

Lugged Butterfly Valve

Resilient Seated · Fully Tapped Lugs · DN32-DN400 · PN10/16 & ANSI Class 150 · Ductile Iron Body · CF8M Disc · EPDM Seat

A resilient seated lugged butterfly valve for general water, HVAC and process duty. Every lug is tapped right through, so each flange bolts to the valve independently — the downstream side can be broken for maintenance, or the valve used at the end of a line, without disturbing the upstream connection. Lug tappings suit both PN10/16 and ANSI Class 150 flanges, so one valve covers metric and imperial pipework. Supplied bare shaft with an ISO 5211 top flange for lever, gearbox or actuator mounting.

Design Features

- **Fully tapped lugs** — each lug is threaded through, so the valve bolts independently to each flange
- **Dead-end service** — the downstream pipework or flange can be removed with the valve closed and the line still under pressure
- **One body drilling for both standards** — lug tappings suit PN10/16 and ANSI Class 150 flanges
- **CF8M stainless disc** as standard, giving better corrosion resistance than the usual ductile iron or nickel-plated disc
- **Cartridge-style EPDM seat** isolating the body from the line fluid — no separate body liner or flange gasket required
- **Stainless shaft** in ASTM A182 F304, blow-out proof arrangement
- **ISO 5211 top flange** for direct mounting of lever, gearbox, pneumatic or electric actuator
- **Zero leakage** seat tightness to ISO 5208 / API 598



SHOWN WITH LEVER OPERATOR — DN32 TO DN200

Specification

Valve type	Resilient seated lugged butterfly valve, concentric disc, fully tapped lugs
Size range	DN32 to DN400 (1¼" to 16")
Pressure rating	PN10 / PN16 and ANSI Class 150
Body	Ductile iron to EN 1563 — GJS500-7
Shaft	Stainless steel to ASTM A182 F304
Disc	Stainless steel to ASTM A351 CF8M (316)
Seat	EPDM
Temperature range	-20 °C to +110 °C
Operation	Supplied bare shaft with ISO 5211 top flange; lever, gearbox or actuator fitted to order
Top flange	ISO 5211 — F5/F7 (DN32-100), F7 (DN125-200), F10 (DN250-300), F14 (DN350-400)
Tolerances	ISO 2768-M
Model reference	20L3040 EPDM · L32200203040E0 (DN32-200), L250400203040E0 (DN250-400)

Standards & Testing

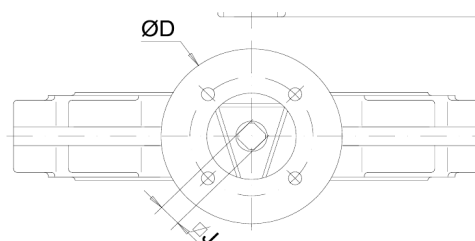
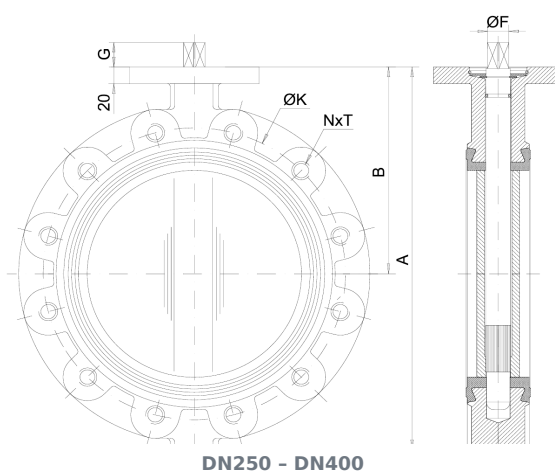
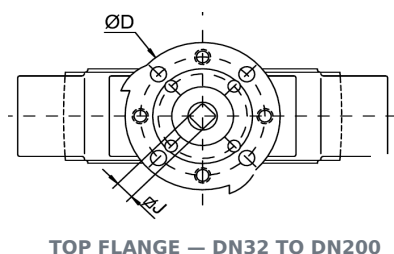
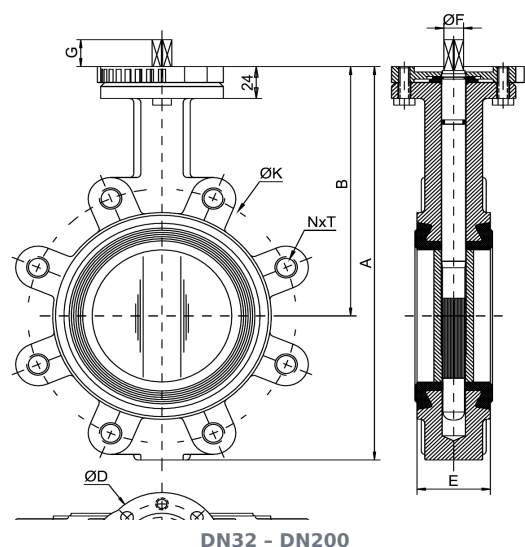
Face to face	EN 558 Series 20 · ISO 5752 Series 20 · API 609 Table 1 · BS 5155 Series 4
Lug tappings / flange drilling	PN10/16 — ISO 7005, DIN 2501, EN 1092-1 ANSI Class 150 — ANSI B16.5
Top flange	ISO 5211
Pressure test	EN 12266-1, ISO 5208 — body 1.5 × PN, seat 1.1 × PN
Tightness test	ISO 5208 — zero leakage to API 598
Tolerances	ISO 2768-M

