

Features

- ISO5211 top mounting for manual, air or electric actuators
- Unique wave line seat reduces torque and extends seal life
- Ductile iron body with 3-layer epoxy/epoxy/PUR coating
- 316SS disc with 2-piece stem design enhances flow capacity
- EPDM or NBR (Buna-N) seal options
- Seat is vulcanized to phenolic backup ring
- V-ring stem/shaft seals, same material as seat
- PTFE graphite reinforced stem bearings
- Pressure rated 230 PSI (16 Bar)
- Multi-standard flanged mounting holes
- Optional 10 position locking hand lever

Applications

Wafer body butterfly valves are used to control the flow of water, oils, air, vacuum and other media compatible with the materials of construction. Valves can be operated with manual, air or electric actuators.

Two seal options are available:

EPDM: Water service, other compatible media.

NBR (Buna-N): Oils, air, vacuum, other compatible media.

Temperature Range

EPDM Seals: 0 to 248° F (-18 to 120°C)

Buna-N Seals: 5 to 185° F (-15 to 85°C)

Construction

Valve Body	3-layer Epoxy/Epoxyp/PUR coated ductile iron GGG40
Disc	316 stainless steel CF8M
Disc Seat/Liner - Options	EPDM, NBR (Buna-N)
Stem Seals	V-ring (same material as seat)
Stem	420SS
Bearings	PTFE Graphite reinforced/Nylon
Fasteners	Stainless Steel



Operation

Direct mount wafer butterfly valves can be easily fitted with optional manual operator, air actuator or electric actuator using standard ISO5211 top mounting. Rotating the square stem one quarter turn moves the stainless steel disc and open or closes the valve. Unique wave line soft seat reduces the torque required to close the valve and extends the seal life.

Description

Wafer butterfly valves with epoxy-coated ductile iron body are designed to control various media in commercial and industrial applications. Valve mounts between two standard ANSI/ASME Class 125/ 150 and other international flanges. Seat to flange seal, eliminates the need for flange gaskets. Disc is precision machined 316SS. Two piece stem and disc design enhances the flow capacity and reduces turbulence.

Options

- Hand lever with 10 position locking
- Gear Operators (6" sizes)
- Air Actuators
- Electric Actuators

Specifications (English units)

Stock Number	Pipe Size (inch)	Orifice Diam. (inch)	Cv Flow Factor	Pressure Max.(PSI)	Fluid Media*	Body	Disc
Wafer Body EPDM Seals: BARE STEM (no handle)							
564416	2	2.00	124	230	Water	Ductile Iron	316SS
564420	2-1/2	2.50	247	230	Water	Ductile Iron	316SS
564424	3	3.00	470	230	Water	Ductile Iron	316SS
564432A	4	4.00	929	230	Water	Ductile Iron	316SS
564448	6	6.00	2243	230	Water	Ductile Iron	316SS
Wafer Body NBR (BUNA-N) Seals: BARE STEM (no handle)							
564616	2	2.00	124	230	Air, Oil, Vacuum	Ductile Iron	316SS
564620	2-1/2	2.50	247	230	Air, Oil, Vacuum	Ductile Iron	316SS
564624	3	3.00	470	230	Air, Oil, Vacuum	Ductile Iron	316SS
564632A	4	4.00	929	230	Air, Oil, Vacuum	Ductile Iron	316SS
564648	6	6.00	2243	230	Air, Oil, Vacuum	Ductile Iron	316SS

Cv = The GPM of water at 60° F that will pass through the valve with 1 PSI pressure drop

* Consult compatibility chart for other fluid media. Suitable for vacuum up to 29 inHg

