

BUTTERFLY VALVES · STAINLESS STEEL · CARTRIDGE SEAT

BVWS Stainless Steel Wafer Butterfly Valve

PN10 rated wafer-pattern butterfly valve with a CF8M stainless steel body and disc, SS431 stem and a replaceable PTFE coated NBR cartridge seat. DN50–DN300.



CF8M BODY & DISC

PN10 / 10 BAR

AS 2129

ISO 5211

FEATURES

- 10 bar pressure rated
- CF8M stainless steel body and disc
- SS431 stem with PTFE bushing
- PTFE coated NBR resilient cartridge seat
- Replaceable seat
- PN10 rated — drilled to Table D, Table E and ANSI 150 flange patterns
- Bi-directional with bubble tight sealing
- Blow-out proof stem
- Suitable for high repetition and actuated applications
- Flange seal design eliminating the need for flange gaskets
- ISO top mounting flange for ease of actuation
- Gear operation available on all sizes — supplied with the standard gearbox
- Design and manufacture according to API 609
- Inspection and test according to API 598
- Fasteners: 316 stainless steel

Not suitable for end of line use unless fitted with a flange on the open side — required to support the cartridge seat.

TECHNICAL SPECIFICATION

Construction	Wafer concentric seal on body butterfly valve
Size	50 mm – 300 mm
Pressure rating	PN10 (10 bar)
Face to face	According to API 609
Flange drilling	AS 2129 Table D AS 2129 Table E ANSI B16.5 #150
Body finish	Uncoated CF8M stainless steel
Mounting pad	ISO 5211
Temperature range	–10 °C to 90 °C (PTFE coated NBR)
Suitable media	W.O.G. and similar

PRESSURE TESTING

BODY / SHELL

1.5 MPa

SEAT

1.1 MPa

Inspection and test according to API 598.

CONTROLS & OPTIONS

Lever operation	50 mm – 300 mm
Gear operation	50 mm – 300 mm (standard gearbox)
Electric actuators	12 V, 24 V, 240 V, 415 V
Pneumatic actuators	Single and double acting

MODEL CODES & OPERATING DATA

Model	DN (mm)	Pressure range	Temperature range	ISO 5211 top flange	Square H×H	Round Øc	Torque (Nm)
BVWS*050	50	Vacuum to 10 bar	-10 °C to 90 °C (PTFE/NBR)	F05	9 × 9	—	11.7
BVWS*065	65	Vacuum to 10 bar	-10 °C to 90 °C (PTFE/NBR)	F05	9 × 9	—	18.2
BVWS*080	80	Vacuum to 10 bar	-10 °C to 90 °C (PTFE/NBR)	F05	9 × 9	—	28.6
BVWS*100	100	Vacuum to 10 bar	-10 °C to 90 °C (PTFE/NBR)	F07	11 × 11	—	44.2
BVWS*125	125	Vacuum to 10 bar	-10 °C to 90 °C (PTFE/NBR)	F07	14 × 14	—	66.3
BVWS*150	150	Vacuum to 10 bar	-10 °C to 90 °C (PTFE/NBR)	F07	14 × 14	—	101.4
BVWS*200	200	Vacuum to 10 bar	-10 °C to 90 °C (PTFE/NBR)	F10	17 × 17	—	149.5
BVWS*250	250	Vacuum to 10 bar	-10 °C to 90 °C (PTFE/NBR)	F10	22 × 22	—	227.5
BVWS*300	300	Vacuum to 10 bar	-10 °C to 90 °C (PTFE/NBR)	F10	22 × 22	—	377

* refers to operation type L (lever operated) or G (gear operated). Torque figures are seating torques for clean water duty — confirm with Global Water Group before actuator sizing.

COMPONENTS

No.	Item	Material
1	Body	CF8M stainless steel
2	Disc	CF8M stainless steel
3	Stem	SS 431
4	Stem bushing	PTFE
5	Seat	NBR moulded to PTFE (cartridge)
6	O-ring	NBR
7	Pin	SS 316

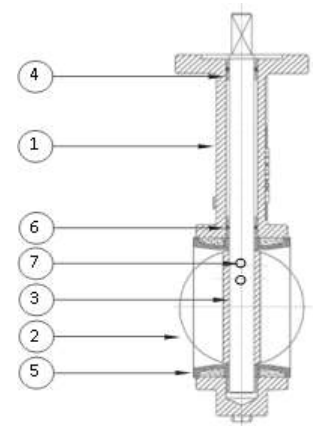


Fig. 1 — Component identification, numbered per table.

