

Centric Wafer Butterfly Valve



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1. Key Design Features

- **Centric (Concentric) Design:** The stem (shaft) passes exactly through the centerline of the disc and the center of the valve bore. This means the disc is always in contact with the seat throughout its rotation.
- **Wafer Body:** The valve has a thin, "wafer-like" profile. It does not have its own flange bolts; instead, it is **sandwiched** between two pipe flanges and secured by long bolts that span the entire width of the valve.⁵
- **Resilient Seat:** Most centric valves use a "soft seat" made of elastomers like **EPDM, Nitrile (NBR), or Viton**. This ensures a bubble-tight shut-off even at low pressures.

2. How It Works

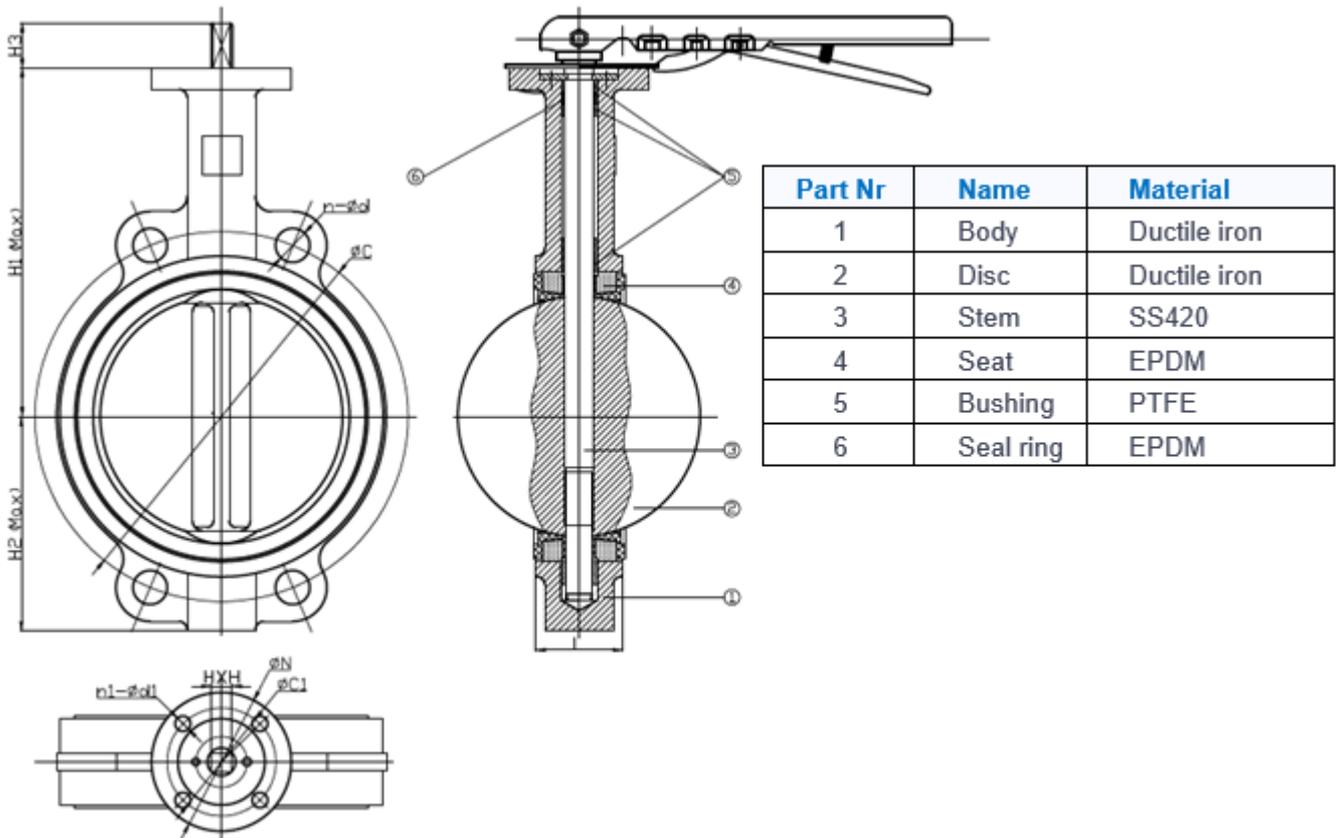
The valve operates on a **quarter-turn** principle

- **Open:** When the disc is rotated parallel to the flow, the valve is fully open, allowing fluid to pass with minimal pressure drop.
- **Closed:** When rotated perpendicular to the flow, the disc edge presses into the rubber liner (seat), creating a tight seal.
- **Throttling:** The valve can be held at intermediate angles to roughly regulate the flow rate

Dimension Sheet

Size	L	EN1092 PN16		H1±5 (Max)	H2±5 (Max)	H3	ISO5211				H
		ΦC	n-Φd				TOP	ΦN	ΦC1	n1-Φd1	
DN40	33	110	4-Φ19	139	68	29	F05	65	50	4-Φ8	9
DN50	43	125	4-Φ19	161	80	29	F05	65	50	4-Φ8	9
DN65	46	145	4-Φ19	175	89	29	F05	65	50	4-Φ8	9
DN80	46	160	8-Φ19	181	95	29	F05	65	50	4-Φ8	9
DN100	52	180	8-Φ19	200	114	29	F07	90	70	4-Φ10	11
DN125	56	210	8-Φ19	213	127	29	F07	90	70	4-Φ10	14

DN150	56	240	8-Φ23	226	139	29	F07	90	70	4-Φ10	14
DN200	60	295	12-Φ23	260	175	35	F10	125	102	4-Φ12	17
DN250	68	355	12-Φ28	292	203	35	F10	125	102	4-Φ12	22
DN300	78	410	12-Φ28	337	242	35	F10	125	102	4-Φ12	22



Technical Attributes

- **Size Range:** DN25-DN300
- **Design Std:** EN 1074, EN593,EN558-1, API609
- **Pressure:** PN6, PN10, PN16, 200PSI, 250PSI, 10K, 16K
- **Temperature Range:** -20°C to +200°C (depending on different material)
- **Face to Face:** EN558-1 20 Series, ISO5752 20 Series, API609, DIN3202 K1
- **Flange Standard:** ISO7005-2 PN10/PN16, EN1092-2 PN10/PN16, ANSI 125/150, AS4087 PN14/PN16, JIS 10K/16K
- **Liner:** NBR (BUNA),EPDM,PTFE