

TECHNICAL SPECIFICATIONS

Full-Face Wafer/Lug Butterfly Valves: 2"– 16"
Series 710 Lined Fiberglass Composite



1. SCOPE

Full-Face Wafer/Lug Butterfly Valves with through-drilled or threaded flange bolt holes for corrosive and/or abrasive chemical services.

2. SERVICE RATING

Continuous temperature service from -60 to 250° F. Short-term exposures to 300° F are acceptable.

150 PSI rating for complete temperature range.

3. MATERIALS OF CONSTRUCTION

- (1) **Body:** Glass fiber reinforced vinyl ester resin
- (2) **Disc:** PFA-lined, UHMWPE-lined, 316 stainless steel, Gr. C-2 Titanium
- (3) **Seat:** PTFE/silicone, PTFE/Viton, UHMWPE/silicone
- (4) **Body Bolts:** PTFE-coated ASTM A193 Gr. B7
- (5) **Flange Connections:** Bolt holes may be through drilled (wafer) or threaded (lug).
- (6) **ISO 5211 Mounting Pad**

4. DESIGN

- Body shall have flange clearance holes for alignment or be threaded. Threaded valves are fully rated for end-of-line service.
- Face-to-face dimensions shall be as shown on Page 2.
- Disc shall be a one piece blowout proof design.
- Stem sealing to be provided by mating primary seat/disc spherical surfaces backed up by tortuous locking barbs
- Valve design shall be such that it can be bolted into a standard PTFE-lined steel pipe and the valve disc not interfere with the lining of the pipe.
- Valve seat to be PTFE with an elastomeric energizer to provide bubble tight shut off capabilities.
- Gear or lever handle shall be available on all sizes.
- Valves shall be capable of on-off actuation or modulating control with pneumatic, electric or hydraulic actuators.

5. QUALITY ASSURANCE

- The Manufacturer's facility shall be certified to ISO 9001 or equivalent.
- Each valve shall be pneumatically tested to 165 psi with no evidence of external leakage.
- Each valve shall be subjected to a pneumatic seat test at 150 psi with no allowable leakage.

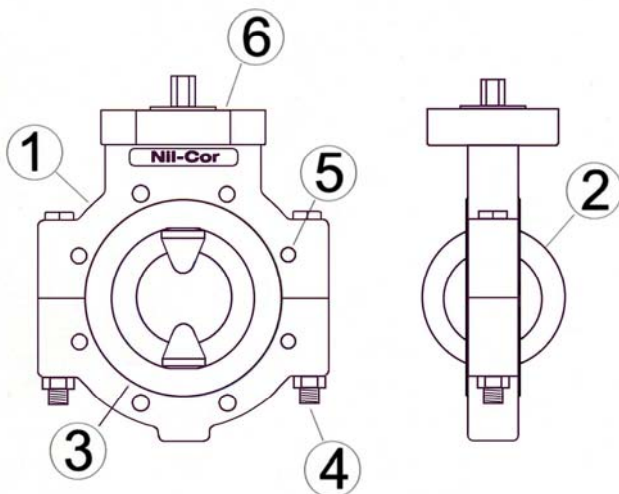
6. PACKING AND SHIPPING

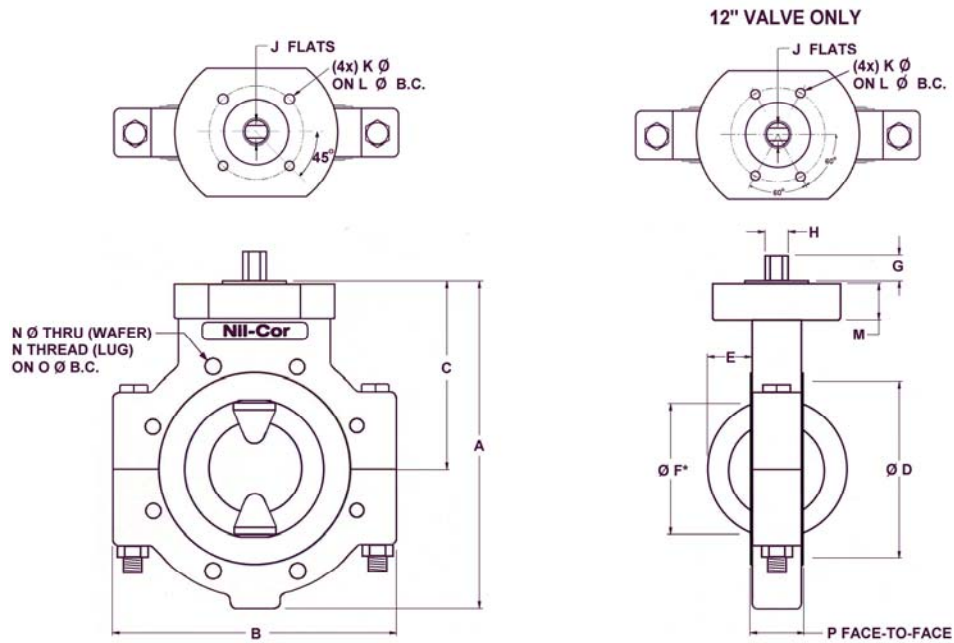
Valves shall be shipped in the closed position. Each valve shall be marked with the manufacturer, size, series, construction materials, serial number, and valve component designation.

