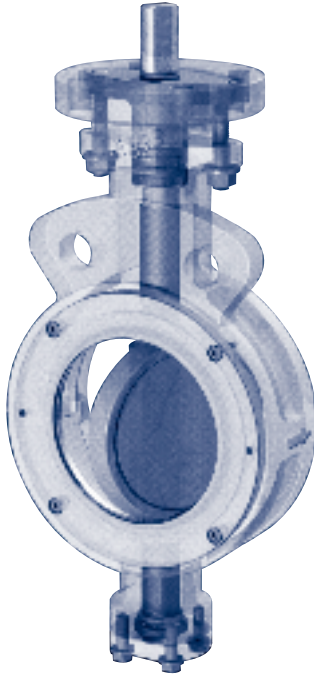


# High Performance Butterfly Valve Series 400



## Construction Specifications:

**Sizes:** 2" through 48"

**Body:** Carbon Steel A216-WCB  
Stainless Steel A351-CF8M

**Disc:** Stainless Steel A351-CF8M

**Stem:** Stainless Steel 17-4PH

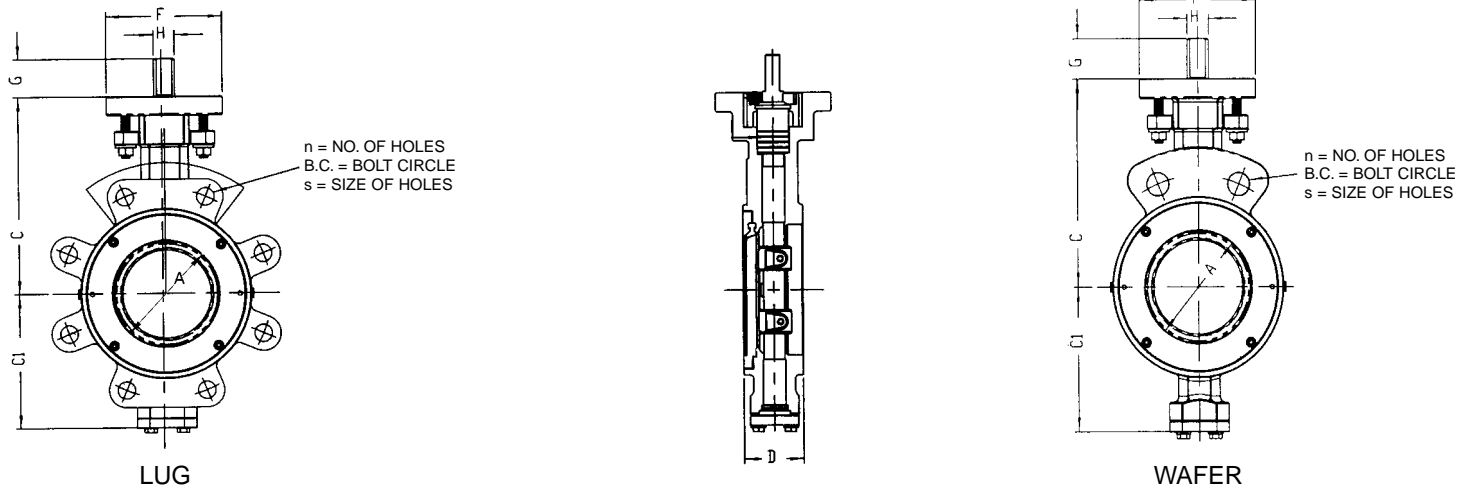
**Seat:** RTFE

**Actuation Options:** Worm Gear      Lever  
Pneumatic                  Electric

## Features:

1. **Body** — High quality one piece casting which provides consistent uniformity. Sizes 2 inch to 6 inch are investment castings. Body is available in Wafer, Lug, Double Flanged, and Butt-welded.
2. **Underneath Drawn Gland Packing** — Allows for direct mounting of actuation and ease of adjustment.
3. **Seat** — An advanced design that provides a bidirectional interference and pressure assisted seal. This design achieves maximum seal at low, medium and high pressure.
4. **Extended Neck** — Allows for two inches of pipe insulation.
5. **Packing** — PTFE is a cup and cone system and Graphite is die formed rings for positive seals.
6. **Bearings** — Made of Graphite impregnated or Reinforced PTFE impregnated 316 Stainless Steel to ensure long service life.
7. **Stem** — Manufactured of high strength 17-4 ph Stainless Steel to provide maximum strength and stability for high torque applications.
