	1/4" Flat Washer	Steel, Zinc Plated	1


CENTRAL GROOVED PIPING PRODUCTS