Dimensions All dimensions in millimetres

DN	NPS	A	B	ØD	E	ØF	G	ØJ	PN10		PN16		ANSI 150		ISO 5211 TOP FL.	WEIGHT kg
									ØK	N × T1	ØK	N × T1	ØK	N × T1		
32	1¼"	205	140	88	33	9.5	14	8	100	4×M16	100	4×M16	88.9	4×½"	F5 / F7	3
40	1½"	205	140	88	33	9.5	14	8	110	4×M16	110	4×M16	98.5	4×½"	F5 / F7	3
50	2"	228	156	88	43	9.5	14	8	125	4×M16	125	4×M16	120.6	4×⅝"	F5 / F7	3.5
65	2½"	248	161	88	46	12	16	9	145	4×M16	145	4×M16	139.7	4×⅝"	F5 / F7	4.5
80	3"	265	169	88	46	14	16	11	160	8×M16	160	8×M16	152.4	4×⅝"	F5 / F7	6.5
100	4"	298	187	88	52	14	20	11	180	8×M16	180	8×M16	190.5	8×⅝"	F5 / F7	8
125	5"	331	206	105	56	17	20	14	210	8×M16	210	8×M16	215.9	8×¾"	F7	11
150	6"	349	215	105	56	17	20	14	240	8×M20	240	8×M20	241.3	8×¾"	F7	12
200	8"	430	255	105	60	21	24	17	295	8×M20	295	12×M20	298.5	8×¾"	F7	18.5
250	10"	460	248	150	68	25	24	19	350	12×M20	355	12×M24	362	12×⅞"	F10	28.5
300	12"	523	280	150	78	28	24	22	400	12×M20	410	12×M24	431.8	12×⅞"	F10	42
350	14"	570	300	170	78	28	29	22	460	16×M20	470	16×M24	476.3	12×1"	F14	53
400	16"	644	340	170	102	35	29	27	515	16×M24	525	16×M27	539.8	16×1"	F14	77

Lugs are tapped right through and suit PN10, PN16 and ANSI Class 150Lb flange drillings. ØK is the bolt circle and N × T1 the number and thread size of tappings for each standard. Top flange plate thickness is 24 mm for DN32-DN200 and 20 mm for DN250-DN400. Weights are for the bare shaft valve without operator.

Reference Views



Dimension Key

A	Overall height, bottom of body to top of drive
B	Height from valve centreline to top of drive
ØD	ISO 5211 top flange outside diameter
E	Face to face — body width between flanges
ØF	Shaft diameter

G	Height of drive square above the top flange
ØJ	Drive square across flats
ØK	Lug tapping bolt circle diameter
N x T1	Number and thread size of tapped lugs

Operators & Options

- **Lever operator** with notch plate for intermediate throttling positions — DN32 to DN200
- **Worm gearbox** with handwheel and position indicator — standard on DN250 and above, available on smaller sizes
- **Pneumatic actuation**, double acting or spring return, mounted directly to the ISO 5211 top flange
- **Electric actuation**, on/off or modulating
- **Accessories**: limit switch box, solenoid valve, positioner, manual override
- **Alternative seat and disc materials** available to order — confirm duty and media at enquiry

Redrawn by Actuation Valve & Control Ltd from the manufacturer's published data, references L32200203040E0 and L250400203040E0. Confirm operator and seat options at enquiry. Certified drawings are available on request against a specific order.