



## **STANDARDS**

- NSF 372 Certified Lead Free
- NSF 61 Certified for drinking water
- Meets AWWA C504 and C516 requirements

# **J Flow Controls 84/85 Series AWWA Butterfly Valve for Water Systems**

## **FEATURES & BENEFITS**

- 84 Series flanged butterfly valves
- 85 Series lugged butterfly valves
- Designed for long life
- High performance
- Low maintenance
- Corrosion resistant
- Bi-directional, tight shutoff
- Direct mount mounting surface
- Epoxy coated

## **APPLICATIONS & INDUSTRIES**

- Water/wastewater treatment
- Chemical & petrochemical industries
- Shipbuilding
- Food processing
- Petroleum refining
- Power generation
- Process applications
- Fire control
- HVAC
- Water works

### 84/85 SERIES TECHNICAL INFORMATION

**Size Range:** 3" - 78"

**Temperature Range:** up to 290°F

**Pressure Rating**

- 75 psi
- 150 psi
- 250 psi

**Body Material**

- Cast Iron
- Ductile Iron
- Carbon Steel
- Stainless Steel

**End Connections:** flanged

**Actuator Type**

- Handwheel
- Chainwheel
- Square nut
- Cylinder
- Electric motor
- Pneumatic
- Electric hydraulic

