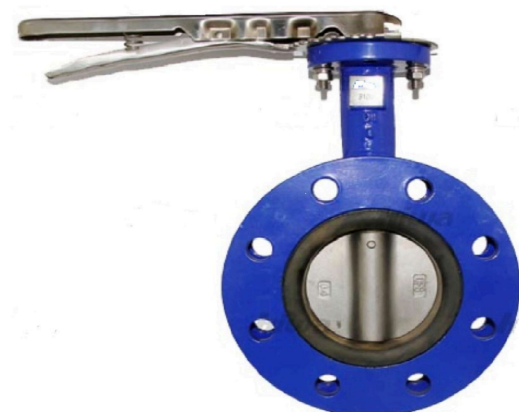


BUTTERFLY VALVES

BVF Flanged Butterfly Valve

16 bar rated, double-flanged ductile iron butterfly valve with vulcanised seat for end-of-line isolation and high-repetition actuated service. DN50–DN600.



EN 558-1

ISO 5208

AS 4087

ISO 5211

FEATURES

- 16 bar pressure rated — suitable for end of line service / isolation
- Double-flanged ductile iron body with fusion bonded epoxy coating
- 316 stainless steel disc
- Vulcanised NBR liner / seat suitable for vacuum operations
- Available in PN16 / Table D and Table E flange pattern
- 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
- Gearbox fitted as standard on all sizes 350 mm and above
- Inspection and test according to ISO 5208
- Top flange drilling according to ISO 5211
- Fasteners: 316 stainless steel

TECHNICAL SPECIFICATION

Construction	Flanged concentric seal on body butterfly valve
Size	50 mm – 600 mm
Pressure rating	PN16 (16 bar)
Face to face	According to EN 558-1, 13 Series
Flange drilling	AS 4087 PN16 (Table D) AS 2129 Table E
Coatings	Fusion bonded epoxy
Mounting pad	ISO 5211
Temperature range	–10 °C to 90 °C (nitrile)
Suitable media	W.O.G. and similar

PRESSURE TESTING

BODY / SHELL

2.4 MPa

SEAT

1.76 MPa

Inspection and test according to ISO 5208.

CONTROLS & OPTIONS

Lever operation	300 mm and below
Gear operation	50 mm – 600 mm
Electric actuators	12 V, 24 V, 240 V, 415 V
Pneumatic actuators	Single and double acting
Valve extensions	0.5 m to 2 m lengths

MODEL CODES & OPERATING DATA

Model	DN (mm)	Pressure range	Temperature range	ISO 5211 top flange	Square H×H	Round Øc	Torque (Nm)
BVFN*050	50	Vacuum to 16 bar	-29 °C to 90 °C (NBR)	F05	9 × 9	—	11.7
BVFN*065	65	Vacuum to 16 bar	-29 °C to 90 °C (NBR)	F05	9 × 9	—	18.2
BVFN*080	80	Vacuum to 16 bar	-29 °C to 90 °C (NBR)	F05	9 × 9	—	28.6
BVFN*100	100	Vacuum to 16 bar	-29 °C to 90 °C (NBR)	F07	11 × 11	—	44.2
BVFN*125	125	Vacuum to 16 bar	-29 °C to 90 °C (NBR)	F07	14 × 14	—	66.3
BVFN*150	150	Vacuum to 16 bar	-29 °C to 90 °C (NBR)	F07	14 × 14	—	101.4
BVFN*200	200	Vacuum to 16 bar	-29 °C to 90 °C (NBR)	F10	17 × 17	—	149.5
BVFN*250	250	Vacuum to 16 bar	-29 °C to 90 °C (NBR)	F10	22 × 22	—	227.5
BVFN*300	300	Vacuum to 16 bar	-29 °C to 90 °C (NBR)	F10	22 × 22	—	377
BVFNG350	350	Vacuum to 16 bar	-29 °C to 90 °C (NBR)	F10	—	31.6	859.3
BVFNG400	400	Vacuum to 16 bar	-29 °C to 90 °C (NBR)	F14	—	33.15	1458.6
BVFNG450	450	Vacuum to 16 bar	-29 °C to 90 °C (NBR)	F14	—	38	1721.2
BVFNG500	500	Vacuum to 16 bar	-29 °C to 90 °C (NBR)	F14	—	41.15	2745.6
BVFNG600	600	Vacuum to 16 bar	-29 °C to 90 °C (NBR)	F16	—	50.65	3088.8

* refers to operation type L (lever operated) or G (gear operated).

