

TECHNICAL DATA SHEET

**Wafer Butterfly Valve VD 290 PSI (PN 20 MPa)
class 150, compact flanged connection
(seal – EPDM/PTFE/NBR), with handle**



GENERAL INFORMATION ABOUT THE PRODUCT

Product Name: Wafer Butterfly Valve VD 290 PSI (PN 20 MPa) class 150, compact flanged connection (seal – EPDM, PTFE, NBR), with handle

Purpose: The wafer butterfly valve is intended for use as a shut-off or control valve for flow control in heat supply systems, water supply, in technological processes of food, chemical, oil and gas, pulp and paper and other industries.

MAIN TECHNICAL DATA AND CHARACTERISTICS

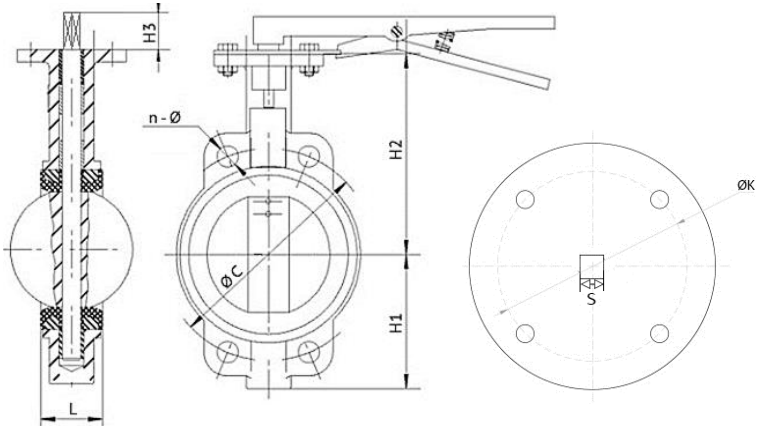
Nominal diameter DN, inch (mm)	1 1/2" – 12" (40 – 300)
Nominal pressure PSI (PN, MPa)	290 (2,0) class 150
Maximum ambient temperature t, °F (°C)	from -4 to +185 (from -20 to +85) for NBR from -4 to +248 (from -20 to +120) for EPDM from +14 to +356 (from -10 to +180) for PTFE
Tightness in the gate	according to class VI MSS SP-61
Working environment	EPDM: cold and hot water, air without oil and fat impurities, other media neutral to the material used PTFE: water, alkalis, acids, solvents and oxidizers NBR: water, mineral oils, hydrocarbons, oils, fats
Connection to the pipeline	compact flanged
Type of control	manual (handle)

INFORMATION ABOUT THE MATERIALS OF THE MAIN PARTS

Nº	Name	Material	Nº	Name	Material
1	Body	Stainless Steel AISI 316L or Carbon Steel ASTM A216 Gr. WCB	6	Bushing	PTFE
2	Seal	EPDM / PTFE / NBR	7	O-ring	NBR nitrile
3, 4, 5	Disc, Stem, Stud	Stainless Steel AISI 316L	8, 9	Plate, Handle	Carbon Steel



