

Metal Replacement Butterfly Valve Type 565 Wafer/Lug



General

- **Size:** 2"–12"
- **Outer Body:** Polyamide PA6-60
- **Material:** Disc (core/wetted): Polyamide PA6-60/PVDF
- **Seals:** EPDM, FKM
- **Threaded Inserts:** 316 stainless steel
- **Operation:** Bare shaft, lever, gear
- **Connection:** ANSI 150 for both and DIN 2501 for 565 Wafer
- **Installation length:** EN558 row 20, ISO 5752 row 20, API 609 table 2
- **Actuator Interface:** EN ISO 5211

Key Certifications

- NSF 61
- ISO 9393-2
- EN 12266 (leak rate A)
- ISO 5208 (Rate A)
- FDA x 21 177.2600: EPDM and FKM
- USP Class VI (physiological non-toxic): EPDM and FKM

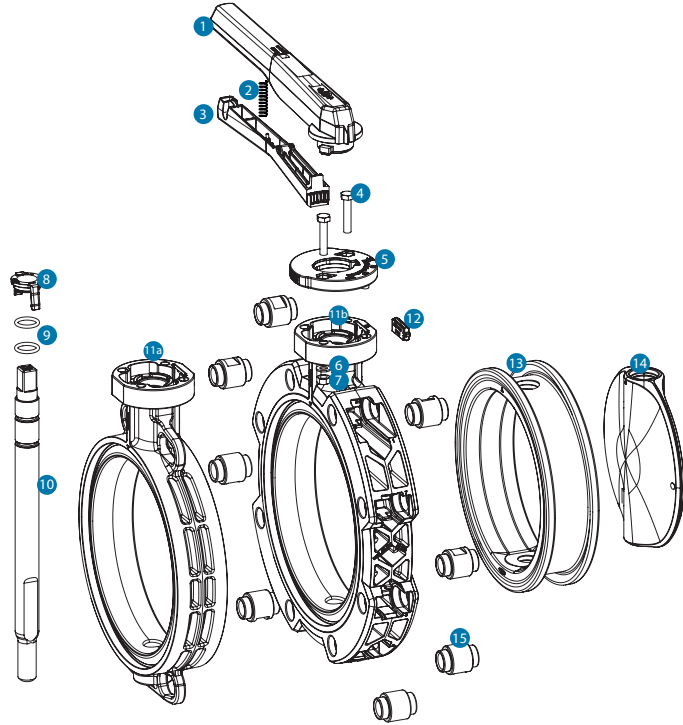
Sample Specification

The Type 565 Wafer and Type 565 Lug Butterfly Valves are wafer and lug style butterfly valves compatible with both ANSI 16.5 Class 150 and DIN 2501 flange patterns. The disc operation utilizes centric, resilient seated design principles. The valve is rated for bidirectional use. The stem is non-wetted, utilizing an interference fit of a molded seat and the disc hub. The seal liner fully isolates the valve body from process fluid. The handle is lockable with standard adjustment increments of 5 degrees. All valves are tested in accordance to ISO9393 and designed to ISO9001 for Quality and ISO14001 for Environmental Management. The operator mounting flange for the Type 565 is compliant with ISO standards. Following assembly, every valve is tested and certified bubble tight exceeding Class VI standards.

Material Specification

PVDF valves shall be type 1, grade 2 according to ASTM D3222 standards. Valves of all materials shall be RoHS compliant.

Components



Key Design Features

Reinforced Disc

The Type 565W/L Butterfly Valve is designed with a reinforced PVDF disc for improved strength. This rugged design is impact resistant, but does not compromise easy operation. The wetted PVDF disc material features superior surface finish and lubricity, while its Durethan® reinforcement provides lightweight toughness.