ISO 5211 TOP FLANGE

Flange	ØN (mm)	ØC1 (mm)	n1-Ød1
F05	65	50	4 - Ø8
F07	90	70	4 - Ø10
F10	125	102	4 - Ø12

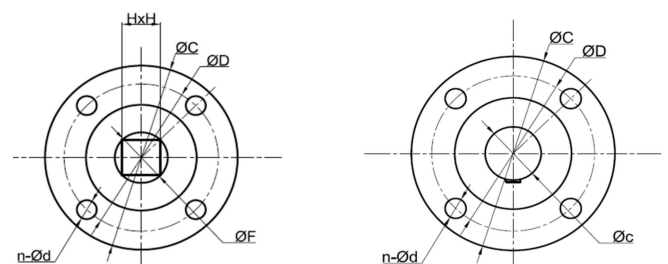


Fig. 2 — Top flange interface: square drive (left) and round drive (right).

DIMENSIONAL SPECIFICATIONS

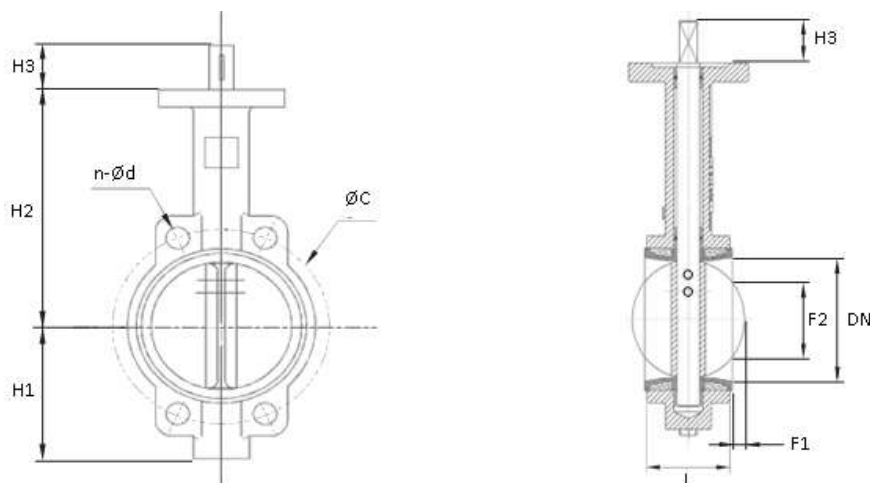


Fig. 3 — Front view (ØC, n-Ød) and sectional side view (L, F1, F2, H1-H3, DN).

BUTTERFLY VALVE — WAFER, LEVER OPERATED

Code	DN	L	H1	H2	H3	F1	F2	Table D		Table E		ANSI 150	
								ØC	n-Ød	ØC	n-Ød	ØC	n-Ød
BVWSL050	50	43	57	143	29	3.2	25.1	114	4 - Ø18	114	4 - Ø18	120.6	4 - Ø19
BVWSL065	65	46	68	155	29	7.6	41.4	127	4 - Ø18	127	4 - Ø18	139.7	4 - Ø19
BVWSL080	80	46	82	160	29	14.9	61.8	146	4 - Ø18	146	4 - Ø18	152.4	4 - Ø19
BVWSL100	100	52	100	181	29	25.1	89.1	178	8 - Ø18	178	8 - Ø18	190.5	8 - Ø19
BVWSL125	125	56	112	194	29	32.6	108.7	210	8 - Ø18	210	8 - Ø18	215.9	8 - Ø22.4
BVWSL150	150	56	126	202	29	48.9	144.6	235	8 - Ø18	235	8 - Ø22	241.3	8 - Ø22.4
BVWSL200	200	60	162	240	35	70	192.5	292	8 - Ø18	292	8 - Ø22	298.4	8 - Ø22.4
BVWSL250	250	68	193	272	35	90.3	240.5	356	8 - Ø22	356	12 - Ø22	361.9	12 - Ø25.4
BVWSL300	300	78	236.5	318	35	111	290.8	404	12 - Ø22	406	12 - Ø26	431.8	12 - Ø25.4