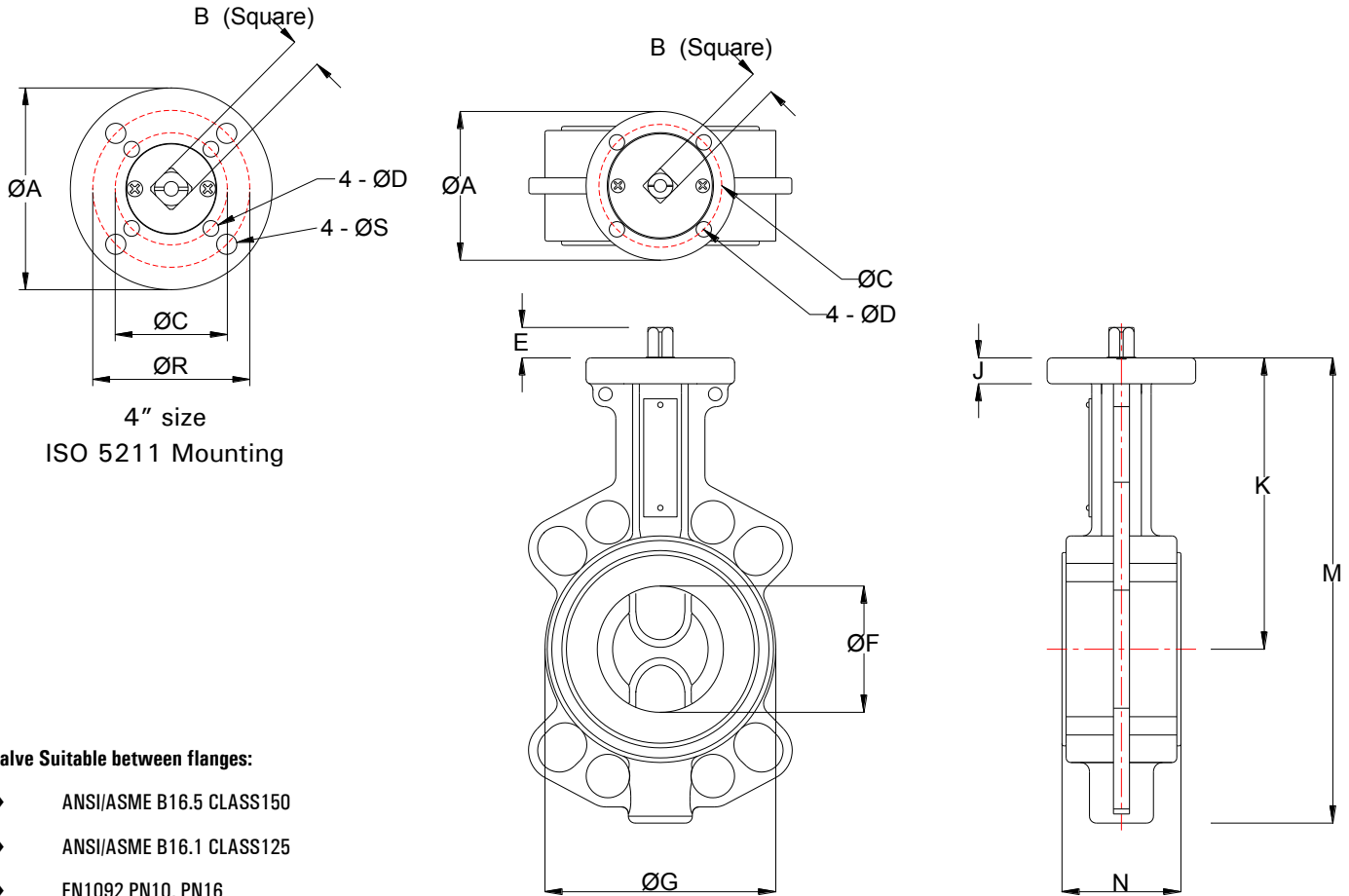
Specifications (Metric units)

Stock Number	Pipe Size (DN)	Orifice Diam. (mm)	Kv Flow Factor	Pressure Max.(Bar)	Fluid Media*	Body	Disc
Wafer Body EPDM Seals: BARE STEM (no handle)							
564416	50	50	107	16	Water	Ductile Iron	316SS
564420	65	65	212	16	Water	Ductile Iron	316SS
564424	80	80	404	16	Water	Ductile Iron	316SS
564432A	100	100	799	16	Water	Ductile Iron	316SS
564448	150	150	1929	16	Water	Ductile Iron	316SS
Wafer Body NBR (BUNA-N) Seals: BARE STEM (no handle)							
564616	50	50	107	16	Air, Oil, Vacuum	Ductile Iron	316SS
564620	65	65	212	16	Air, Oil, Vacuum	Ductile Iron	316SS
564624	80	80	404	16	Air, Oil, Vacuum	Ductile Iron	316SS
564632A	100	100	799	16	Air, Oil, Vacuum	Ductile Iron	316SS
564648	150	150	1929	16	Air, Oil, Vacuum	Ductile Iron	316SS

