

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



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”-24” ; 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 1.5X maximum working pressure 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

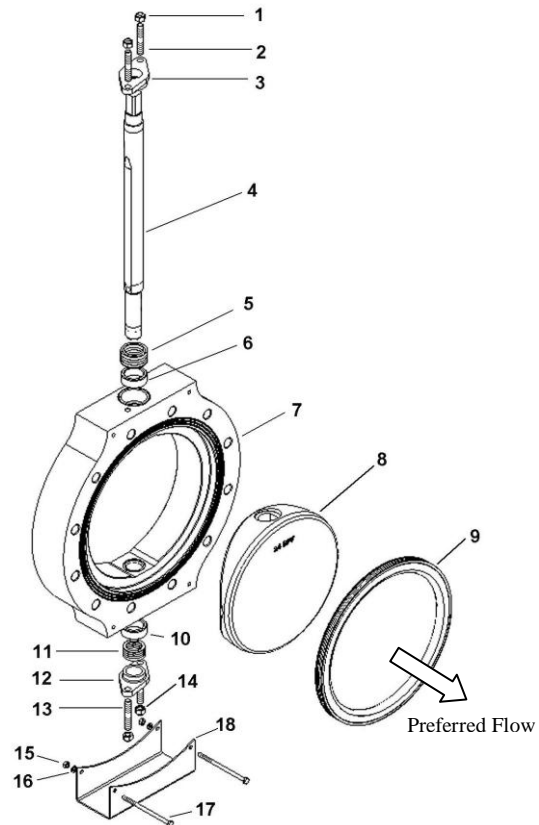
Valves shall be shipped in the closed position. Each valve shall be marked with the manufacturer, size, series, construction materials, serial number, and valve component designation.

6. AVAILABILITY

Valves meeting this specification are available from:

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

MATERIALS OF CONSTRUCTION

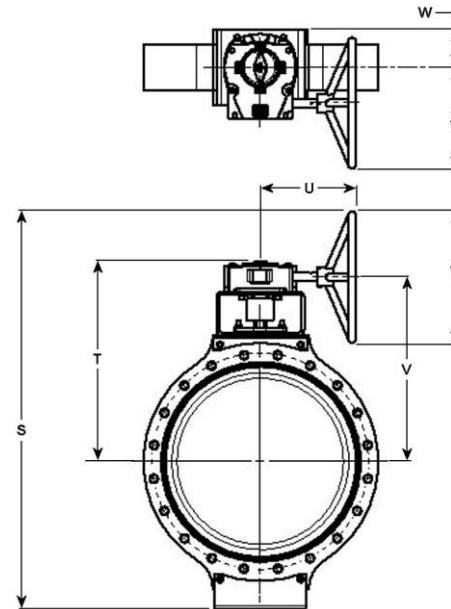
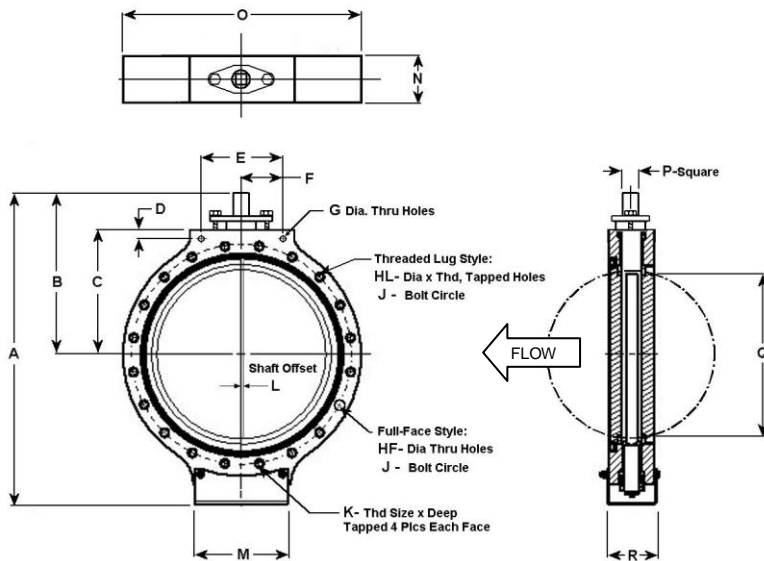


