

Wafer Style Butterfly Valve Type 565



General

- **Size:** 2"–12"
- **Outer Body:** Polyamide PA6-60
- **Material:** Disc (core/wetted): Polyamide PA6-60/PVDF
- **Seals:** EPDM, FKM
- **Stem:** 316 stainless steel
- **Operation:** Bare shaft, lever, gear
- **Connection:** Both ANSI 150 and DIN 2501
- **Actuator Interface:** EN ISO 5211

Key Certifications

- **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
- **NSF 61**

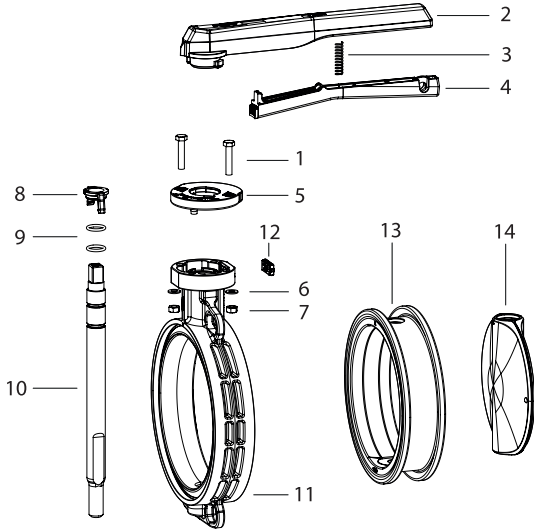
Sample Specification

The Type 565 Butterfly Valve is wafer style compatible with both ANSI 16.5 150lb 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 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



Optional Features

- **Actuation:** Electric, pneumatic
- **Limit Switches:** Mechanical, inductive
- **Handle:** Find adjustment lever (1°)
- **Operation:** Chain operator, square operating nut
- **Hardware:** Alternatives available upon request

Valve Components

Part	Description	Material
1	Screw	304 Stainless Steel
2	Lever	Durethan®
3	Spring	Spring Steel coated with MOLYKOTE 3400A
4	Grid lever	Durethan®
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
11	Housing	Durethan®
12	Cap	EPDM
13	Seat liner	EPDM or FKM
14	Disc (core)	Durethan®
14	Disc (wetted)	PVDF

Key Design Features

Reinforced Disc

The Type 565 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.



Double Redundant Seals

The Type 565 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.

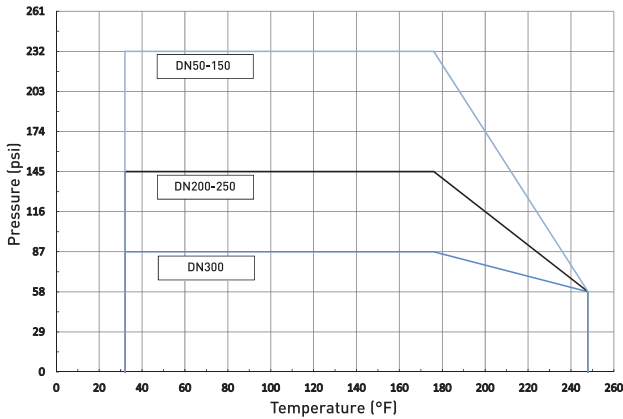
Inductive Double Switches

The Type 565 Butterfly Valve is offered with inductive switches 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 switch swapped without removing the operator.



Technical Data

Pressure-Temperature Curve



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	*
10	280	*
12	315	*

Operating torques

Size (inch)	d (mm)	Operating Torque (ft-lb) @ 145 psi	Operating Torque (ft-lb) @ 232 psi
2	63	11.1	11.1
2½	75	14.8	14.8
3	90	18.4	18.4
4	110	19.5	29.5
5	140	36.9	36.9
6	160	44.3	44.3
8	225	118.0	-
10	280	184.4	-
12	315	221.3	-