COMPONENTS

No.	Item	Material
1	Body	Ductile iron
2	Disc	SS 316
3	Stem	SS 420
4	Stem bushing	PTFE
5	Seat	NBR
6	O-ring	NBR
7	Pin	SS 316

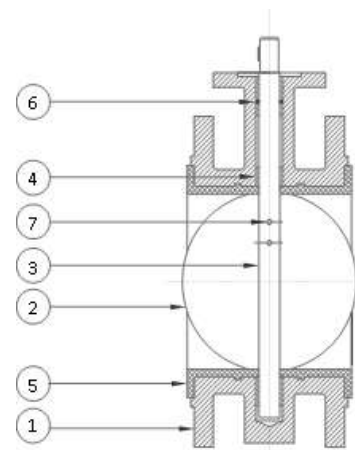


Fig. 1 — Component identification, numbered per table.

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
F14	175	140	4 - Ø18
F16	210	165	4 - Ø22
F25	300	254	8 - Ø18
F30	350	298	8 - Ø22

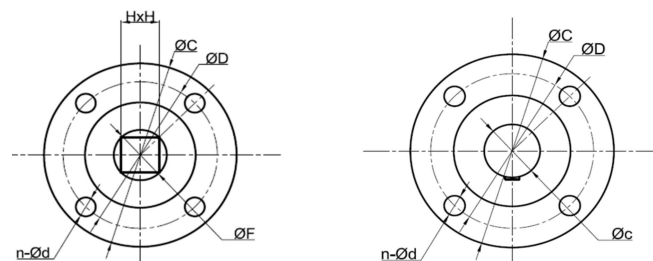


Fig. 2 — Top flange interface: square drive (left) and round drive (right).

DIMENSIONAL SPECIFICATIONS

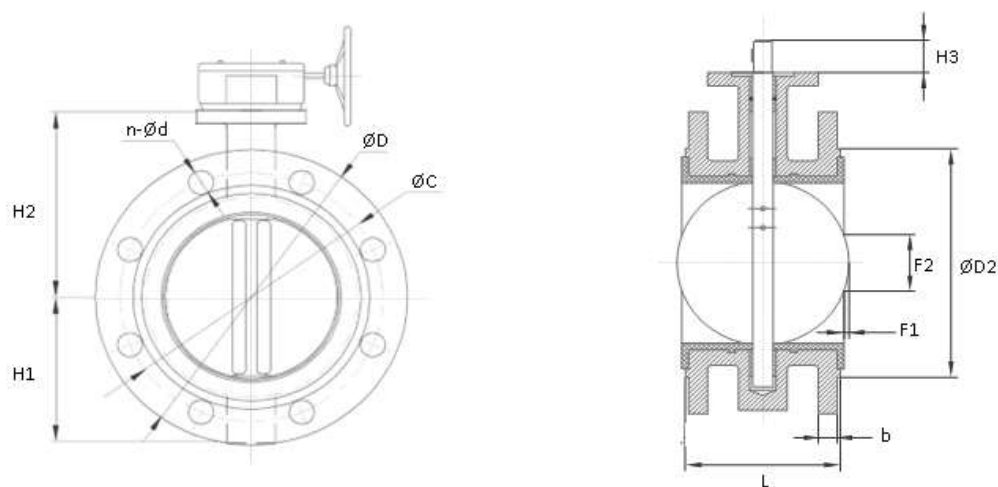


Fig. 3 — Front view (ØC, ØD, n-Ød) and sectional side view (L, b, F1, F2, H1-H3, ØD2).

BUTTERFLY VALVE — FLANGED, LEVER OPERATED

Code	DN	L	H1	H2	H3	F1	F2	b	ØD	ØD2	Table D		Table E	
											ØC	n-Ød	ØC	n-Ød
BVFN050-*	50	108	80	110	29	0	0	15.4	150	99	114	4 - Ø18	114	4 - Ø18
BVFN065-*	65	112	80	134	29	0	0	15.4	165	118	127	4 - Ø18	127	4 - Ø18
BVFN080-*	80	114	95	131	29	0	0	15	185	132	146	4 - Ø18	146	4 - Ø18
BVFN100-*	100	127	114	150	29	0	0	17	215	158	178	8 - Ø18	178	8 - Ø18
BVFN125-*	125	140	113	170	29	0	0	18	255	186	210	8 - Ø18	210	8 - Ø18
BVFN150-*	150	140	139	180	29	4.5	52	20	280	211	235	8 - Ø18	235	8 - Ø22
BVFN200-*	200	152	175	210	35	25.45	134.4	20	335	268	292	8 - Ø18	292	8 - Ø22
BVFN250-*	250	165	204	246	35	43.25	189.81	21	405	328	356	8 - Ø22	356	12 - Ø22
BVFN300-*	300	178	242	276	35	61.75	243.4	26	455	378	404	12 - Ø22	406	12 - Ø26