Item	Description	Material
1	Gland Nut, Top	304 Stainless Steel
2	Gland Stud, Top	304 Stainless Steel
3	Gland, Top	316 Stainless Steel
4	Shaft	17-4PH SS/Vinyl Ester
5	Packing, Top	Virgin PTFE V-Rings
6	Disc Spacer, Top	Glass-reinforced PTFE
7	Valve Body	Fiberglass reinforced Vinyl Ester
8	Disc	Fiberglass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

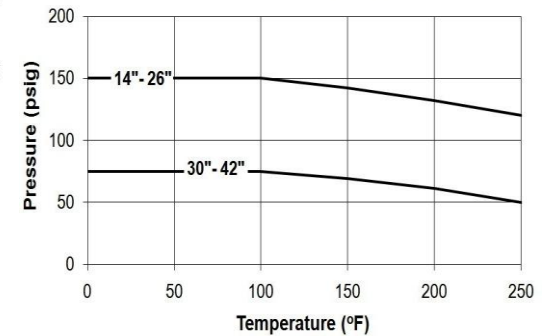
Nil-Cor 310HD BUTTERFLY VALVE DIMENSIONS

All dimensions are in inches unless otherwise specified

SIZE	14"	16"	18"	20"	24"	26"	30"	36"	42"
TORQUE (IN-LBS)	7,850	10,675	13,850	19,970	23,875	29,850	39,100	62,375	81,000
TORQUE (NM)	887	1,206	1,565	2,256	2,697	3,373	4,417	7,047	9,152
Cv	5,984	7,744	10,120	12,320	18,040	19,500	27,280	39,280	55,000



Shutoff Pressure/Temperature
14" - 42" HD Butterfly Design



SIZE	A	B	C	D	E	F	G	HF	HL	J	K	No. Holes	M	N	O	P	Q	R	S	T	U	V	W	X	Y	WT. BARE STEM	WT. WITH GEAR
14	26.56	13.65	10.79	0.75	9.00	4.50	0.34	1.13	1" - 8	18.75	NA	12	10.56	3.75	21.00	1.063	12.73	4.08	36.32	18.30	11.51	16.41	3.75	10.63	14.00	77	106
16	30.23	15.61	12.25	0.88	9.00	4.50	0.34	1.13	1" - 8	21.25	NA	16	10.81	4.13	23.50	1.063	14.97	4.46	39.50	19.75	11.51	17.88	3.75	10.63	14.00	132	163
18	32.18	16.78	13.40	0.81	8.50	4.25	0.41	1.25	1-1/8" - 7	22.75	1-1/8" - 7 x 1.0	16	10.48	4.63	25.00	1.417	17.00	4.96	41.43	20.90	11.51	19.03	3.75	10.63	14.00	145	176
20	34.78	17.77	14.39	1.06	11.50	5.75	0.41	1.25	1-1/8" - 7	25.00	1-1/8" - 7 x 1.0	20	13.13	5.12	27.50	1.811	18.86	5.54	48.65	25.04	13.98	22.64	5.13	13.98	18.00	187	246
24	40.69	20.66	17.28	1.25	11.00	5.50	0.53	1.38	1-1/4" - 7	29.50	1-1/4" - 7 x 1.25	20	13.07	6.19	32.00	1.811	22.71	6.61	54.55	27.94	14.02	25.53	5.13	13.63	18.00	281	343
26	43.03	21.83	18.45	1.25	11.37	5.69	0.53	1.38	1-1/4" - 7	31.75	1-1/4" - 7 x 1.25	24	14.43	6.38	34.25	1.811	24.73	6.80	56.89	29.10	14.01	26.70	5.75	13.62	18.00	383	449
30	48.66	25.03	20.63	1.38	12.00	6.00	0.53	1.38	1-1/4" - 7	36.00	1-1/4" - 7 x 1.25	28	17.56	6.50	38.75	2.165	28.81	7.06	67.19	31.27	21.17	31.56	5.75	16.06	24.00	595	704
36	55.86	28.86	24.00	1.25	13.50	6.75	0.53	1.62	1-1/2" - 6	42.75	1-1/2" - 6 x 1.5	32	23.03	7.88	46.00	2.953	34.66	8.44	74.19	35.00	20.81	35.19	5.75	19.30	24.00	893	1100
42	62.58	32.21	27.38	1.25	16.00	8.00	0.53	1.62	1-1/2" - 6	49.50	1-1/2" - 6 x 1.5	36	23.03	9.68	53.00	2.953	40.41	10.24	83.94	38.36	22.44	38.56	6.50	22.30	30.00	1105	1364