Weight

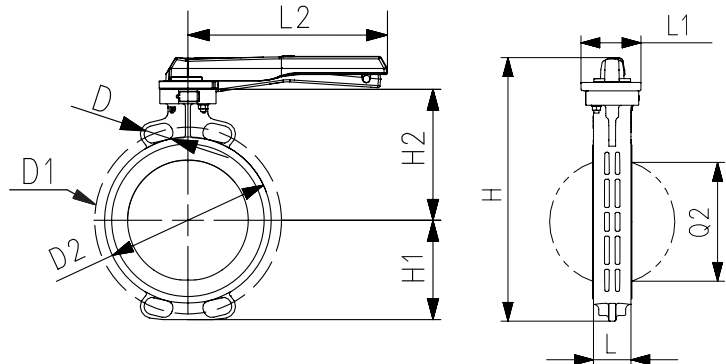
Size (inch)	d (mm)	Lever: EPDM	Lever: FKM	Gear: EPDM	Gear: FKM
2	63	2.7	2.9	6.1	6.3
2½	75	3.1	3.3	6.5	6.8
3	90	3.5	3.5	7.0	7.2
4	110	5.1	5.5	8.6	8.8
5	140	6.3	6.8	9.6	10.2
6	160	8.2	8.8	11.3	11.9
8	225	10.8	11.7	13.7	14.7
10	280	-	-	26.0	17.4
12	315	-	-	33.8	36.0

Dimensions

The following tables are shown in millimeters unless otherwise specified

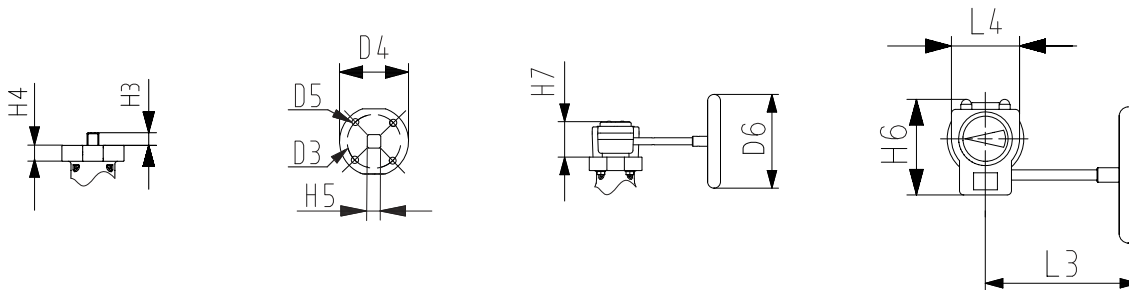
Bare Shaft

Size (inch)	D3	D4	D4	H3	H4	H5
2	70	90	8	27	27	11
2½	70	90	8	27	27	11
3	70	90	8	27	27	11
4	70	90	8	16	16	14
5	70	90	8	16	16	14
6	70	90	8	19	19	17
8	70	90	8	19	19	17
10	102	125	10	41	41	22
12	102	125	10	41	41	22



Lever

Size (inch)	d (mm)	D	D1 min	D1 max	D2	H	H1	H2	L	L1	L2	Q2
2	63	19	120	125	100	222.5	63	133.5	43	85.5	204.5	28.5
2½	75	19	140	145	121	248.5	82	140	46	85.5	204.5	44
3	90	19	150	160	138	261	89	146	46	85.5	204.5	63.5
4	110	19	175	191	158.5	286	104	166.5	52	85.5	254.5	84
5	140	23	210	216	187	313.5	118	180	56	85.5	254.5	110.5
6	160	24	241	241	213	337.5	17	189	56	85.5	319.5	137.5
8	225	23	290	295	267	387	17	209.5	60	85.5	323	191.5
10	280	25	353	362	325.5	499	22	262.5	68	125.5	-	239
12	315	25	400	432	380	555	22	284.5	78	125.5	-	285.5



Gear: G-CI (Standard)

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	230	118
12	315	254	151	64	230	118

Gear: G-AL (Optional)

Size (inch)	d (mm)	D6	H6	H7	L3	L4
2	63	160	112.5	61.5	168	80
2½	75	160	112.5	61.5	168	80
3	90	160	112.5	61.5	168	80
4	110	160	112.5	61.5	168	80
5	140	160	112.5	61.5	168	80
6	160	160	112.5	61.5	168	80
8	225	160	112.5	61.5	168	80
10	280	200	130	68.5	185.5	100
12	315	200	130	68.5	185.5	100