**Design Standard:** AWWA C504

**Face to Face:** AWWA C504

**Testing Inspection:** AWWA C504

**Flange Accommodation:**

- ANSI/ASME B16.1 125lb
- AWWA C207 75psi - 250psi
- AWWA C115

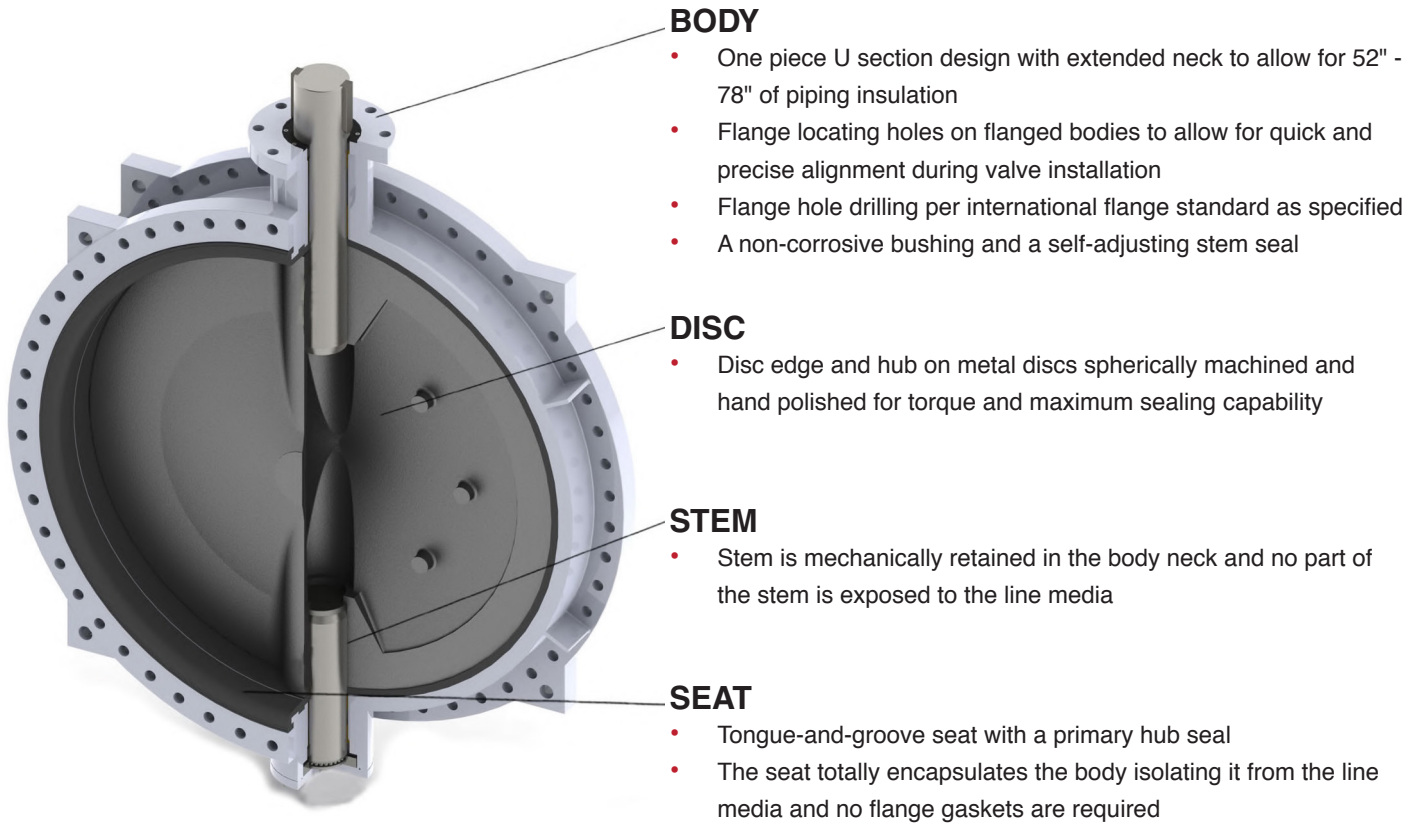
**Top Flange:** ISO 5211



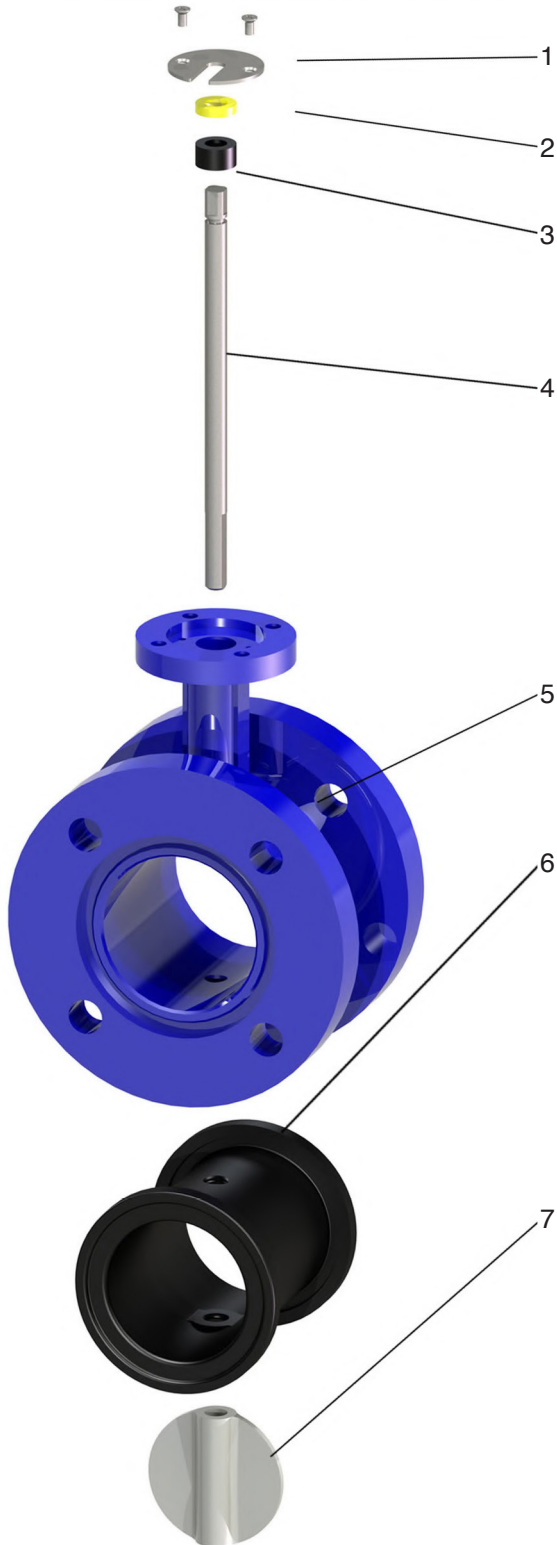
#### Features & Benefits

- Small in size and light in weight
- Easy installation and maintenance
- Quick 90° on-off operation
- Minimized operating torque, energy saving
- Bubble-tight sealing
- Wide selection of materials
- Long service life
- Excellent regulation performance