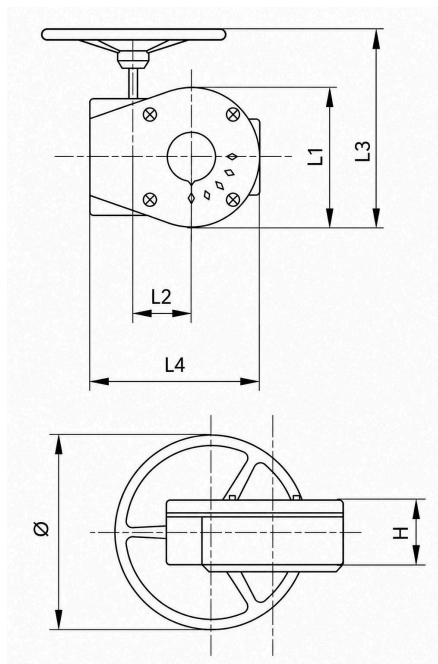
BUTTERFLY VALVE — WAFER, GEAR OPERATED

Code	DN	L	H1	H2	H3	F1	F2	Table D		Table E		ANSI 150	
								ØC	n-Ød	ØC	n-Ød	ØC	n-Ød
BVWSG050	50	43	57	143	29	3.2	25.1	114	4 - Ø18	114	4 - Ø18	120.6	4 - Ø19
BVWSG065	65	46	68	145	29	7.6	41.4	127	4 - Ø18	127	4 - Ø18	139.7	4 - Ø19
BVWSG080	80	46	82	160	29	14.9	61.8	146	4 - Ø18	146	4 - Ø18	152.4	4 - Ø19
BVWSG100	100	52	100	181	29	25.1	89.1	178	8 - Ø18	178	8 - Ø18	190.5	8 - Ø19
BVWSG125	125	56	112	194	29	32.6	108.7	210	8 - Ø18	210	8 - Ø18	215.9	8 - Ø22.4
BVWSG150	150	56	126	202	29	48.9	144.6	235	8 - Ø18	235	8 - Ø22	241.3	8 - Ø22.4
BVWSG200	200	60	162	240	35	70	192.5	292	8 - Ø18	292	8 - Ø22	298.4	8 - Ø22.4
BVWSG250	250	68	193	272	35	90.3	240.5	356	8 - Ø22	356	12 - Ø22	361.9	12 - Ø25.4
BVWSG300	300	78	236.5	318	35	111	290.8	406	12 - Ø22	406	12 - Ø26	431.8	12 - Ø25.4

All dimensions in millimetres unless stated. Flange patterns: Table D, Table E and ANSI 150.

GEARBOX SPECIFICATIONS

Fig. 4 — Standard gear operator.



50 – 300 MM BUTTERFLY VALVE

Code	DN	L1	L2	L3	L4	L5	Ø	ISO 5211 Top Flange	Mounting Bolts	Output Torque (Nm)	Drive Ratio	Turns
BVGS50/65/80	50	105	45	215	127	70	150	F05	4 – M6	150	24:1	6
BVGS50/65/80	65	105	45	215	127	70	150	F05	4 – M6	150	24:1	6
BVGS50/65/80	80	105	45	215	127	70	150	F05	4 – M6	150	24:1	6
BVGS100	100	105	45	215	127	70	150	F07	4 – M8	150	24:1	6
BVGS125/150	125	105	45	215	127	70	150	F07	4 – M8	150	24:1	6
BVGS125/150	150	105	45	215	127	70	150	F07	4 – M8	150	24:1	6
BVGS200	200	145	63	303	170	76	300	F10	4 – M10	500	30:1	7.5
BVGS250	250	145	63	303	170	76	300	F10	4 – M10	500	30:1	7.5
BVGS300	300	156	80	300	190	79	300	F10	4 – M10	1200	50:1	12.5

All dimensions in millimetres. Standard (coated) gearbox fitted — stainless steel gearboxes are not supplied with this range.

STANDARDS & APPROVALS

- Design and manufacture according to API 609
- Inspection and testing according to API 598
- Flange drilling according to AS 2129 / AS 4087 and ANSI B16.5
- Actuator mounting according to ISO 5211

Designs, materials and specifications shown are subject to change without notice due to our continuing program of product development. Confirm critical dimensions with Global Water Group prior to fabrication.