



BUTTERFLY VALVE
CHECK VALVE

AN ISO **9001 : 2015** CERTIFIED COMPANY ISI **13095** CERTIFIED COMPANY



"Leadership is the capacity to translate vision into reality" at **Omval Controls Pvt. Ltd.** we are set our vision to delivering excellence.

**Omval Controls Pvt. Ltd.** is made its presence in 2018 as a Butterfly Valves & Check Valves division. Pascal Valves is globally recognized marketing & manufacturing of Various Types Butterfly Valves & Check Valves etc with manufacturing operation in India supported by worldwide distribution network.

We are professionally managed ISO 9001:2015 & ISI 13095 approved firm. Perfection in design, stringent quality checks at every manufacturing stage. Unmatchable performance and prompt after sales and service are some of the salient features of our business. Pascal Valves provided maximum safety, reliability & suitability virtually in all branches of Industrial applications.

## INDUSTRY WE SERVE

- Pharma Ceutical Industry
- Chemical Industry
- Oil Industry
- Food Industry
- Water Supply
- Waste Water Treatment
- Fire Protection
- Gas Supply
- Petro Chemical & Refineries

- Power Plants
- Fertilizer Industry
- Paper & Pul Industry
- HVAC Line
- Solvent Extraction Industry
- Edible Oil Industry
- Dairy Industry
- Sugar Plant etc.
- Irrigation





O1 CENTRIC WAFER BODY BUTTERFLY VALVES  1.1 Centric Wafer Body Butterfly Valves Features 1.2 Material of Construction 1.3 Dimension Specification	4 5 6
O2 CENTRIC LUG BODY BUTTERFLY VALVES	
2.1 Centric Lug Body Butterfly Valve Features	7
2.2 Material of Construction.	8
2.3 Dimension Specification.	9
O3 operators availability lever, gear, actuator	10
04 WAFER TYPE DISC CHECK VALVE	
4.1 Wafer type Disc check valves features	11
4.2 Material of Construction.	11
4.3 Dimension Specification.	12

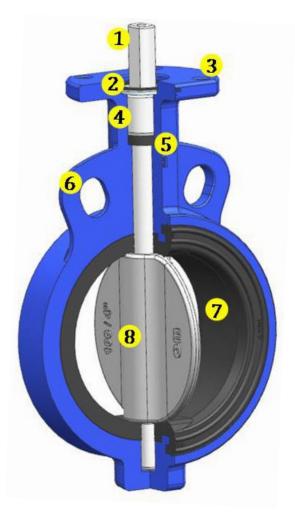
# OUR PRODUCT RANGE

VALVE	TYPE	1.5"	2"	2.5"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	22"	24"
Butterfly Valve	Wafer	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~
Butterfly Valve	Lug	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~
Check Valve	Wafer	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~



### CENTRIC WAFER BODY BUTTERFLY VALVE FEATURES

- 1 STEM Precision double "D" disc to stem connection drives the disc without the need for screws or pins. The close tolerance, double "D" connection that drives the valve disc is an exclusive feature of the Pascal valve. Disassembly of the Pascal stem is just a matter of pulling the stem out of the disc.
- 2. STEM RETAINING: The stem is retained in the body by means of a unique stainless steel Spirolox retaining ring, manufactured from stainless steel as standard,
- Top plate drilled to fit iso 5211 dimensions. All handles, gear operators and pneumatic actuators are designed to mount directly.
- 4 STEM BUSHING: An upper stem bushing, retained by a stainless steel ring, is provided to absorb actuator side thrusts and is PTFE as standard.
- 5 STEM SEAL: Double "U" cup seal design is self-adjusting and gives positive sealing in both directions. Keeps environmental contaminants from entering the stem bore.
- 6 BODY: One piece wafer or lug style allows for ease of assembly and maintenance.
- 7 SEAT: Pascal's Replaceable tongue and groove seat design provides complete isolation of flowing media from the body. The seat also features a moulded o-ring which eliminates the need of flange gaskets.
- OISC/STEM: One piece design. The disc edge is spherically machined and hand polished to produce a bubble tight shut off, minimum torque, and longer seat life. For erosion and abrasion resistance.