## 84/85 SERIES FEATURES

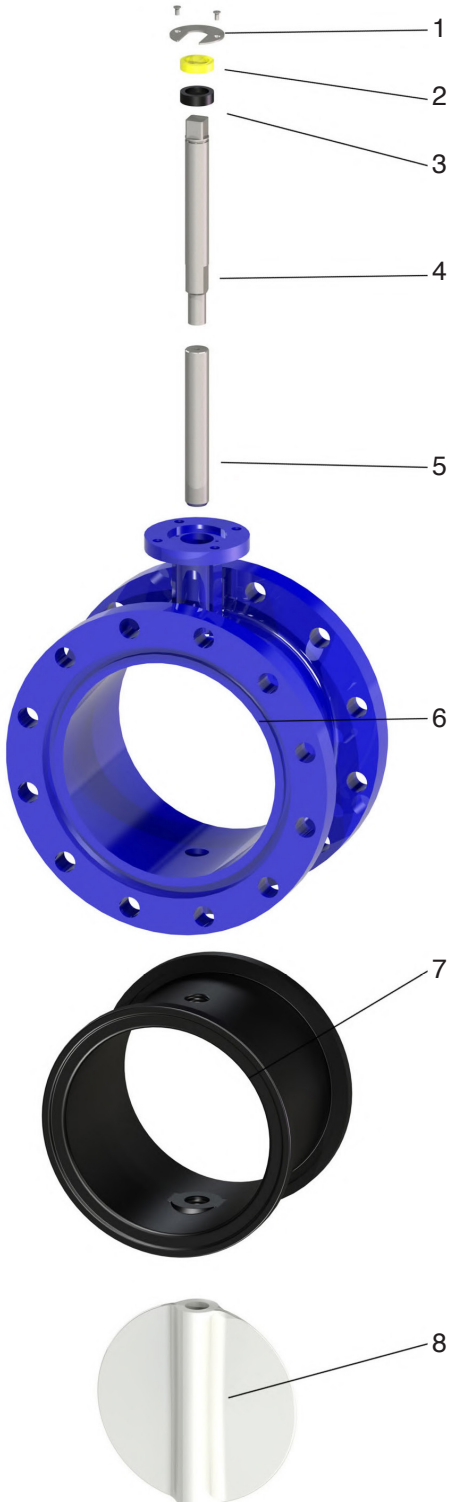


## 84 SERIES PARTS IDENTIFICATION



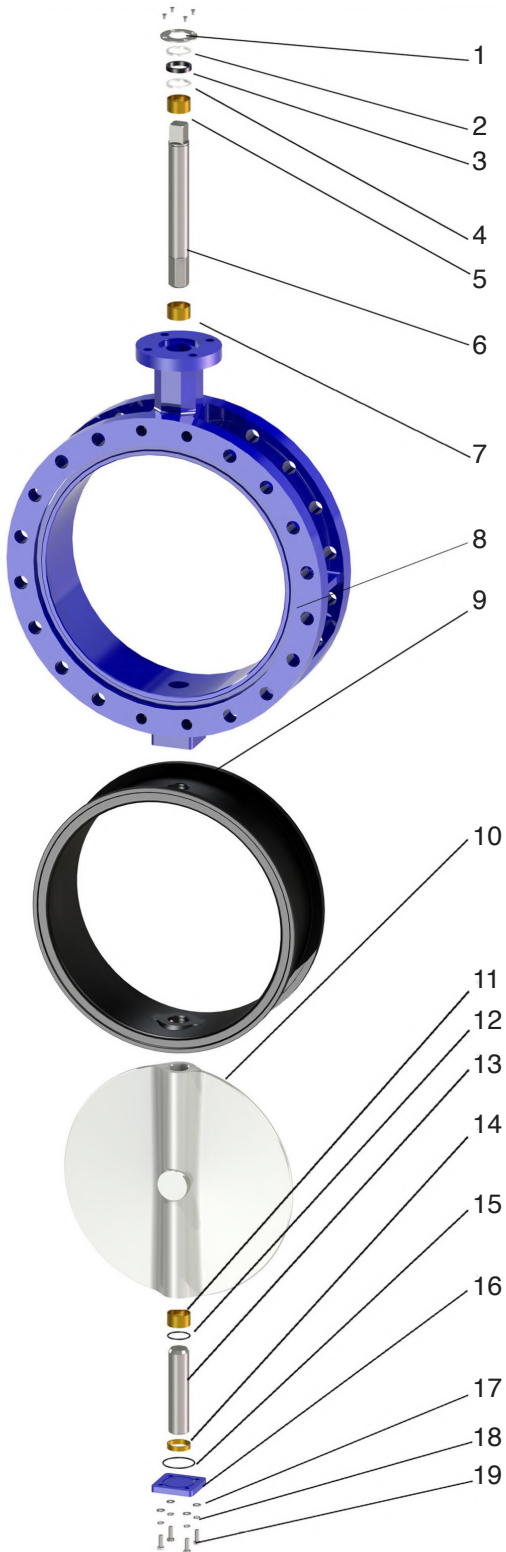
No	Parts Name	Materials
1	U Shape Gland	Stainless Steel, Carbon Steel
2	Bushing	FRP
3	Packing	NBR / EPDM
4	Shaft	SS410, SS304, SS431, SS316, Monel, K500, 17-4PH, C6300, C92200, 2507, 2205
5	Body	GG20, GG25, GGG40, GGG45, GGG50
6	Seat	NBR (BUNA-N), EPDM, HEPDM, FKM (VITON), Polychloroprene, Natural Rubber, Silicon Rubber
7	Disc	GGG40, GGG45, GGG50, WCB, WCC, LCC, LCB, CF8, CF8M, CF3, CF3M, C95800, C95400, C9550

