

Features

- Wafer butterfly valve with ISO5211 direct mount actuator
- Unique wave line seat reduces torque and extends seal life
- Ductile iron body with epoxy coating and 316SS disc
- Rack and pinion quarter turn (90°) rotation
- Spring Return or Double Acting Actuators
- Type IP67 weatherproof actuator
- Variable open/close stroke setting
- ATEX approved
- Highly visible valve position indicator
- Actuator factory lubricated for normal lifetime

Applications

Pneumatic/ manual actuated butterfly valves for control of water and other media compatible with the materials of construction. The de-clutch option can be used for manual operation or to set a stop limit for opening or closing. Cycle times approx. 1 to 3 seconds per 90° rotation. Valve can be mounted in any orientation. EPDM seals typically used for on-off control of water and other media compatible with the materials of construction. NBR (Buna-N) seals typically used for air, oil, vacuum and other media compatible with the materials of construction. Available in either failsafe spring return or double acting designs.

Operation

Double acting actuators require air pressure to open and air pressure to close. Spring return actuators require air pressure to open and utilize springs to close for failsafe operation. Pulling the handwheel détente pin allows manual operation of the valve via the handwheel. Re-engaging the détente pin mid-stroke creates a partial stroke position, ie the automatic stroke begins/ends at the locked handwheel position. Rotating the handwheel counterclockwise rotates the output drive counterclockwise when viewed from the top.

Construction

Valve Body	Epoxy coated ductile iron
Disc	316 stainless steel CF8M
Disc Seat/Liner	EPDM or NBR (Buna-N)
Stem/Stem Seals	420 stainless steel / V-ring (same material as seat)
Actuator Seals	NBR (Buna-N)
Actuator Body	Extruded aluminium– 35 micron anodizing, 40 micron polyester coated end covers
Position Indicator	Glass filled Polyamide
Fasteners	Stainless Steel



Description

Valworx heavy duty pneumatic/manual combination actuator features hard anodized aluminum enclosure, type IP67. Actuators are available in double acting and spring return models. Direct mount butterfly valve with epoxy-coated ductile iron lug body are designed for 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. Standard Namur mounting pads for optional accessory confirmation switches, pilot valves and valve positioners. Rotation adjustment +5° at the 0° and 90° positions. The integral handwheel is used for manual operation and setting a limit stop.