# CENTRIC WAFER BODY BUTTERFLY VALVE



#### **TECHNICAL SPECIFICATION**

**Design & Manufacturing Standards** 

API 609 / BS EN-593 / IS13095 / ASME B16.5 / ISO 7005

**Testing Standard** 

API 598 / API6D / BSEN 12266-1

Valve face to face Dimension

Category A API 609 / IS13095 / EN593 / ISO5752Tab5

**TOP Flange Drilling** 

ISO 5211

**Flang Standard** 

DIN EN 1092-PN6, PN10, Class 150, BS10 Tab D&E, IS6392, Tab 11/17, JIS 5K/10K

#### **MATERIAL OF CONSTRUCTION**

#### BODY

Cast Iron ASTM A126 Class B IS 210 FG 260, Ductile Iron ASTM A 395 (60-40-18), WCB (CS) ASTM A 216, Stainless Steel (CF8M/CF8) ASTM A 351M/351

#### **DISC**

Cast Iron ASTM A126 Class B IS 210 FG 260, Ductile Iron ASTM A 395 (60-40-18), WCB (CS) ASTM A 216, Stainless Steel (CF8M/CF8) ASTM A 351M/351 Alluminium Bronze, Duplex, Super Duplex

\*DISC also available with Rubber Lining in EBBONITE/ EPDM/NBR/NYLON/HYPLON (with Gurranted Spark Test Pass)

#### **SEAT**

EPDM / White EPDM (FOOD GRADE)
BUNA-N / White - BUNA N (Food Garde)
(NITRILE - NBR) VITON, HYPLON, BUTYLE, SILICON, NEOPRENE, NATURAL RUBBER

#### STEM

Stainless Steel ASTM A 479 TYPE 410 Stainless Steel ASTM A 276 TYPE 316 Stainless Steel ASTM A 276 TYPE 304 Duplex, Super Duplex, Monel, Bronze

**STEM BUSHING: PTFE, ACETAL** 

OIL SEAL (Stem Seal): EPDM

**WASHER:** SS304

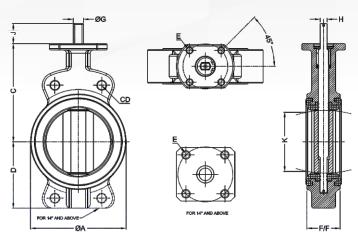
**RETAINING CIRCLIP:** SPRING STEEL

**Note:** Note: All Body and Disc are **IC** Cast from 1.5"(**DN40**) To 24" (**DN600**) Available. any other Special Material are also work on request for Body / Disc / Stem / Seat.