## 84 SERIES PARTS IDENTIFICATION



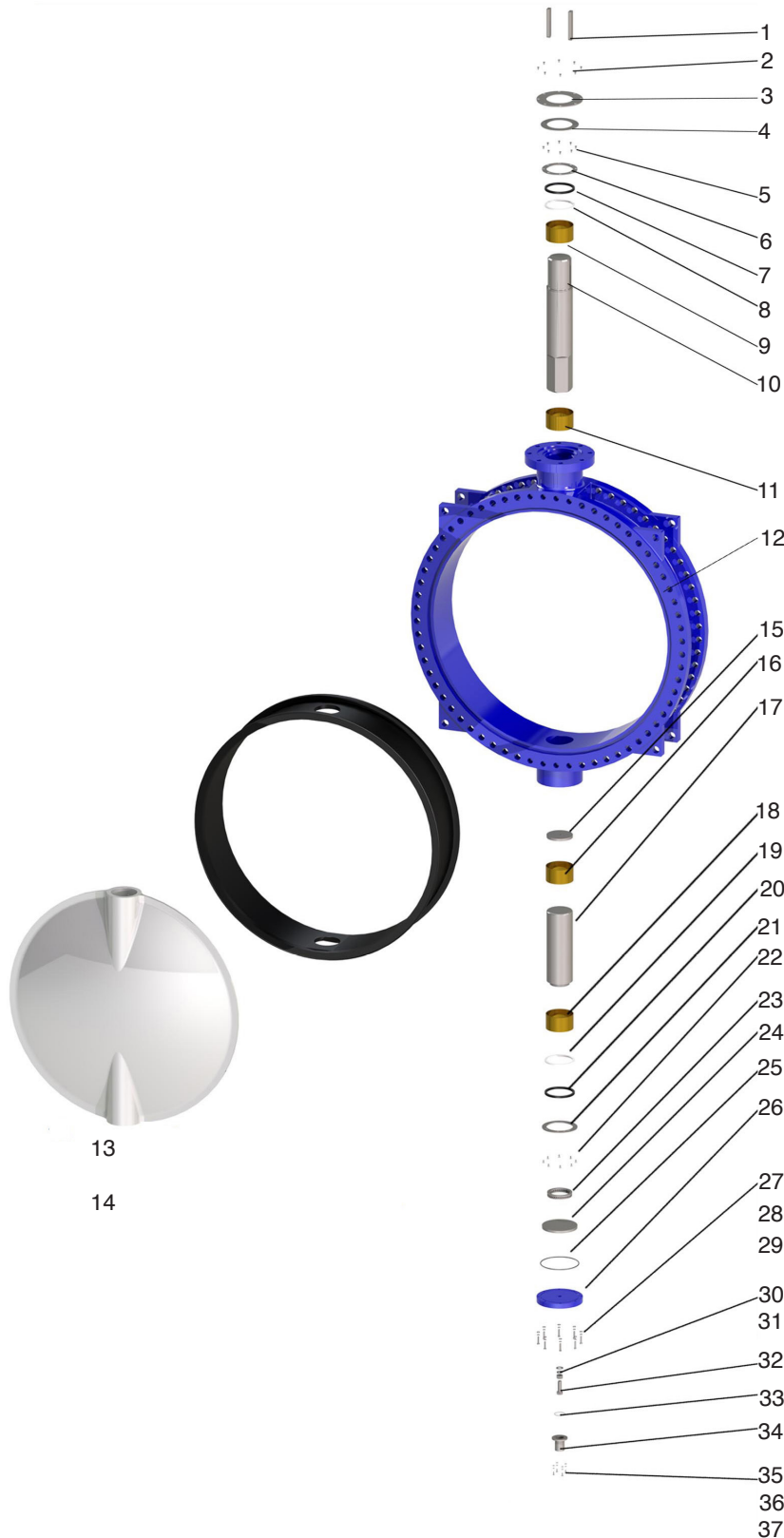
No	Parts Name	Materials
1	U Shape Gland	Stainless Steel, Carbon Steel
2	Bushing	FRP
3	Packing	NBR / EPDM
4	Up Shaft	SS410, SS304, SS431, SS316, Monel, K500, 17-4PH, C6300, C92200, 2507, 2205
5	Down Shaft	SS410, SS304, SS431, SS316, Monel, K500, 17-4PH, C6300, C92200, 2507, 2205
6	Body	GG20, GG25, GGG40, GGG45, GGG50
7	Seat	NBR (BUNA-N), EPDM, HEPDM, FKM (VITON), Polychloroprene, Natural Rubber, Silicon Rubber
8	Disc	GGG40, GGG45, GGG50, WCB, WCC, LCC, LCB, CF8, CF8M, CF3, CF3M, C95800, C95400, C9550