Kv = The number of m³ per hour of 20° C water at 1 bar pressure drop

* Consult compatibility chart for other fluid media. Suitable for vacuum up to 29 inHg

Dimensions 2" to 6" Sizes



Valve Suitable between flanges:

- ◆ ANSI/ASME B16.5 CLASS150
- ◆ ANSI/ASME B16.1 CLASS125
- ◆ EN1092 PN10, PN16
- ◆ JIS B 2239 10K, 16K
- ◆ BS 10 Table D, Table E

Pipe Size		A	B	C	D	E	F	G	J	K	M	N	R	S	ISO	Weight
2 DN50	inch	2.56	0.43	1.97	0.28	0.53	1.97	3.90	0.39	4.96	7.95	1.81	-	-	F05	4.4 lb
	mm	65	11	50	7	13.5	50	99	10	126	202	46	-	-		2.0 kg
2-1/2 DN65	inch	2.56	0.43	1.97	0.28	0.53	2.56	4.46	0.39	5.28	8.50	1.93	-	-	F05	5.5 lb
	mm	65	11	50	7	13.5	65	113	10	134	216	49	-	-		2.5 kg
3 DN80	inch	2.56	0.43	1.97	0.28	0.53	3.15	5.07	0.39	6.18	9.96	1.93	-	-	F05	7.3 lb
	mm	65	11	50	7	13.5	80	129	10	157	253	49	-	-		3.3 kg
4 DN100	inch	3.54	0.55	1.97	0.28	0.75	3.94	6.17	0.51	6.57	11.06	2.19	2.76	0.35	F05/F07	10.8 lb
	mm	90	14	50	7	19	100	157	13	167	281	56	70	9		4.9 kg
6 DN150	inch	3.54	0.67	2.76	0.35	0.73	5.91	8.39	0.51	7.99	13.58	2.31	-	-	F07	17.0 lb
	mm	90	17	70	9	18.5	150	213	13	203	345	59	-	-		7.7 kg

Valve Seating Torques (inch lbs)

SIZE	Maximum Differential Pressure (PSI)				
	50	100	145	200	230
2	62	62	71	71	71
2-1/2	97	97	106	115	115
3	124	133	151	159	168
4	186	195	212	239	248
6	400	434	487	558	593

Valve Seating Torques (nm)

SIZE	Maximum Differential Pressure (Bar)				
	3.5	7	10	14	16
DN50	7	7	8	8	8
DN65	11	11	12	13	13
DN80	14	15	17	18	19
DN100	21	22	24	27	28
DN150	45	49	55	63	67



Torques shown are for on-off "wet" service (ex: water), for dry service (ex: air) multiply above values by 1.25. Valve disc turned clockwise and activated at least once per month. The effect of dynamic torque is not considered in calculation.

Flow Capacity (Cv)

SIZE	Disc Open Angle							
	20°	30°	40°	50°	60°	70°	80°	90°
2	1	5.5	16	33	54	82	113	124
2-1/2	2.7	13	31	57	89	141	199	247
3	7	32	62	106	163	248	350	470
4	16	66	125	203	225	470	691	929
6	59	150	260	422	665	1136	1785	2243

Cv = The number of US gallons per minute of 60° F water at 1 psi pressure drop

Flow Capacity (Kv)

SIZE	Disc Open Angle							
	20°	30°	40°	50°	60°	70°	80°	90°
DN50	0.9	4.7	13	29	47	71	97	107
DN65	2.3	11	26	49	77	121	170	212
DN80	6	28	54	91	140	213	301	404
DN100	14	57	108	175	262	404	594	799
DN150	51	129	224	363	572	977	1535	1929

Kv = The number of m³ per hour of 20° C water at 1 bar pressure drop

Features

- Powder epoxy coated aluminum hand lever
- 10 position locking handle
- Convenient installation and usage
- 304SS bolts and nuts

Appication

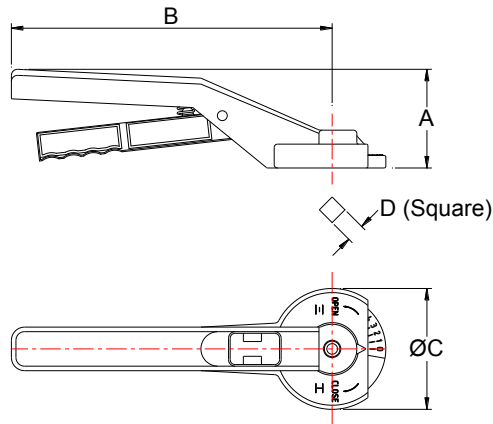
Hand lever operator for wafer and lug style butterfly valves. The valve disc can be locked in any one of 10 positions with spring loaded lever. Hand lever kit includes lever, gear locking plate and stainless hardware for mounting.