BUTTERFLY VALVE — FLANGED, GEAR OPERATED

Code	DN	L	H1	H2	H3	F1	F2	b	ØD	ØD2	Table D		Table E	
											ØC	n-Ød	ØC	n-Ød
BVFNG050-*	50	108	80	110	29	0	0	15.4	150	99	114	4 - Ø18	114	4 - Ø18
BVFNG065-*	65	112	80	134	29	0	0	15.4	165	118	127	4 - Ø18	127	4 - Ø18
BVFNG080-*	80	114	95	131	29	0	0	15	185	132	146	4 - Ø18	146	4 - Ø18
BVFNG100-*	100	127	114	150	29	0	0	17	215	158	178	8 - Ø18	178	8 - Ø18
BVFNG125-*	125	140	113	170	29	0	0	18	255	186	210	8 - Ø18	210	8 - Ø18
BVFNG150-*	150	140	139	180	29	4.5	52	20	280	211	235	8 - Ø18	235	8 - Ø22
BVFNG200-*	200	152	175	210	35	25.45	134.4	20	335	268	292	8 - Ø18	292	8 - Ø22
BVFNG250-*	250	165	204	246	35	43.25	189.81	21	405	328	356	8 - Ø22	356	12 - Ø22
BVFNG300-*	300	178	242	276	35	61.75	243.4	26	455	378	406	12 - Ø22	406	12 - Ø26
BVFNG350-*	350	190	253	312	45	71.95	274.57	29	525	429	470	12 - Ø26	470	12 - Ø26
BVFNG400-*	400	216	282	343	51.2	87.1	324.96	29	580	480	521	12 - Ø26	521	12 - Ø26
BVFNG450-*	450	222	323	381	51.2	109.6	381.28	29	640	548	584	12 - Ø26	584	16 - Ø26
BVFNG500-*	500	229	348	433	64.2	131.45	435.34	31	705	609	641	16 - Ø26	641	16 - Ø26
BVFNG600-*	600	267	416	518	70.2	163	529.49	37	825	720	756	16 - Ø30	756	16 - Ø33

All dimensions in millimetres unless stated. * refers to flange pattern D (Table D) or E (Table E).

GEARBOX SPECIFICATIONS

Fig. 4 — Gear operator, 50–450 mm.

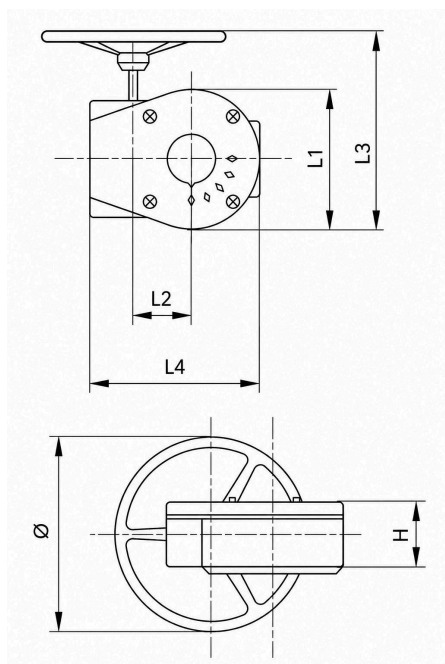
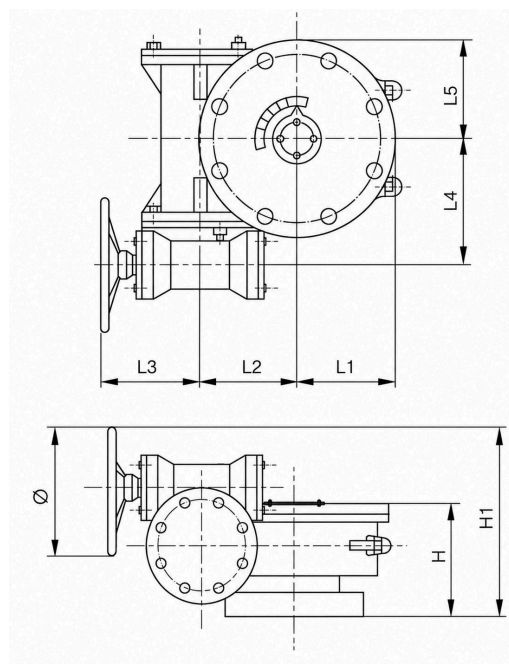