8. **Disc** — Made of CF8M Stainless Steel and engineered to allow for quick release from the seat. This reduces the amount of torque needed to un-seat the disc.
9. **Disc Taper Pins** — Pins are offset from the center of the stem which places them in compression rather than in shear. This gives them a yield point greater than the stem itself. Pins are welded in place after final assembly and testing.
10. **Integrally Cast Disc Position Stop** — Machined position stop on the body locates the disc in the seat to achieve maximum seat and seal life.

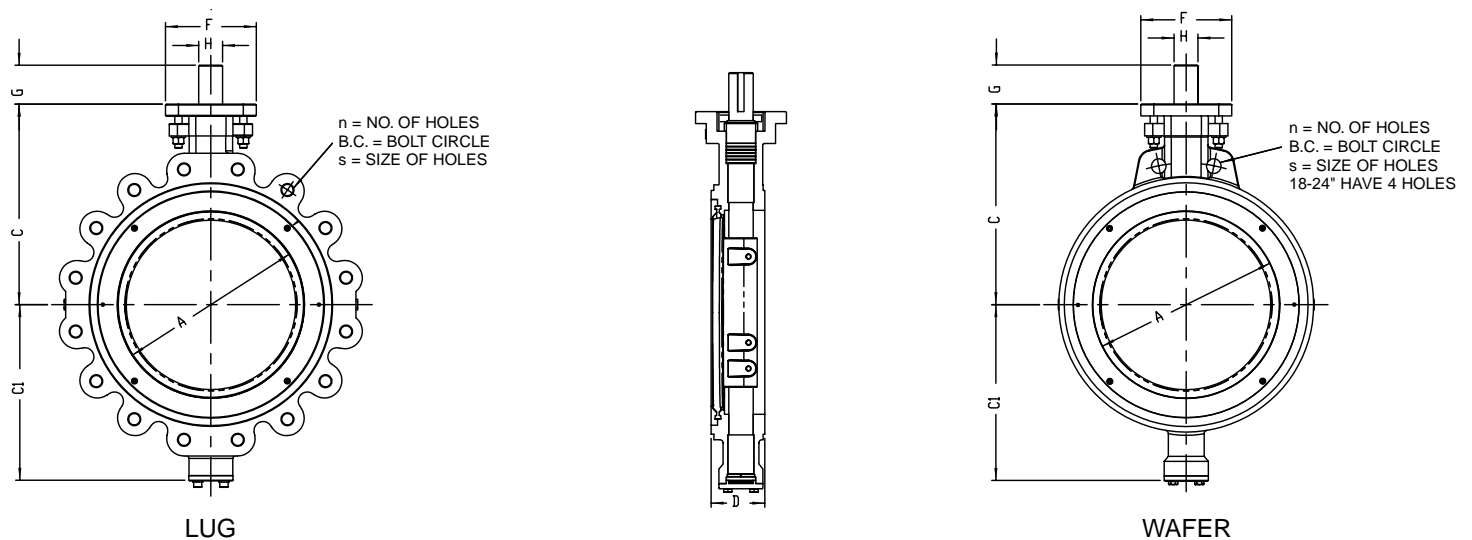
## ANSI Class 150 2"-12" Lugged and Wafer



### Valve Dimensions

Size	FLANGE DIMENSIONS													
	A	C	C1	D	F	G	H	B.C.	Lug			Wafer		
									n	s	n	s		
2"	1.85	4.92	3.93	1.69	4	1.25	.563	4.75	4	5/8-11 UNC	2	0.75		
2.5"	2.44	5.63	4.02	1.81	4	1.25	.625	5.50	4	5/8-11 UNC	2	0.75		
3"	2.91	6.23	4.41	1.88	4	1.25	.625	6.00	4	5/8-11 UNC	2	0.75		
4"	3.82	7.01	4.84	2.12	4	1.25	.750	7.50	8	5/8-11 UNC	2	0.75		
6"	5.43	8.34	6.53	2.25	4	1.25	.750	9.50	8	3/4-10 UNC	2	0.88		
8"	7.36	9.45	7.72	2.50	6	1.25	.875	11.75	8	3/4-10 UNC	2	0.88		
10"	9.29	11.02	8.66	2.81	6	2.00	1.125	14.25	12	7/8-9 UNC	2	1.00		
12"	10.79	12.00	10.43	3.19	6	2.00	1.125	17.00	12	7/8-9 UNC	2	1.00		