## **DIMENSION SPECIFICATION**





Valve	Size					Top M	lounting	g Flange					Boltir	ng Dia
Inch	DIN	ØΑ	F/F	С	D	E No.of Hole Model No.of Dia		øG	н	J	K	ASME B16.5 CD	ISD 7005 CD	
1.5	40	71.80	43.00	87.00	47.00	F05	4	8.00	12.00	8.00	30.00	_	98.40	110.00
2	50	91.00	43.00	113.00	59.00	F05	4	8.00	14.00	10.00	29.40	30.98	120.70	125.00
2.5	65	96.80	46.00	110.00	61.00	F05	4	8.00	14.00	10.00	30.00	48.741	139.70	145.00
3	80	116.80	46.00	128.00	73.00	F05	4	8.00	14.00	10.00	30.00	66.42	152.40	160.00
4	100	149.00	52.00	154.00	91.00	F07	4	9.00	16.00	11.00	31.40	90.64	190.50	180.00
5	125	168.90	56.00	169.00	105.00	F07	4	9.00	19.00	13.00	32.00	115.10	215.90	210.00
6	150	202.00	56.00	189.00	122.00	F07	4	9.00	19.00	13.00	30.00	140.23	241.30	240.00
8	200	250.00	60.00	214.00	146.00	F07/F10	4/4	9.00/11.00	22.00	16.00	30.00	189.53	298.50	295.00
10	250	308.00	68.00	251.00	185.00	F10	4	11.00	28.00	20.00	32.00	240.99	362.00	350.00
12	300	361.40	78.00	289.00	214.00	F10	4	11.00	30.00	22.00	32.00	289.68	431.80	400.00
14	350	413.00	78.00	340.00	262.00	F12	4	14.50	35.00	27.00	52.00	325.65	476.30	460.00
16	400	474.00	102.00	373.00	294.00	F12	4	14.50	35.00	27.00	52.00	374.88	539.80	515.00
18	450	528.00	114.00	407.00	319.00	F16	4	21.00	47.00	36.00	59.00	424.97	577.90	565.00
20	500	582.00	127.00	436.00	354.00	F16	4	21.00	49.00	36.00	59.00	473.25	635.00	620.00
22	550	634.00	127.00	464.00	381.00	F16	4	21.00	49.00	36.00	59.00	525.88	692.10	-
24	600	690.00	154.00	494.00	422.00	F16	4	21.00	59.00	46.00	80.00	571.61	749.30	725.00

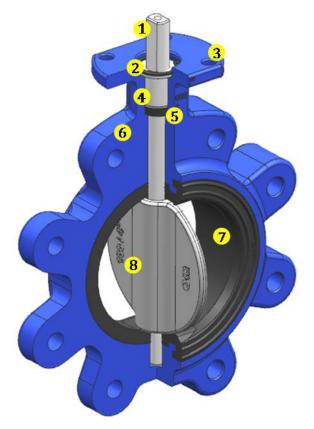
# Torque Rating(NM) for **Rubber Line Wafer Butterfly Valve**

VALVE		1.5"	2"	2.5"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	22"	24"
Pressure Valve △P Bar (PSI)	.5 7 0 2 6	7 8 8 12 17	7 8 8 12 17	13 14 14 18 22	14 18 18 23 32	29 30 30 34 45	44 47 48 53 65	58 65 66 73	102 118 122 131 210	164 183 198 218 319	269 317 337 369 468	351 401 450 540 800	418 504 585 702 1025	659 825 989 1186 1730	768 957 1144 1373 2002	996 1295 1684 2189 2845	1091 1412 1760 2288 3080



### CENTRIC LUG BODY BUTTERFLY VALVE FEATURES

- 1 STEM Precision double "D" disc to stem connection drives the disc without the need for screws or pins. The close tolerance, double "D" connection that drives the valve disc is an exclusive feature of the Pascal valve. Disassembly of the Pascal stem is just a matter of pulling the stem out of the disc.
- 2. STEM RETAINING: The stem is retained in the body by means of a unique stainless steel Spirolox retaining ring, manufactured from stainless steel as standard,
- Top plate drilled to fit iso 5211 dimensions. All handles, gear operators and pneumatic actuators are designed to mount directly.
- 4. STEM BUSHING: An upper stem bushing, retained by a stainless steel ring, is provided to absorb actuator side thrusts and is PTFE as standard.
- 5 STEM SEAL: Double "U" cup seal design is self-adjusting and gives positive sealing in both directions. Keeps environmental contaminants from entering the stem bore.
- 6 BODY: One piece wafer or lug style allows for ease of assembly and maintenance.
- 7 SEAT: Pascal's Replaceable tongue and groove seat design provides complete isolation of flowing media from the body. The seat also features a moulded o-ring which eliminates the need of flange gaskets.
- DISC/STEM: One piece design. The disc edge is spherically machined and hand polished to produce a bubble tight shut off, minimum torque, and longer seat life. For erosion and abrasion resistance.