7. AVAILABILITY

Valves meeting this specification are available from:

Nil-Cor®, LLC
12241 Rockhill Avenue, NE
Alliance, Ohio 44601
(330) 823-0500
Fax (330) 821-6722
www.nilcor.com





ENGLISH UNITS (Dimensions in inches)

SIZE	A	B	C	D	E	F	SHAFT			ISO FLANGE			WAFER	LUG	O	P	WT (lbs)
							G	H	J	K	L	M	N	N			
2	8.78	8.25	5.53	3.61	0.47	2.06	1.31	0.625	0.439	0.44	4.016	0.50	0.75	5/8 - 11	4.75	1.69	6
3	10.06	9.00	6.31	5.00	0.69	2.59	1.31	0.625	0.439	0.44	4.016	0.88	0.75	5/8 - 11	6.00	1.81	9
4	11.31	10.25	6.81	6.00	1.00	3.47	1.31	0.625	0.439	0.44	4.016	0.88	0.75	5/8 - 11	7.50	2.06	14
6	14.09	12.22	8.06	8.25	1.88	5.50	1.31	1.000	0.836	0.44	4.016	1.50	0.88	3/4 - 10	9.50	2.22	25
8	17.19	15.39	8.44	10.25	2.69	7.38	1.31	1.000	0.836	0.44	4.016	1.50	0.88	3/4 - 10	11.75	2.38	34
10	21.09	18.81	12.31	12.25	3.63	9.56	1.75	1.375	1.000	0.56	4.921	1.50	1.00	7/8 - 9	14.25	2.69	52
12	23.75	21.00	13.31	14.38	4.44	11.56	2.13	1.375	1.000	0.56**	4.921	1.50	1.00	7/8 - 9	17.00	3.09	65
14	CF	CF	CF	CF	CF	CF	CF	CF	CF	CF	CF	CF	CF	CF	CF	CF	CF
16	30.00	26.55	15.81	18.50	5.69	14.75	2.00	2.00	1.560	.406***	5.625	1.63	1.13	1 - 8	21.25	4.00	185

METRIC UNITS (Dimensions in mm)

SIZE	A	B	C	D	E	F	SHAFT			ISO FLANGE			WAFER	LUG	O	P	WT (kg)
							G	H	J	K	L	M	N	N			
50	223.0	209.6	140.5	91.7	11.9	52.3	33.3	15.88	11.15	11.2	102	12.7	19.1	5/8 - 11	120.7	42.9	2.7
80	255.6	228.6	160.3	127.0	17.5	65.8	33.3	15.88	11.15	11.2	102	22.4	19.1	5/8 - 11	152.4	46.0	4.1
100	287.3	260.4	173.0	152.4	25.4	88.1	33.3	15.88	11.15	11.2	102	22.4	19.1	5/8 - 11	190.5	52.4	6.4
150	357.9	310.4	204.7	209.6	47.8	139.7	33.3	25.40	21.23	11.2	102	38.1	2.2	3/4 - 10	241.3	56.4	11.4
200	436.6	390.9	214.4	260.4	68.3	187.5	33.3	25.40	21.23	11.2	102	38.1	22.4	3/4 - 10	298.5	60.3	15.5
250	535.8	477.8	312.7	311.2	92.2	242.8	44.5	34.93	25.40	14.2	125	38.1	25.4	7/8 - 9	362.0	68.3	23.6
300	603.3	533.4	338.1	365.3	112.8	293.6	54.1	34.93	25.40	14.2**	125	38.1	25.4	7/8 - 9	431.8	78.6	29.5
350	CF	CF	CF	CF	CF	CF	CF	CF	CF	CF	CF	CF	CF	CF	CF	CF	CF
400	762.0	674.1	401.6	470.0	144.4	374.6	50.8	50.8	39.6	10.3***	142.9	41.3	28.6	1 - 8	540.0	101.6	83.9

NOTES:

*Lined piping which exceeds the liner thickness specification of ASTM F1545 may require spacers to avoid disc interference.

** 12" valve size only, the actuator mounting holes are offset 15° on ISO 5211 F12 bolt circle. (See Above)

*** 16" actuator mounting flange is not ISO-compliant.