## 85 SERIES PARTS IDENTIFICATION



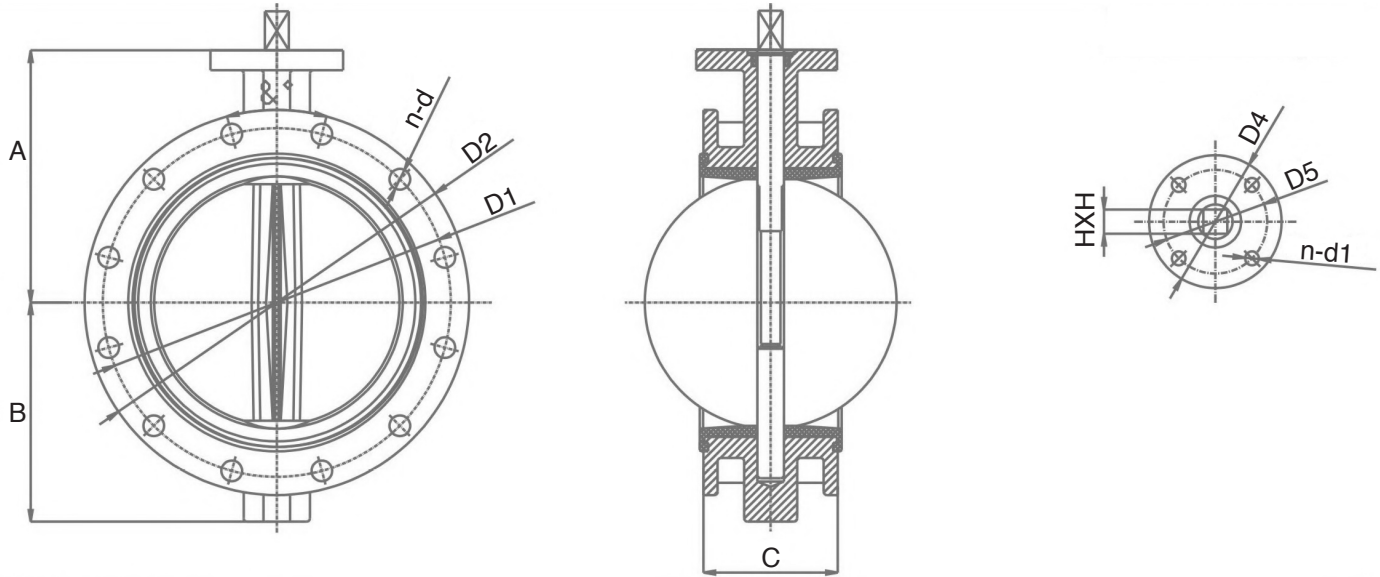
No	Parts Name	Materials
1	Packing Gland	Stainless Steel, Carbon Steel
2	Packing Gasket	PTFE
3	Packing	NBR / EPDM
4	Packing Gasket	PTFE
5	Bushing	Bronze
6	Up Shaft	SS410, SS304, SS431, SS316, C63000, Monel
7	Bushing	Bronze
8	Body	Cast Iron, Ductile Iron
9	Body Seat	NBR (BUNA-N), EPDM, FKM (VITON), Polychloroprene, Natural Rubber, Silicon Rubber
10	Disc	GGG40, GGG45, GGG50, CF8, CF8M, CF3, CF3M, C95800, C95400, C95500, WCB, WCC, LCC, LCB
11	Bushing	Bronze
12	O Ring	NBR/EPDM
13	Down Shaft	SS410, SS304, SS316, SS431, C63000, Monel
14	Bushing	Bronze
15	O Ring	NBR/EPDM
16	End Cover	Cast Iron, Ductile Iron
17	Gasket	Stainless Steel
18	Spring Washer	Stainless Steel
19	Screw	Stainless Steel