# CENTRIC LUG BODY BUTTERFLY VALVE



#### **TECHNICAL SPECIFICATION**

#### **Design & Manufacturing Standards**

API 609 / BS EN-593 / IS13095 / ASME B16.5 / ISO 7005

#### **Testing Standard**

API 598 / API6D / BSEN 12266-1

#### **Valve face to face Dimension**

Category A API 609 / IS13095 / EN593 / ISO5752Tab5

#### **TOP Flange Drilling**

ISO 5211

#### **Flang Standard**

DIN EN 1092-PN6, PN10, Class 150, BS10 Tab D&E, IS6392, Tab 11/17, JIS 5K/10K

#### **MATERIAL OF CONSTRUCTION**

#### **BODY**

Cast Iron ASTM A126 Class B IS 210 FG 260, Ductile Iron ASTM A 395 (60-40-18), WCB (CS) ASTM A 216, Stainless Steel (CF8M/CF8) ASTM A 351M/351

#### **DISC**

Cast Iron ASTM A126 Class B IS 210 FG 260, Ductile Iron ASTM A 395 (60-40-18), WCB (CS) ASTM A 216, Stainless Steel (CF8M/CF8) ASTM A 351M/351 Alluminium Bronze, Duplex, Super Duplex

\*DISC also available with Rubber Lining in EBBONITE/ EPDM/NBR/NYLON/HYPLON (with Gurranted Spark Test Pass)

#### **SEAT**

EPDM / White EPDM (FOOD GRADE)
BUNA-N / White - BUNA N (Food Garde)
(NITRILE - NBR) VITON, HYPLON, BUTYLE, SILICON, NEOPRENE, NATURAL RUBBER

#### STEM

Stainless Steel ASTM A 479 TYPE 410 Stainless Steel ASTM A 276 TYPE 316 Stainless Steel ASTM A 276 TYPE 304 Duplex, Super Duplex, Monel, Bronze

**STEM BUSHING:** PTFE, ACETAL

OIL SEAL (Stem Seal): EPDM

WASHER: SS304

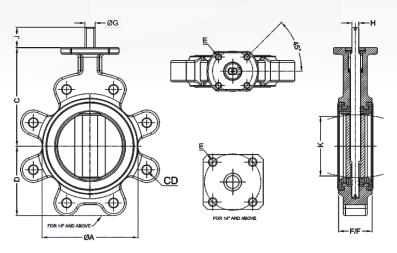
**RETAINING CIRCLIP:** SPRING STEEL

**Note:** Note: All Body and Disc are **IC** Cast from 1.5"(**DN40**) To 24" (**DN600**) Available. any other Special Material are also work on request for Body / Disc / Stem / Seat.