Approvals/Standards

Actuator

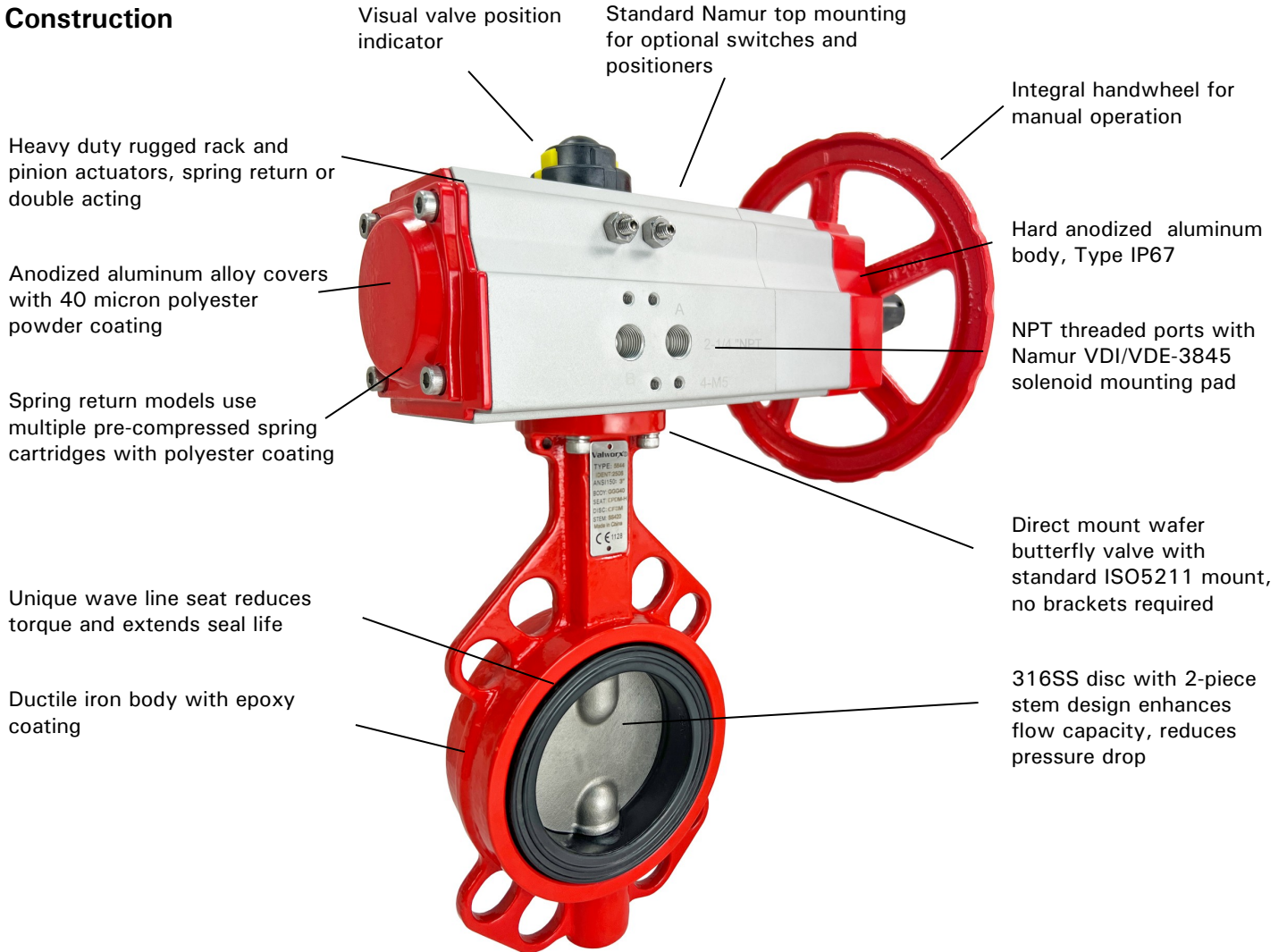
- CE Declaration of conformity
- EN ISO 12100:2010
- EN ISO 4414:2010
- ISO5211/ DIN3337 valve mounting
- Namur VDI/VDE 3845 accessory mounting
- ATEX- Ex II 2 G Ex h IIC T6 Gb; Ex II 2 D Ex H IIB T85°C Db
- SIL3 per IEC 61508:2010



Valve

- Design complies with API-609, MSS SP-67
- Tests per API-598, AWWA C502-87
- CE conformance– PED 2014/68/UE
- Suitable flanges- ANSI/ASME Class 125/150, EN1092 PN10, PN16, BS10 Table D, E and JIS B2239 10K,16K

Construction



Pressure Rating

Pressure Rating: 230 PSI (16 Bar), 2-8" / 145 PSI (10 Bar), 10"
 Vacuum 29in Hg

Pilot Media: Filtered, dry or lubricated compressed air

Pilot Air Pressure– Double Acting: 43-120 PSI (3-8 Bar)

Pilot Air Pressure– Spring Return: 87-120 PSI (6-8 Bar)

Temperature Range

Actuator Temperature Rating: -4 to 176°F (-20 to 80°C)

Valve Temperature Rating: EPDM seals 0 to 248° F (-18 to 120°C)

Options

- DMS: Direct Mount Solenoid
 - pilot to electrically operate the ball valve
- VPS: Valve Position Switches
 - limit switches to confirm valve position
- PVP: Pneumatic Valve Positioner
 - position the ball with 4-20mA
- Lock out/Tag out device
- Inline mounting

