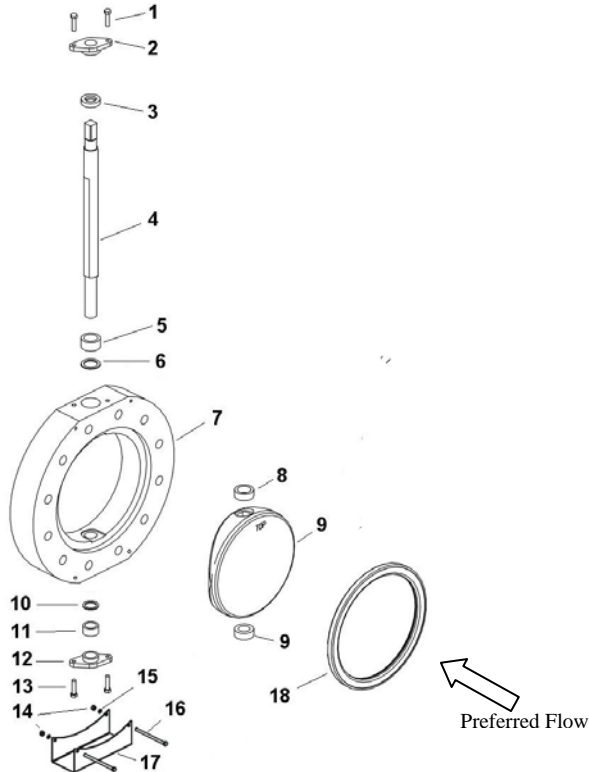


TECHNICAL SPECIFICATIONS
Wafer Butterfly Valves: 14"– 42"
Series 310HD Fiberglass Reinforced Vinyl Ester



MATERIALS OF CONSTRUCTION



Item	Description	Material
1	Top Gland Bolts	304 Stainless Steel
2	Top Gland	316 Stainless Steel
3	Shaft Retainer Ring	316 Stainless Steel
4	Shaft	17-4PH SS/Vinyl Ester
5	Top Packing	Virgin PTFE V-Rings
6	Support Ring, Top	316 Stainless Steel
7	Valve Body	Fiberglass reinforced Vinyl Ester
8	Disc Spacer	Glass-reinforced PTFE
9	Disc	Fiberglass reinforced Vinyl Ester
10	Support Ring, Bottom	316 Stainless Steel
11	Bottom Packing	Virgin PTFE V-Rings
12	Bottom Gland	316 Stainless Steel
13	Bottom Gland Bolts	304 Stainless Steel
14	Nuts, Bottom Shield	304 Stainless Steel
15	Lock Washers	304 Stainless Steel
16	Hex Head Cap Screws	304 Stainless Steel
17	Bottom Shield	Epoxy-coated Carbon Steel
18	Seat Ring	Viton/Aluminum back-up ring

1. SCOPE

High Performance Wafer Butterfly Valves with through-drilled or threaded flange bolt holes for corrosive chemical service used in construction of pressurized piping systems.

2. SERVICE TEMPERATURE RATING

Continuous temperature service from -50 to 250° F. Short-term exposures to 300° F are acceptable. Pressure rating 150 psi shutoff, 14"-20"; 75 psi shutoff, 24"-42" up to 200° F.

3. DESIGN

- Valve seat and disc geometry shall provide a 360° uninterrupted bi-directional bubble tight seal .
- Disc design shall be double-offset for reduced torque and seat wear.
- Face-to-face dimensions shall be as shown on Page 2.
- Stems shall be single-piece, pressure-balanced , blowout proof design.
- Packing shall be adjustable V-ring type.
- Valve disc in the open position shall not interfere with the I.D. of standard PTFE-lined steel pipe.
- Gear actuator shall be available on all sizes.
- Valves shall be capable of on-off or modulating control

4. QUALITY ASSURANCE

- The Manufacturer’s facility shall be certified to ISO 9001 or equivalent. The Manufacturer shall be certified to the European Pressure Equipment Directive (PED) and the “CE” mark shall be affixed to each valve label.
- Each valve shall be hydrostatically tested with water at 225 psig with the disc open and both ends blanked for 3 minutes with no evidence of leakage.
- Each valve shall be subjected to a hydrostatic seat test at not less than 110% of the rated shutoff pressure and an air test at 20 psig with no evidence of leakage.