THE MAIN DIMENSIONS OF WAFER BUTTERFLY VALVE



DN	inch	1 1/2"	2"	2 1/2"	3"	4"	5"	6"	8"	10"	12"
	mm	40	50	65	80	100	125	150	200	250	300
H1	inch	2.20	2.99	3.50	3.74	4.49	5.00	5.51	6.97	7.99	9.53
	mm	56	76	89	95	114	127	140	177	203	242
H2	inch	4.33	6.38	6.89	7.13	7.87	8.39	8.86	10.24	11.50	13.27
	mm	110	162	175	181	200	213	225	260	292	337
H3	inch	1.06	1.26	1.26	1.26	1.26	1.26	1.26	1.42	1.42	1.42
	mm	27	32	32	32	32	32	32	36	36	36
L	inch	1.30	1.77	1.89	1.93	2.17	2.28	2.32	2.52	2.76	3.15
	mm	33	45	48	49	55	58	59	64	70	80
S	inch	0.35	0.35	0.35	0.35	0.43	0.55	0.55	0.67	0.87	0.87
	mm	9	9	9	9	11	14	14	17	22	22
K	inch	1.97	1.97	1.97	1.97	1.97	2.76	2.76	4.02	4.02	4.92
	mm	50	50	50	50	50	70	70	102	102	125
C	inch	4.33	4.92	5.71	6.30	7.09	8.27	9.45	11.61	13.98	16.14
	mm	110	125	145	160	180	210	240	295	355	410
n - Ø	inch	4 - Ø0.71						8 - Ø0.91	12 - Ø0.91	12 - Ø1.06	
	mm	4 - Ø18						8 - Ø23	12 - Ø23	12 - Ø27	
Stem	inch	0.35x0.35				0.43x0.43	0.55x0.55	0.67x0.67	0.87x0.87		
	mm	9x9				11x11	14x14	17x17	22x22		
ISO 5211		F05	F05	F05	F05	F07	F07	F07	F10	F10	F10
Weight	lbs	4.41	4.41	5.07	5.73	9.04	11.46	14.55	25.35	38.14	61.29
	kg	2	2	2.3	2.6	4.1	5.2	6.6	11.5	17.3	27.8



MAXIMUM TORQUES (Nm)

DN		Torque at 290 PSI (PN 2.0 MPa), Nm		
		EPDM	NBR	PTFE
inch	mm			
1 1/2"	40	50	50	50
2"	50	50	50	50
2 1/2"	65	50	50	50
3"	80	50	50	50
4"	100	50	50	80
5"	125	80	80	150
6"	150	100	100	300
8"	200	300	300	400
10"	250	400	400	400
12"	300	400	400	600

MAXIMUM TORQUES (in/lb)

DN		Torque at 290 PSI (PN 2.0 MPa), in/lb		
		EPDM	NBR	PTFE
inch	mm			
1 1/2"	40	443	443	443
2"	50	443	443	443
2 1/2"	65	443	443	443
3"	80	443	443	443
4"	100	443	443	708
5"	125	708	708	1328
6"	150	885	885	2655
8"	200	2655	2655	3540
10"	250	3540	3540	3540
12"	300	3540	3540	5310



INSTALLATION AND OPERATION

1. Before installation, it is necessary to clean (purge) pipelines from dirt, sand, scale.
2. The installation of wafer butterfly valves should be carried out only between the collar flanges. The inner diameter of the flanges must correspond to the nominal diameter of the wafer butterfly valve.
3. The flanges should be located plane-parallel with respect to each other at a distance that ensures free (without unnecessary effort) placement of the gate between them. There should be no nicks, shells, burrs, as well as other surface defects on the sealing surfaces of the flanges.
4. Before mounting, the wafer butterfly valve disc must be slightly opened, but so that the disc does not extend beyond the rotary shutter body.
5. Center the wafer butterfly valve and slightly tighten the bolts (studs), but do not tighten them. Open the wafer butterfly valve disc to the "fully open" position.
6. Tighten the bolts (studs) so that the flanges and the wafer butterfly valve body (metal part) are touched. The flange connections should be tightened evenly in three or even four passes, in a criss-cross sequence.
7. The tightening of the bolts on the compact flanged connections should be uniform around the perimeter. Slowly close and open the wafer butterfly valve. If the wafer butterfly valve has been installed correctly, the wafer butterfly valve should open and close freely.



WARRANTY PERIOD

The manufacturer guarantees the operability of the product for 12 months from the date of commissioning, but not more than 14 months from the date of sale.

The warranty does not apply:

- for parts and materials of the product subject to wear;
- in cases of damage caused by:
 - making changes to the original design of the product;
 - violations of general installation recommendations;
 - malfunctions caused by improper maintenance and storage;
 - improper operation and use of the equipment.

MARK OF SALE

№ in order	Name	Quantity

Date of sale: _____

P.P.