Fig. 5 — Gear operator, 500–1200 mm.



50 – 450 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
BVGR350	350	156	80	300	190	79	300	F10	4 – M10	1200	50:1	12.5
BVGR400	400	247	118	336	279	109	385	F14	4 – M16	1800	80:1	20
BVGR450	450	247	118	336	279	109	385	F14	4 – M16	1800	80:1	20

500 – 1200 MM BUTTERFLY VALVE

Code	DN	L1	L2	L3	L4	L5	H	H1	Ø	ISO 5211 Top Flange	Mounting Bolts	Output Torque (Nm)	Drive Ratio	Turns
BVGR500	500	107	100	160	168	107	125	271	285	F14	4 – M16	2500	640:1	160
BVGR600	600	131	125	160	193	131	136	330	385	F16	4 – M20	4000	640:1	160
BVGR700/750/800	700	146	140	197	230	146	149	378	425	F25	8 – M16	8000	704:1	176
BVGR700/750/800	750	146	140	197	230	146	149	378	425	F25	8 – M16	8000	704:1	176
BVGR700/750/800	800	146	140	197	230	146	149	378	425	F25	8 – M16	8000	704:1	176
BVGR900/1000	900	173	162	197	246	173	155	377	425	F25	8 – M16	15000	748:1	187
BVGR900/1000	1000	173	162	197	246	173	155	377	425	F25	8 – M16	15000	748:1	187
BVGR1200	1200	185	240	203	303	251	194	399	425	F30	8 – M20	25000	850:1	212.5

All dimensions in millimetres. Gearboxes 350 mm and above are fitted as standard.

ACCESSORIES — BVES BUTTERFLY VALVE EXTENSIONS

Construction	Ductile iron body
Suits valves	50 mm – 600 mm
Coatings	Fusion bonded epoxy
Mounting pad	ISO 5211
Lengths	0.5 m to 2 m

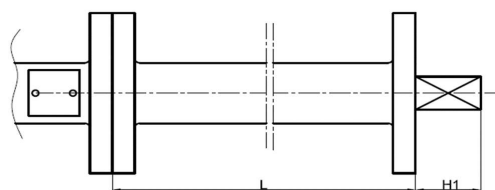


Fig. 6 — BVES extension spindle (L, H1).

Model	Valve DN (mm)	L (m)	H3	ISO 5211 top flange	Shaft square H×H
BVES050- *M	50	1 / 1.5 / 2	29	F05	9
BVES065- *M	65	1 / 1.5 / 2	29	F05	9
BVES080- *M	80	1 / 1.5 / 2	29	F05	9
BVES100- *M	100	1 / 1.5 / 2	29	F07	11
BVES125- *M	125	1 / 1.5 / 2	29	F07	14
BVES150- *M	150	1 / 1.5 / 2	29	F07	14
BVES200- *M	200	1 / 1.5 / 2	35	F10	17
BVES250- *M	250	1 / 1.5 / 2	35	F10	22
BVES300- *M	300	1 / 1.5 / 2	35	F10	22
BVES350- *M	350	1 / 1.5 / 2	45	F10	31.6
BVES400- *M	400	1 / 1.5 / 2	51.2	F14	33.15
BVES450- *M	450	1 / 1.5 / 2	51.2	F14	38
BVES500- *M	500	1 / 1.5 / 2	64.2	F14	41.15
BVES600- *M	600	1 / 1.5 / 2	70.2	F16	50.65

* substitute the required length in the model code — e.g. BVES150-1M, BVES150-1.5M or BVES150-2M.

STANDARDS & APPROVALS

- Face to face according to EN 558-1, 13 Series
- Inspection and testing according to ISO 5208
- Flange drilling according to AS 4087 PN16 (Table D) and AS 2129 (Table E)
- Top flange drilling / 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.