## 85 SERIES PARTS IDENTIFICATION



No	Parts Name	Materials
1	Key	Carbon Steel
2	Screw	Stainless Steel
3	Gland	Carbon Steel
4	Shaft Retainer	Stainless Steel, Carbon Steel
5	Bolts	Stainless Steel
6	Packing Gland	Carbon Steel
7	Packing	EPDM/NBR
8	Packing Gasket	PTFE
9	Bushing	Luberized Bronze
10	Up Shaft	Stainless Steel, Monel, K500, C63200
11	Bushing	Luberized Bronze
12	Body	Cast Iron, Ductile Iron
13	Disc	Ductile Iron, Stainless Steel, Carbon Steel, AL Bronze
14	Seat	Natural Rubber, Hypalon, EPDM, Neoprene, NBR, Viton, Abrasion-resistant Rubber
15	Gasket	Stainless Steel
16	Bushing	Luberized Bronze
17	Down Shaft	Stainless Steel, Monel, K500, C63200
18	Bushing	Luberized Bronze
19	Packing Gasket	PTFE
20	Packing	EPDM/NBR
21	Packing Gland	Carbon Steel
22	Bolts	Stainless Steel
23	Bearing	Assembly
24	Tray	Carbon Steel
25	O Ring	EPDM/NBR
26	End Cover	Cast Iron, Ductile Iron
27	Gasket	Stainless Steel
28	Spring Washer	Stainless Steel
29	Screw	Stainless Steel
30	Gasket	Stainless Steel
31	Spring Washer	Stainless Steel
32	Adjusting Screw	Stainless Steel
33	O Ring	EPDM/NBR
34	Protecting Cap	Stainless Steel
35	Gasket	Stainless Steel
36	Spring Washer	Stainless Steel
37	Screw	Stainless Steel

## 84 SERIES DIMENSIONS



### OUTLINE DIMENSIONS

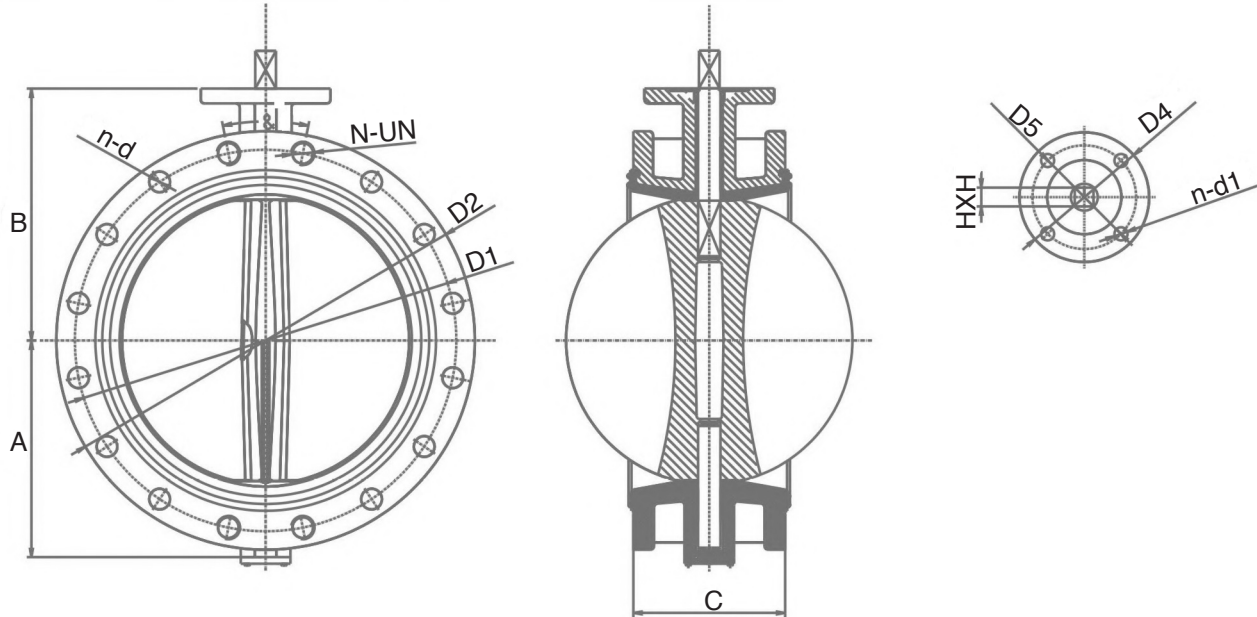
Size	A	B	C	ISO5211	D4	D5	n-d1	HXH
3"	6.22"	3.74"	5.00"	F07	3.54"	2.76"	0.16" - 0.39"	0.43" x 0.43"
4"	6.93"	4.49"	5.00"	F07	3.54"	2.76"	0.16" - 0.39"	0.43" x 0.43"
5"	7.48"	5.00"	5.00"	F07	3.54"	2.76"	0.16" - 0.39"	0.55" x 0.55"
6"	8.35"	5.47"	5.00"	F07	3.54"	2.76"	0.16" - 0.39"	0.55" x 0.55"
8"	9.29"	6.85"	5.98"	F10	4.92"	4.02"	0.16" - 0.47"	0.87" x 0.87"
10"	10.4"	7.99"	7.99"	F10	4.92"	4.02"	0.16" - 0.47"	0.87" x 0.87"
12"	12.0"	9.53"	7.99"	F10	4.92"	4.02"	0.16" - 0.47"	0.87" x 0.87"
14"	14.5"	10.5"	7.99"	F10	4.92"	4.02"	0.16" - 0.47"	0.87" x 0.87"