## **DIMENSION SPECIFICATION**





Valve	e Size					Top M	lounting	, Flange					В	olting [	Dia
Inch	DIN	ØΑ	F/F	С	D	E	No.of Holes	Hole Dia	øG	н	J	K	ASME B16.5 CD	No.of Holes	Threads UNC-2B
1.5	40	71.80	43.00	87.00	47.00	F05	4	8.00	12.00	8.00	30.00	-	98.40	4	1/2-13
2	50	91.00	43.00	113.00	59.00	F05	4	8.00	14.00	10.00	29.40	30.98	120.70	4	5/8-11
2.5	65	96.80	46.00	110.00	61.00	F05	4	8.00	14.00	10.00	30.00	48.741	139.70	4	5/8-11
3	80	116.80	46.00	128.00	73.00	F05	4	8.00	14.00	10.00	30.00	66.42	152.40	4	5/8-11
4	100	149.00	52.00	154.00	91.00	F07	4	9.00	16.00	11.00	31.40	90.64	190.50	8	5/8-11
5	125	168.90	56.00	169.00	105.00	F07	4	9.00	19.00	13.00	32.00	115.10	215.90	8	3/4-10
6	150	202.00	56.00	189.00	122.00	F07	4	9.00	19.00	13.00	30.00	140.23	241.30	8	3/4-10
8	200	250.00	60.00	214.00	146.00	F07/F10	4/4	9.00/11.00	22.00	16.00	30.00	189.53	398.50	8	3/4-10
10	250	308.00	68.00	251.00	185.00	F10	4	11.00	28.00	20.00	32.00	240.99	362.00	12	7/8-9
12	300	361.40	78.00	289.00	214.00	F10	4	11.00	30.00	22.00	32.00	289.68	431.80	12	7/8-9
14	350	413.00	78.00	340.00	262.00	F12	4	14.50	35.00	27.00	52.00	325.65	476.30	12	1-8
16	400	474.00	102.00	373.00	294.00	F12	4	14.50	35.00	27.00	52.00	374.88	539.80	16	1-8
18	450	528.00	114.00	407.00	319.00	F16	4	21.00	47.00	36.00	59.00	424.97	577.90	16	11/8-7
20	500	582.00	127.00	436.00	354.00	F16	4	21.00	49.00	36.00	59.00	473.25	635.00	20	11/8-7
22	550	634.00	127.00	464.00	381.00	F16	4	21.00	49.00	36.00	59.00	525.88	692.10	20	11/4-7
24	600	690.00	154.00	494.00	422.00	F16	4	21.00	59.00	46.00	80.00	571.61	749.30	20	11/4-7

# Torque Rating(NM) for **Rubber Line Lug Butterfly Valve**

VALVE		1.5"	2"	2.5"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	22"	24"
Full Rated	3.5	7	7	13	14	29	44	58	102	164	269	351	418	659	768	996	1091
	7	8	8	14	18	30	47	65	118	183	317	401	504	825	957	1295	1412
Pressure Valve ∆P Bar	10	8	8	14	18	30	48	66	122	198	337	450	585	989	1144	1684	1760
(PSI)	12	12	12	18	23	34	53	73	131	218	369	540	702	1186	1373	2189	2288
	16	17	17	22	32	45	65	110	210	319	468	800	1025	1730	2002	2845	3080

## **OPERATORS**





#### **BARE SHAFT**

Valve up to Size 24" for customizes Operating System available in Different Shape & Size Stem Direct Mounting



#### **GEAR**

Valve up to 24" Size can be direct mounted with gear operators for marvel operation gear operates can be attached with chain wheel operators for opening or closing valves located on pipe lines at high elevators.



#### LEVER

Valve up to 12" Size Depending on pressure rating can be supplied with lever handles for manual operation. Pad locking can also be provided for preventing unauthorized operation.



#### **ACTUATOR**

Au valves can be direct mounted with pneumatic Actuator or Electric Actuators and access for complete automation options controlled valves can be mounted with manual override.

## SEAT SELECTION GUIDE

Seat Type	Temperat	ure Range	Media
Seat Type	Max	Max	Media
EPDM / White EPDM	-20° F (-29°C)	302°F (150°C)	Water+Steam+Chemical
Buna-N / White Buna-N (Nitrite)	0°F (-18°C)	212°F (100°C)	Oils
Viton (FKM)	0°F (-18°C)	392°F (200°C)	All Oils
Silicon	0°F (-18°C)	392°F (200°C)	Hot Air Application & All Food Ind.
			Goods Whether Resistence
Neoprene	0°F (-18°C)	240°F (120°C)	Moderate Oil Resistant
Viton Extreme	0°F (-18°C)	536°F (280°C)	All Oils



# WAFER TYPE DISC CHECK VALVE FEATURES



#### **TECHNICAL SPECIFICATION**

**Design & Manufacturing & Flange Standards**DIN EN 1092-PN6, PN10 & PN16, Class 150, BS10
Tab D&E, ANSIB 16.5#150 / ASMEB 16.5.