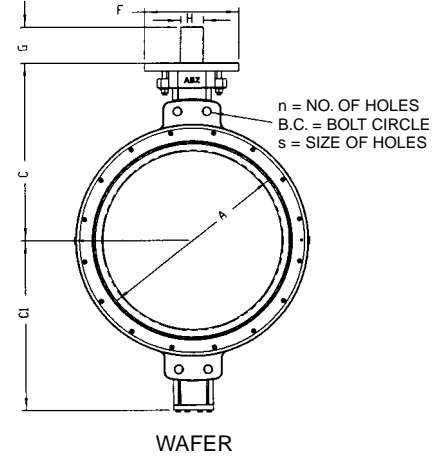
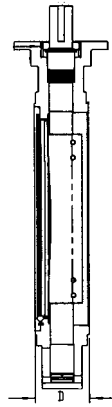
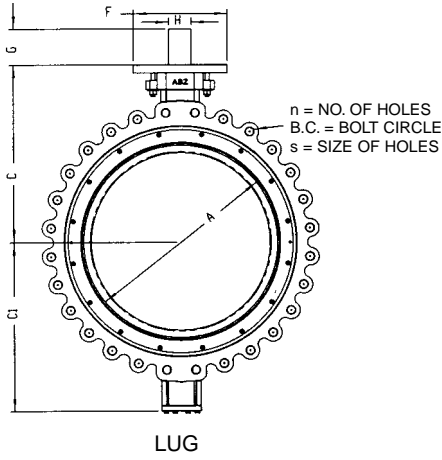
## ANSI Class 150 14"-24" Lugged and Wafer



### Valve Dimensions

INCH	MM	FLANGE DIMENSIONS													
		A	C	C1	D	F	G	H	B.C.	Lug			Wafer		
										n	s	n	s		
14	350	12.44	13.19	11.81	3.62	6.00	2.25	1.375	18.75	12	1-8 UNC	2	1.12		
16	400	14.71	15.47	13.58	4.00	6.88	3.00	1.875	21.75	16	1-8 UNC	2	1.12		
18	450	16.46	16.81	14.76	4.50	6.88	3.00	1.875	22.75	16	1 1/8-8 UNC	4	1.25		
20	500	18.43	17.13	16.14	5.00	6.88	3.00	2.125	25.00	20	1 1/8-8 UNC	4	1 1/8-8 UNC		
24	600	21.57	20.87	18.70	6.06	11.00	4.00	2.555	29.50	20	1 1/4-8 UNC	4	1 1/4-8 UNC		

# ANSI Class 150 30"-48" Lugged and Wafer

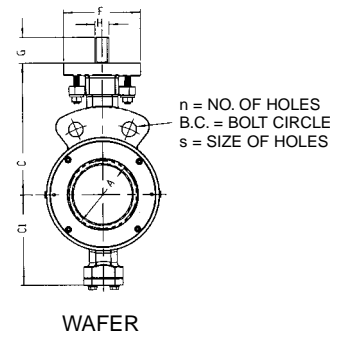
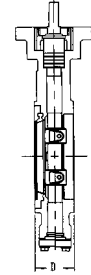
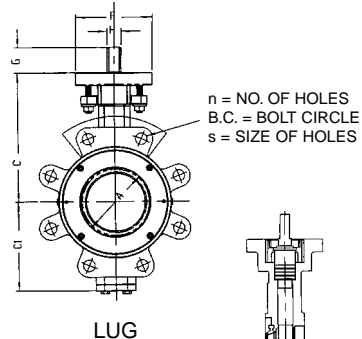
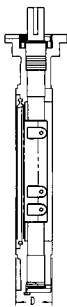
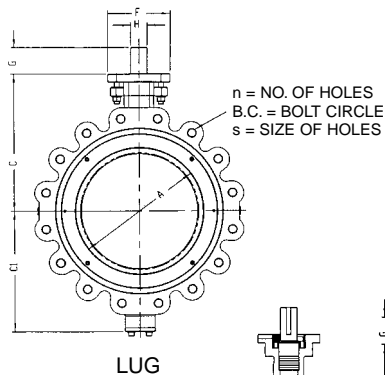