### FLANGE DIMENSIONS (ASME B16.1)

Size	D2	D1	N-D	&
3"	7.48"	6"	0.16" - 0.79"	3.54"
4"	9.06"	7.5"	0.31" - 0.79"	1.77"
5"	10.1"	8.5"	0.31" - 0.91"	1.77"
6"	11.0"	9.5"	0.31" - 0.91"	1.77"
8"	13.6"	11.75"	0.31" - 0.91"	1.77"
10"	15.9"	14.25"	0.47" - 1.02"	1.18"
12"	19.1"	17"	0.47" - 1.02"	1.18"
14"	21.1"	18.75"	0.47" - 1.14"	1.18"



## 85 SERIES DIMENSIONS



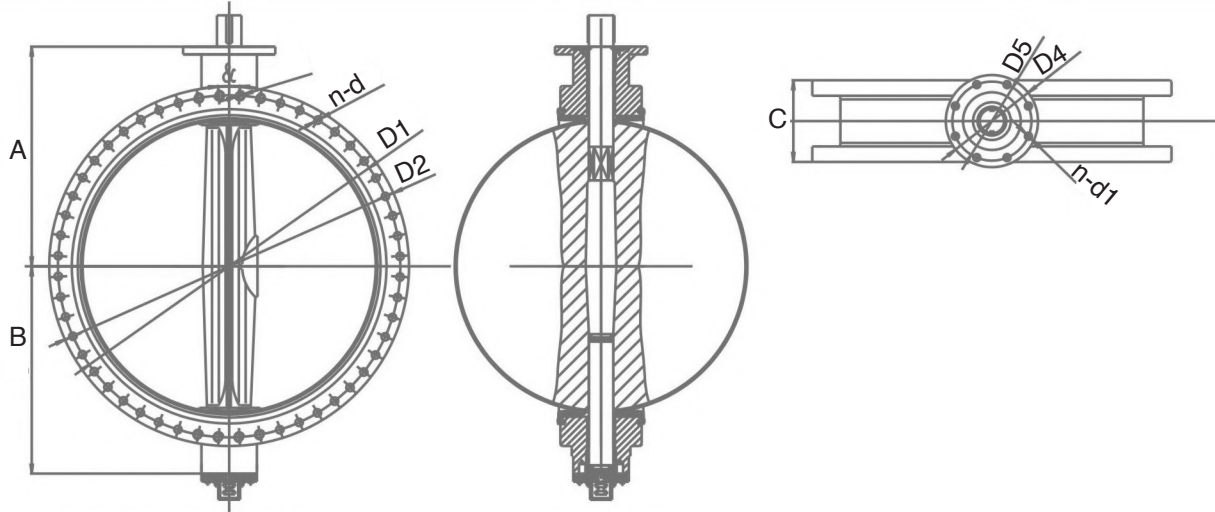
### OUTLINE DIMENSIONS

Size	A	B	C	ISO5211	D4	D5	n-d1	HXH
16"	12.2"	15.7"	7.99"	F14	5.51"	5.51"	0.16" - 0.71"	1.06" x 1.06"
18"	13.4"	16.6"	7.99"	F14	5.51"	5.51"	0.16" - 0.71"	1.06" x 1.06"
20"	14.3"	17.9"	7.99"	F14	5.51"	5.51"	0.16" - 0.71"	1.42" x 1.42"
24"	17.8"	22.2"	7.99"	F16	8.27"	6.50"	0.16" - 0.87"	1.42" x 1.42"

### FLANGE DIMENSIONS (ASME B16.1)

Size	D2	D1	N-D	N-UN	&
16"	23.4"	21.25"	0.63" - 1.14"	-	0.88"
18"	25"	22.75"	0.47" - 1.26"	4 - 1-1/8" - 8UN-2B	0.88"
20"	27.6"	25"	0.63" - 1.26"	4 - 1-1/8" - 8UN-2B	0.71"
24"	32.1"	29.5"	0.63" - 1.38"	4 - 1-1/8" - 8UN-2B	0.71"

## 85 SERIES DIMENSIONS



### OUTLINE DIMENSIONS

Size	A	B	C	ISO5211	D4	D5	n-d1
30"	25.6"	20.1"	12.0"	F25	11.8"	10.0"	0.31" - 0.71"
36"	28.3"	25.0"	12.0"	F25	11.8"	10.0"	0.31" - 0.71"
42"	33.8"	29.8"	12.0"	F25	11.8"	10.0"	0.31" - 0.71"
48"	37.7"	33.2"	15.0"	F30	13.8"	11.7"	0.31" - 0.87"
54"	40.6"	37.4"	15.0"	F35	16.3"	14.0"	0.31" - 1.26"
60"	41.3"	38.4"	15.0"	F35	16.3"	14.0"	0.31" - 1.26"
66"	48.3"	43.9"	18.0"	F40	18.7"	16.0"	0.31" - 1.50"
72"	52.2"	47.2"	18.0"	F48	22.0"	19.0"	0.47" - 1.50"
78"	56.4"	52.4"	18.0"	F48	22.0"	19.0"	0.47" - 1.50"

### FLANGE DIMENSIONS (ASME B16.1)

Size	D2	D1	n-d	n-UN	&
30"	36.0"	38.75"	0.94" - 1.38"	4 - 1-1/4" - 8UN - 2B	0.51"