#### **Testing Standard**

**API 598** 

#### Valve face to face Dimension

API 6D / ASMEB 16.10

#### **MATERIAL OF CONSTRUCTION**

#### BODY:

Cast Iron ASTM A126 IS210 FG260, Ductile Iron ASTM A395 (60-40-18), Carbon Steel ASTM 216 WCB, Stainless Steel ASTM A351M/351 CF8, CF8M

**DISC:** DI, CF8, CF8M, AI Bron, Duplex, Super Duplex.

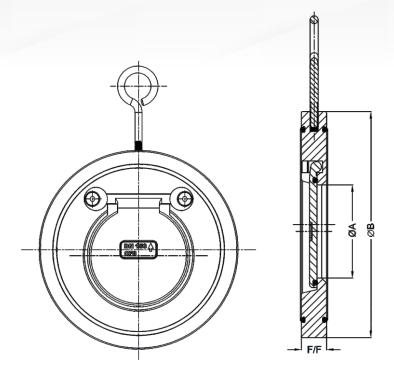
ORING: EPDM, Buna-N, Viton, Hyplon, Butyle, Silicon, Neoprene, PTFE

EYE BOLT: MS, SS

**Note:** Steel, Stainless Steel, Duplex, Super Duplex, Alluminium Bronze, also available in Body & Disc on 1.5" (Dn40) to 24" (DN600)



## **DIMENSION SPECIFICATION**



Valve	e Size					øΒ		
Inch	DIN	øΑ	F/F	PN10	PN16	BS10-D	BS10-E	ANSI #150
1.25	32	18.00	19.00	81.00	81.00	72.00	72.00	74.00
1.5	40	22.00	19.00	93.00	93.00	86.00	86.00	83.00
2	50	30.00	19.00	108.00	108.00	97.00	97.00	102.00
2.5	65	40.00	19.00	128.00	128.00	110.00	110.00	121.00
3	80	52.00	19.00	143.00	143.00	129.00	129.00	134.00
4	100	71.00	19.00	163.00	163.00	161.00	161.00	172.00
5	125	93.00	19.00	193.00	193.00	193.00	193.00	194.00
6	150	114.00	19.00	219.00	219.00	218.00	215.00	220.00
8	200	157.00	29.00	274.00	274.00	274.00	272.00	277.00
10	250	195.00	29.00	329.00	329.00	335.00	335.00	337.00
12	300	230.00	38.00	379.00	385.00	385.00	383.00	407.00
14	350	270.00	44.00	438.00	444.00	446.00	446.00	448.00
16	400	310.00	51.00	489.00	496.00	496.00	496.00	512.00
18	450	360.00	60.00	538.00	555.00	559.00	559.00	545.00
20	500	406.00	64.00	593.00	616.00	616.00	616.00	602.00
22	550	450.00	64.00	-	-	-	-	656.00
24	600	490.00	70.00	695.00	733.00	727.00	724.00	714.00

# CERTIFICATE





CERTIFICATE OF INCORPORATION



ISI 13095 CERTIFICATE



ISO 9001:2015 CERTIFICATE



CERTIFICATE OF IMPORT-EXPORT



UDHYOG AADHAR CERTIFICATE



**UDHYAM REG.**CERTIFICATE











**VALVE ASSEMBLY** 

TURNING







VALVE ASSEMBLY

PRODUCTION







WORKSHOP

FINAL INSPECTION



HYDRO TESTING

INWARD INSPECTION

LASER MARKING









**CASTING STORE** 



**RAW MATERIAL STORE** 







**SEMI FINISH CASTING** 



**OFFICE** 



VALVE DESIGNING







## **MANUFACTURED BY**

#### **OMVAL CONTROLS PVT. LTD.**

Gate No.- 2, Almighty Gate Raod-D, Plot No. G-1403, Metoda GIDC, Lodhika, Rajkot, Gujarat (INDIA) - 360 021.

Mo.: 99988 60676 / +9173592 82995

E.:info@omvalcontrols.in | W:www.omvalcontrols.in