Optional Features

- **Actuation:** Electric, pneumatic
- **Limit Switches:** Mechanical, inductive
- **Operation:** Chain operator, square operating nut

Valve Components

Part	Description	Material
1	Lever	Durethan®
2	Spring	Spring Steel coated with MOLYKOTE 3400A
3	Grid lever	Durethan®
4	Screw	304 Stainless Steel
5	Index plate	Durethan®
6	Washer	304 Stainless Steel
7	Nut	301 Stainless Steel
8	Shaft lock	Durethan®
9	O-ring	EPDM or FKM
10	Shaft	430F Stainless Steel
11a	Wafer-style housing	Durethan®
11b	Lug-style housing	Durethan®
12	Cap	EPDM
13	Seat liner	EPDM or FKM
14	Disc (core)	Durethan®
14	Disc (wetted)	PVDF
15	Threaded inserts	316 Stainless Steel



Double Redundant Seals

The Type 565W/L Butterfly Valve features a truly non-wetted shaft design. The shaft is isolated from the flow media by utilizing a disc-hub seal and double redundant o-rings. This industry tested design ensures a reliable seal for a variety of applications.

Inductive Feedback Sensor

The Type 565W/L Butterfly Valve is offered with inductive sensors that signal the CLOSED or OPEN position of the valve via an electric signal to a controller supplied by the customer. This feedback system can be added with the valve in-line and a new sensor swapped without removing the operator.

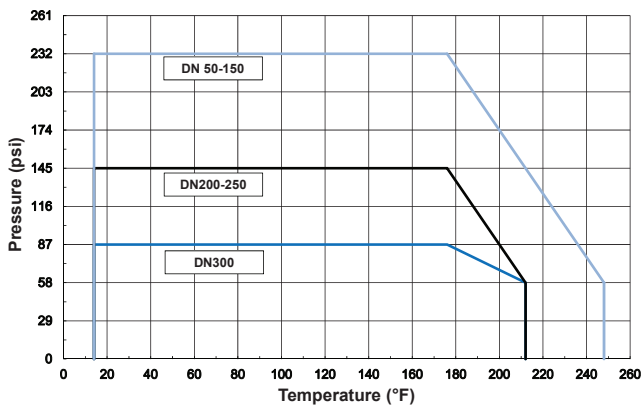


Technical Data

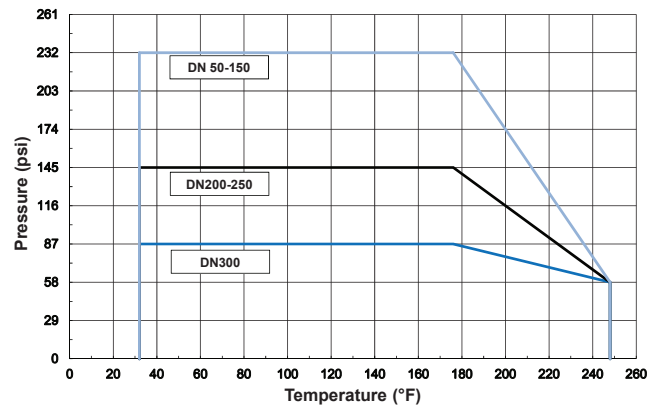
Pressure-Temperature Curves

The following graphs are based on a lifetime of 25 years of water or similar media applications

EPDM



FKM



CV Value

Size (inch)	d (mm)	CV (gal/min)
2	63	101
2½	75	177
3	90	281
4	110	400
5	140	832
6	160	1262
8	225	3052
10	280	4357
12	315	6606

Operating Torques

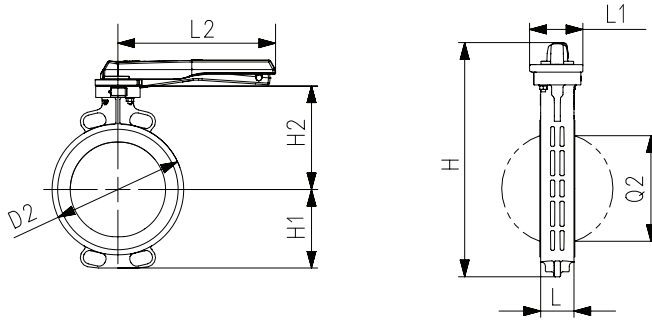
Size (inch)	d (mm)	Operating Torque (ft-lb) @ maximum pressure rating
2	63	11
2½	75	15
3	90	18
4	110	30
5	140	37
6	160	44
8	225	118
10	280	184
12	315	221

Weight (lbs)