Specifications

Stock No.	Description
565001A	Hand lever for valve sizes 2", 2-1/2", 3" (DN50, DN65, DN80)
565002	Hand lever for valve size 4" (DN100)
565003	Hand lever for valve size 6" (DN150)

Dimensions



Pipe Size		A	B	C	D	ISO	Weight
2, 2-1/2, 3 (DN50, 65, 80)	inch	2.4	7.7	2.9	0.43	F05	0.70 lbs
	mm	60	195	73	11		0.32 kg
4 (DN100)	inch	3.1	10.8	3.94	0.55	F07	1.5 lbs
	mm	78	275	100	14		0.68 kg
6 (DN150)	inch	3.1	10.8	3.94	0.67	F07	1.5 lbs
	mm	78	275	100	17		0.68 kg

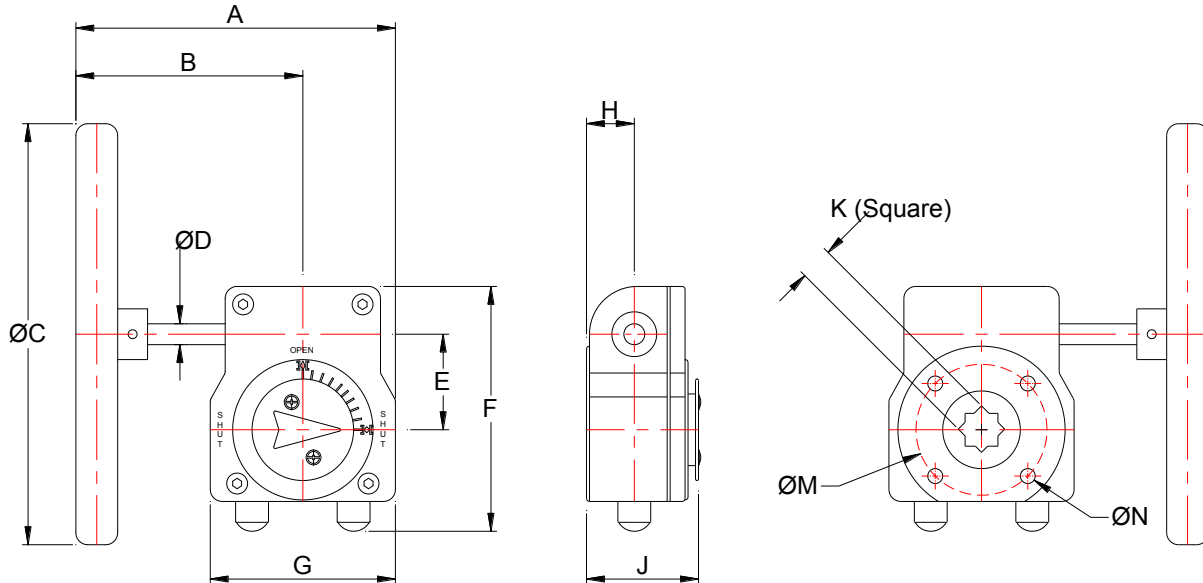
Features

- Aluminum alloy housing
- Hand wheel control
- Steel input shaft and worm gear drive
- Easy ISO5211 mounting
- Waterproof enclosure
- Adjustable travel stops are standard and factory set
- 304SS bolts and nuts



Specifications

Stock No.	Description
565008	Hand wheel gear operator for valve size 6" (DN150)



Pipe Size		A	B	C	D	E	F	G	H	J	K	M	N	ISO	Weight
6 (DN150)	inch	6.77	4.69	7.87	0.47	2.01	5.12	3.94	1.02	2.05	0.67	2.76	-	F07	4.9 lbs
	mm	172	119	200	12	51	130	100	26	52	17	70	M8x12 depth		2.22 kg