## Valve Dimensions

Size	FLANGE DIMENSIONS													
	Lug							Wafer						
	A	C	C1	D	F	G	H	B.C.	n	s	n	s		
30"	27.90	24.60	23.62	7.48	11.5	5.0	3.15	36.00	28	1 1/4-8 UNC	4	1 1/4-8 UNC		
36"	33.45	28.35	27.36	7.99	11.5	5.0	3.15	42.75	32	1 1/2-8 UNC	4	1 1/2-8 UNC		
42"	39.92	34.45	33.46	9.49	13.5	6.0	4.00	49.50	36	1 1/2-8 UNC	4	1 1/2-8 UNC		
48"	45.75	36.42	35.04	10.0	13.5	6.0	4.00	56.00	44	1 1/2-8 UNC	4	1 1/2-8 UNC		

## Valve Dimensions

Size	FLANGE DIMENSIONS													
	Lug							Wafer						
	A	C	C1	D	F	G	H	B.C.	n	s	n	s		
2"	1.85	4.92	3.93	1.69	4	1.25	.563	5.00	8	5/8-11 UNC	2	0.88		
2.5"	2.44	5.63	4.02	1.81	4	1.25	.625	5.88	8	3/4-10 UNC	2	0.88		
3"	2.91	6.23	4.41	1.88	4	1.25	.625	6.62	8	3/4-10 UNC	2	0.88		
4"	3.82	7.01	4.84	2.12	4	1.25	.750	7.88	8	3/4-10 UNC	2	0.88		
6"	5.43	8.66	6.89	2.31	4	1.25	.750	10.62	12	3/4-10 UNC	2	0.88		
8"	7.36	10.43	8.66	2.88	6	2.00	1.125	13.00	12	7/8-9 UNC	2	1.00		
10"	9.29	11.42	9.53	3.25	6	2.00	1.125	15.25	16	1"-8 UNC	2	1"-8 UNC		
12"	10.79	10.83	13.00	3.62	6	2.00	1.375	17.75	16	1 1/8-8 UNC	2	1 1/8-8 UNC		

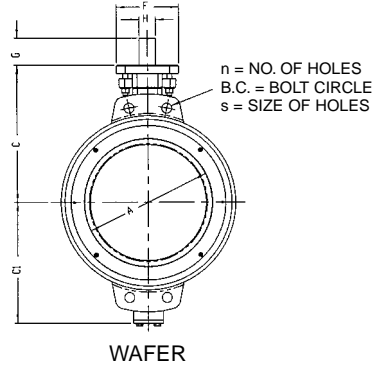


# ANSI Class 300 2"-12" Lugged and Wafer

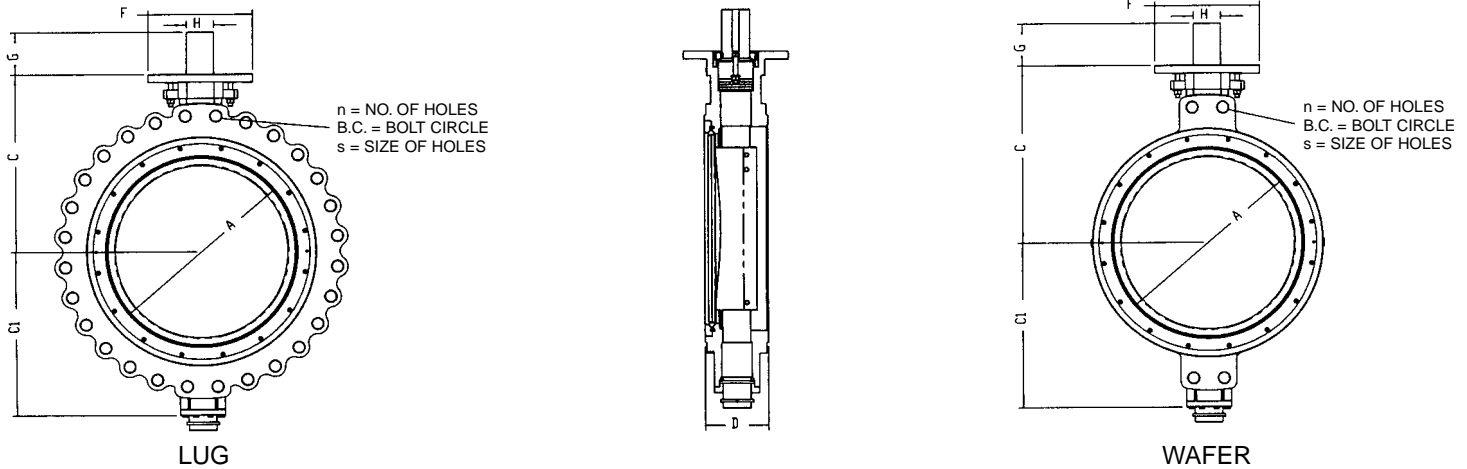
# ANSI Class 300 14"- 24" Lugged and Wafer