Size (inch)	d (mm)	Lever	Gear
2	63	3.1	10.8
2½	75	3.5	11.2
3	90	4.0	11.7
4	110	6.0	13.4
5	140	7.3	15.0
6	160	9.5	16.8
8	225	12.6	19.8
10	280	-	37.9
12	315	-	47.2

Dimensions

The following tables are shown in millimeters unless otherwise specified

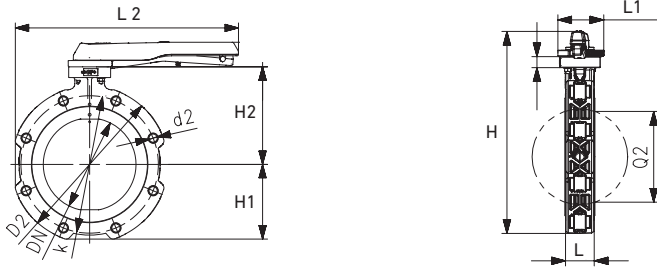


565 Wafer

Size (inch)	d (mm)	D2	H1	H2	L	L1	Q2
2	63	100	63	134	43	86	29
2½	75	121	82	140	46	86	44
3	90	138	89	146	46	86	64
4	110	159	104	167	52	86	84
5	140	187	118	180	56	86	111
6	160	213	131	189	56	86	138
8	225	267	159	210	60	86	191
10	280	326	196	263	68	125	239
12	315	380	231	285	78	125	286

Lever (2"-8")

Size (inch)	H	L2
2	250	205
2½	276	205
3	288	205
4	324	255
5	351	255
6	373	320
8	422	323

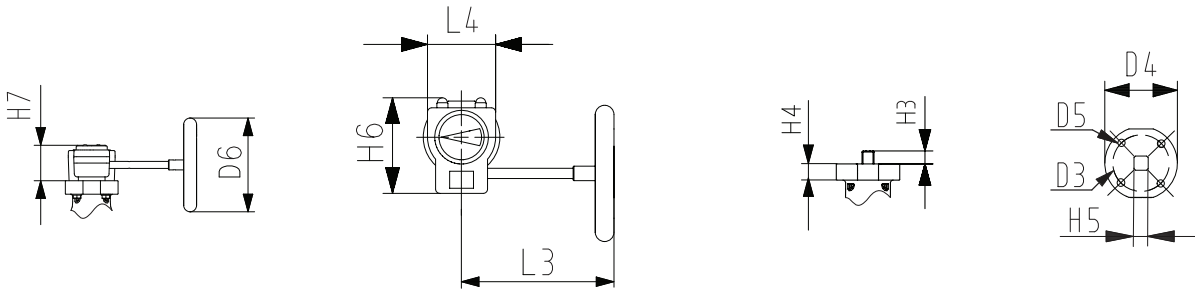


565 Lug

Size (inch)	d (mm)	D2	H1	H2	L	L1	Q2
2	63	155	70	133	43	86	29
2½	75	175	81	140	46	86	44
3	90	190	91	146	46	86	64
4	110	221	106	167	52	86	84
5	140	250	120	180	56	86	111
6	160	277	133	189	56	86	138
8	225	337	160	210	60	86	191
10	280	403	199	263	68	125	239
12	315	479	236	284	78	125	286

Lever (2"-8")

Size (inch)	H	L2
2	257	275
2½	274	285
3	290	295
4	326	360
5	354	374
6	375	455
8	423	483



Gear (G-CI)

Size (inch)	d (mm)	D6	H6	H7	L3	L4
2	63	152	115	58	180	92
2½	75	152	115	58	180	92
3	90	152	115	58	180	92
4	110	152	115	58	180	92
5	140	152	115	58	180	92
6	160	152	115	58	180	92
8	225	152	115	58	180	92
10	280	254	151	64	214	118
12	315	254	151	64	214	118

Bare Shaft

Size (inch)	d (mm)	D3	D4	D4	H3	H4	H5
2	63	70	90	8	27	27	11
2½	75	70	90	8	27	27	11
3	90	70	90	8	27	27	11
4	110	70	90	8	16	16	14
5	140	70	90	8	16	16	14
6	160	70	90	8	19	19	17
8	225	70	90	8	19	19	17
10	280	102	125	10	41	41	22
12	315	102	125	10	41	41	22