5. PACKING AND SHIPPING

Valves shall be shipped in the closed position. Each valve shall be marked with the manufacturer, size, series, construction materials, serial number, and valve component designation.

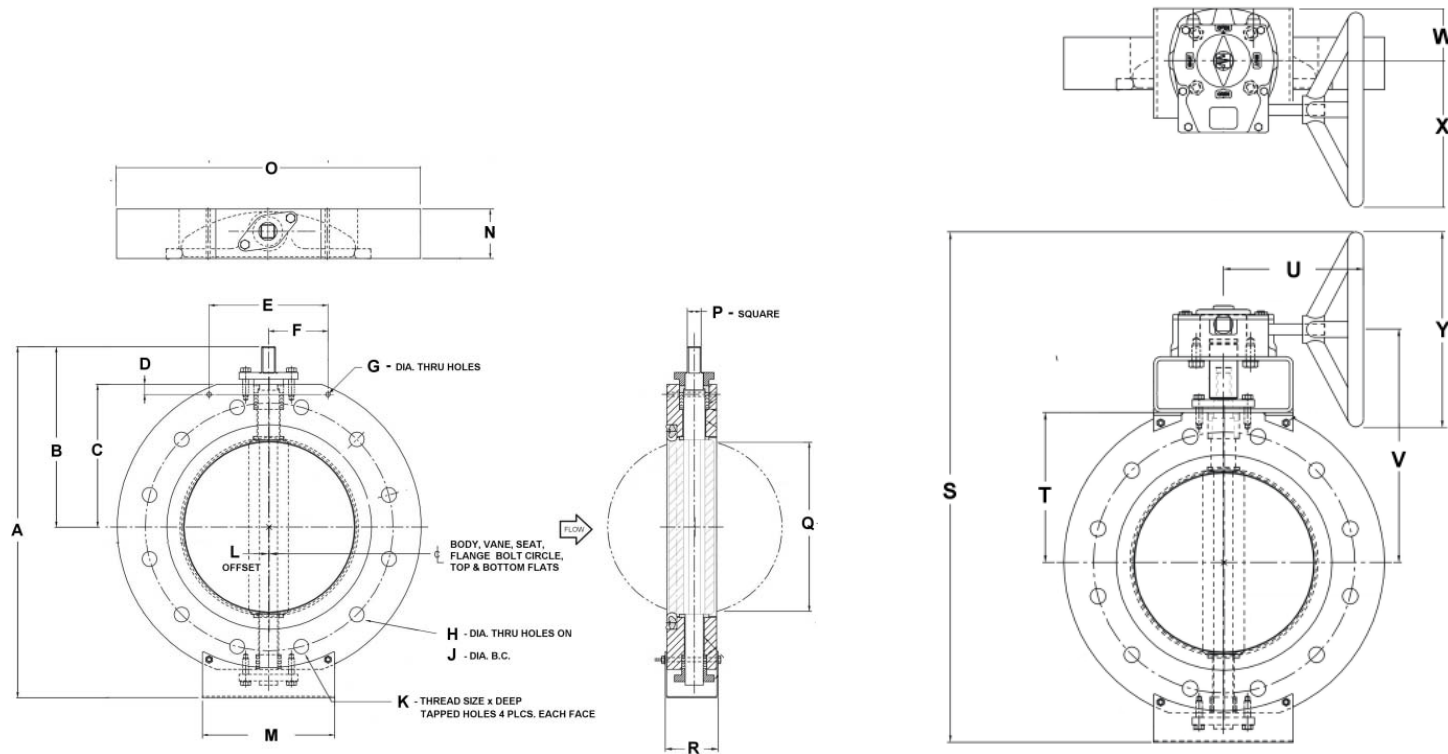
6. AVAILABILITY

Valves meeting this specification are available from:

Nil-Cor®, LLC
 4855 Broadmoor Ave.
 Kentwood, MI 49512
 P: 616-554-3100
 F: 616-554-5623
www.nilcor.com