36"	42.75"	46.0"	1.10" - 1.65"	4 - 1-1/2" - 8UN - 2B	0.44"
42"	53.0"	49.5"	1.30" - 1.65"	4 - 1-1/2" - 8UN - 2B	0.39"
48"	56.0"	59.5"	1.57" - 1.65"	4 - 1-1/2" - 8UN - 2B	0.32"
54"	66.25"	62.75"	1.57" - 1.89"	4 - 1-3/4" - 8UN - 2B	0.32"
60"	73.0"	69.25"	1.89" - 1.89"	4 - 1-3/4" - 8UN - 2B	0.27"
66"	80.0"	76.0"	1.89" - 1.89"	4 - 1-3/4" - 8UN - 2B	0.27"
72"	86.5"	82.5"	2.20" - 1.89"	4 - 1-3/4" - 8UN - 2B	0.24"
78"	93.0"	89.0"	2.36" - 2.13"	4 - 2" - 8UN - 2B	0.22"

### INSTALLATION

The butterfly valve can be installed on the pipeline at any angle.

1. The valve can be used in either flow direction.
2. Before installation, the butterfly valve should be stored in the warehouse to prevent moisture. The disc should be kept to 15° angle open.
3. Before installation, the following processes should be completed:
  - Check carefully and confirm the operation condition of the valve is in line with the technical specification and requirements.
  - Clean the disc sealing area and body sealing completely.
  - Check and confirm the handle is strongly connected to the flange and stem.
4. When mounting the butterfly valve in the pipeline, the load for tightening connection bolts should be uniform.
5. After installation, the disc must be opened for the strength pressure test before being carried out.
6. After installation, the valve should be examined regularly. The main items to be checked are:
  - Whether the valve seat and O-ring have been damaged
  - Check the sealing effects of the disc sealing area
  - Check for scuffing at the time of on-off rotation
  - Perform a sealing test after examination





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