## Valve Dimensions

Size	FLANGE DIMENSIONS													
	Lug							Wafer						
	A	C	C1	D	F	G	H	B.C.	n	s	n	s		
14"	12.44	14.76	12.80	4.62	8	3.00	1.875	20.25	20	1 1/8-8 UNC	4	1 1/8-8 UNC		
16"	14.25	16.73	14.45	5.24	8	3.00	2.125	22.50	20	1 1/4-8 UNC	4	1 1/4-8 UNC		
18"	16.46	18.30	16.14	5.88	11.5	4.00	2.562	24.75	24	1 1/4-8 UNC	4	1 1/4-8 UNC		
20"	18.43	19.00	17.52	6.25	11.5	4.00	2.562	27.00	24	1 1/4-8 UNC	4	1 1/4-8 UNC		
24"	21.57	22.83	20.55	7.12	13.0	4.50	3.150	32.00	24	1 1/2-8 UNC	4	1 1/2-8 UNC		



# ANSI Class 300 30" - 48" Lugged and Wafer



## Valve Dimensions

Size	FLANGE DIMENSIONS											
	A	C	C1	D	F	G	H	Lug			Wafer	
								B.C.	n	s	n	s
30"	27.90	26.38	26.00	9.06	13.5	6.0	4.00	39.25	28	1 3/4-8 UNC	4	1 3/4-8 UNC
36"	33.45	31.10	30.31	9.49	13.5	6.0	4.00	46.00	32	2-8 UNC	4	2-8 UNC
42"	39.92	36.40	35.43	11.81	13.5	6.0	4.00	47.50	32	1 5/8-8 UNC	4	1 5/8-8 UNC
48"	45.75	39.40	38.40	13.78	16.5	7.0	6.00	54.00	32	1 7/8-8 UNC	4	1 7/8-8 UNC

## High Performance Butterfly Valve Specifications

**Service** ANSI Class 150 – 285 psi  
ANSI Class 300 – 720 psi

### General

All valves shall be capable of bi-directional, drop tight service to rated pressure, conforming to the design standards of ANSI B16.34 steel valves and ANSI B16.5 flange mating. Valves shall be Pratt Series 400 ANSI 150 (or ANSI 300) or approved equal.

### Valve Body

The valve body shall be constructed of carbon steel ASTM A216 WCB (or stainless steel ASTM A351, Grade CF8M), wafer (or lug wafer) design for installation between ANSI B16.5 flanges 150# (or 300#). Laying length shall conform to MSS-SP67, latest revision. Body, when carbon steel, shall be painted with a baked on epoxy powder coating.

### Valve Seats

Seat shall be PTFE, retained in the body and be replaceable without removing the disc or stem.

### Valve Disc

The disc shall be constructed of stainless steel A351-CF8M and shall be offset to provide uninterrupted 360° seating.

### Valve Shaft

Valve shafts shall be 17-4 stainless steel. At the operator end of the valve shaft, a packing gland utilizing "V" type chevron packing shall be utilized.

### Testing

Valves shall be tested in accordance with ANSI B16.104 Class V.