Nil-Cor 310HD BUTTERFLY VALVE DIMENSIONS

All dimensions are in
unless otherwise



SIZE	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	WT. BARE STEM	WT. WITH GEAR	TORQUE (IN-LB)	TORQUE (N-M)	Cv
14	26.56	13.65	10.79	0.75	9.00	4.50	0.34	1.13	18.75	NA	.05	10.00	3.75	23.00	1.063	12.78	4.08	36.66	10.79	10.06	16.75	3.75	10.52	14.00	90	120	7,850	887	5,984
16	30.34	15.72	12.25	0.88	9.00	4.50	0.34	1.13	21.25	NA	.05	10.00	4.12	25.50	1.063	14.97	4.46	39.84	12.25	10.06	18.22	3.75	10.52	14.00	155	185	10,675	1,206	7,744
18	32.27	16.87	13.40	0.81	8.50	4.25	0.41	1.25	22.75	1-1/8 x 1.0	.05	10.00	4.63	28.00	1.417	17.00	4.96	41.77	13.40	10.06	19.37	3.75	10.52	14.00	170	200	13,850	1,565	10,120
20	34.69	17.89	14.39	1.06	11.50	5.75	0.41	1.25	25.00	1-1/8 x 1.0	.075	13.00	5.12	30.50	1.811	18.86	5.45	48.37	14.39	12.84	22.36	5.13	13.84	18.00	220	280	19,970	2,256	12,320
24	40.80	20.78	17.28	1.25	11.00	5.50	0.53	1.38	29.50	1-1/4 x 1.25	.075	12.50	6.19	36.00	1.811	22.71	6.61	54.27	17.28	12.84	25.25	5.13	13.84	18.00	330	390	23,875	2,697	18,040
26	43.14	21.95	18.45	1.25	11.38	5.69	0.53	1.38	31.75	1-1/4 x 1.25	.075	13.00	6.38	38.25	1.811	24.73	6.80	56.61	18.45	13.83	26.41	5.75	15.06	18.00	450	510	29,850	3,373	19,500
30	49.00	24.64	20.64	1.38	12.50	6.25	0.66	1.38	36.00	1-1/4 x 1.25	.075	14.00	6.50	43.00	2.165	28.00	7.13	67.00	20.64	16.50	31.00	5.75	18.50	24.00	700	800	39,100	4,417	27,280
36*	58.00	29.52	24.49	1.50	14.00	7.00	0.66	1.62	42.75	1-1/2 x 1.5	.100	15.00	7.88	52.00	2.165	34.00	8.63	74.97	24.49	16.50	34.00	5.75	18.50	24.00	1050	1250	62,375	7,047	39,280
42*	65.00	33.00	27.50	5.50	16.00	8.00	0.76	1.62	49.50	1-1/2 x 1.5	.125	17.00	8.88	56.00	2.750	39.50	9.80	85.50	27.50	18.00	36.00	6.50	19.00	26.00	1300	1550	81,000	9,152	55,000

(*): 36" and 42": Preliminary Design. Consult Factory for current information.

Strong, Lightweight, Chemical Resistant

High Performance Double-Offset ButterFly Valves

- 300, 310, 500 XP or 610XP Resin System
- Viton Seat
- Composite Disc
- Size Range 3" - 36"
- Service Temperature (-)50°F to 250°F
- ANSI CL 150
- DIN, JIS & BS Flg. Drilling Option

Note: Not all resin systems available with all sizes



PTFE / PFA Lined Butterfly Valves

- Structural Composite
- PTFE Seat / PFA Encapsulated Disc
- Size Range 2" - 12"
- Service Temperature (-)50°F to 275°F
- ANSI CL 150 Drilling
- DIN, JIS & BS Flg. Drilling Option



Elastomer Lined Butterfly Valves

- Structural Composite
- EPDM or Hypalon Seat
- EPDM or Hypalon Encapsulated Disc
- Size Range 2" - 12"
- Service Temperature (-)50°F to 250°F
- ANSI CL 150
- DIN, JIS & BS Flg. Drilling Option



3-Way Ball Valve

- 300 or 310 Resin System
- Fiberglass or Graphite Reinforcements
- Size Range 1 1/2"
- Service Temperature (-)50°F to 250°F
- ANSI CL 150
- DIN, JIS & BS Flg. Drilling Option



em Choices

- with Graphite Fiber
- with Glass Fiber
- e with Glass Fiber
- oxy with Graphite Fiber
- oxy with Glass Fiber

s & Chemical Resistance
alog 1000