Specifications (English units)

Stock Number	Pipe Size (inch)	Orifice Diam. (inch)	Cv Flow Factor	Pressure Max. (PSI)	Fluid Media*	Air Volume/ 90° (cubic inches)	Cycle Time/90° (seconds)	Pilot Air Port (NPT)
Wafer Body EPDM Seals: SPRING RETURN								
527102	2	1.97	124	230	Water	24.4	1-1	1/4
527104	3	3.15	470	230	Water	54.9	2-1	1/4
527105	4	3.94	929	230	Water	91.5	2-1	1/4
527107	6	5.91	2243	230	Water	201.4	3-1	1/4
Wafer Body EPDM Seals: DOUBLE ACTING								
527002	2	1.97	124	230	Water	18.3	1-1	1/4
527004	3	3.15	470	230	Water	24.4	1-1	1/4
527005	4	3.94	929	230	Water	42.7	1-1	1/4
527007	6	5.91	2243	230	Water	91.5	1-1	1/4
527008	8	7.87	3584	230	Water	341.7	2-2	1/4
527010	10	9.84	4498	145	Water	341.7	2-2	1/4
Wafer Body NBR (Buna- N) Seals: SPRING RETURN								
527302	2	1.97	124	230	Air, Oil, Vacuum	24.4	1	1/4
527304	3	3.15	470	230	Air, Oil, Vacuum	54.9	2-1	1/4
527305	4	3.94	929	230	Air, Oil, Vacuum	91.5	2-1	1/4
527307	6	5.91	2243	230	Air, Oil, Vacuum	201.4	3-1	1/4
Wafer Body NBR (Buna- N) Seals: DOUBLE ACTING								
527202	2	1.97	124	230	Air, Oil, Vacuum	18.3	1-1	1/4
527204	3	3.15	470	230	Air, Oil, Vacuum	24.4	1-1	1/4
527205	4	3.94	929	230	Air, Oil, Vacuum	42.7	1-1	1/4
527207	6	5.91	2243	230	Air, Oil, Vacuum	91.5	1-1	1/4

Cv is 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*	Air Volume/90° (cubic liters)	Cycle Time/90° (seconds)	Pilot Air Port (NPT)
Wafer Body EPDM Seals: SPRING RETURN								
527102	50	50	107	16	Water	0.4	1-1	1/4
527104	80	80	404	16	Water	0.9	2-1	1/4
527105	100	100	799	16	Water	1.5	2-1	1/4
527107	150	150	1929	16	Water	3.3	3-1	1/4
Wafer Body EPDM Seals: DOUBLE ACTING								
527002	50	50	107	16	Water	0.3	1-1	1/4
527004	80	80	404	16	Water	0.4	1-1	1/4
527005	100	100	799	16	Water	0.7	1-1	1/4
527007	150	150	1929	16	Water	1.5	1-1	1/4
527008	200	200	3100	16	Water	5.6	2-2	1/4
527010	250	250	5200	10	Water	5.6	2-2	1/4
Wafer Body NBR (Buna- N) Seals: SPRING RETURN								
527302	50	50	107	16	Air, Oil, Vacuum	0.4	1-1	1/4
527304	80	80	404	16	Air, Oil, Vacuum	0.9	2-1	1/4
527305	100	100	799	16	Air, Oil, Vacuum	1.5	2-1	1/4
527307	150	150	1929	16	Air, Oil, Vacuum	3.3	3-1	1/4
Wafer Body NBR (Buna- N) Seals: DOUBLE ACTING								
527202	50	50	107	16	Air, Oil, Vacuum	0.3	1-1	1/4
527204	80	80	404	16	Air, Oil, Vacuum	0.4	1-1	1/4
527205	100	100	799	16	Air, Oil, Vacuum	0.7	1-1	1/4
527207	150	150	1929	16	Air, Oil, Vacuum	1.5	1-1	1/4

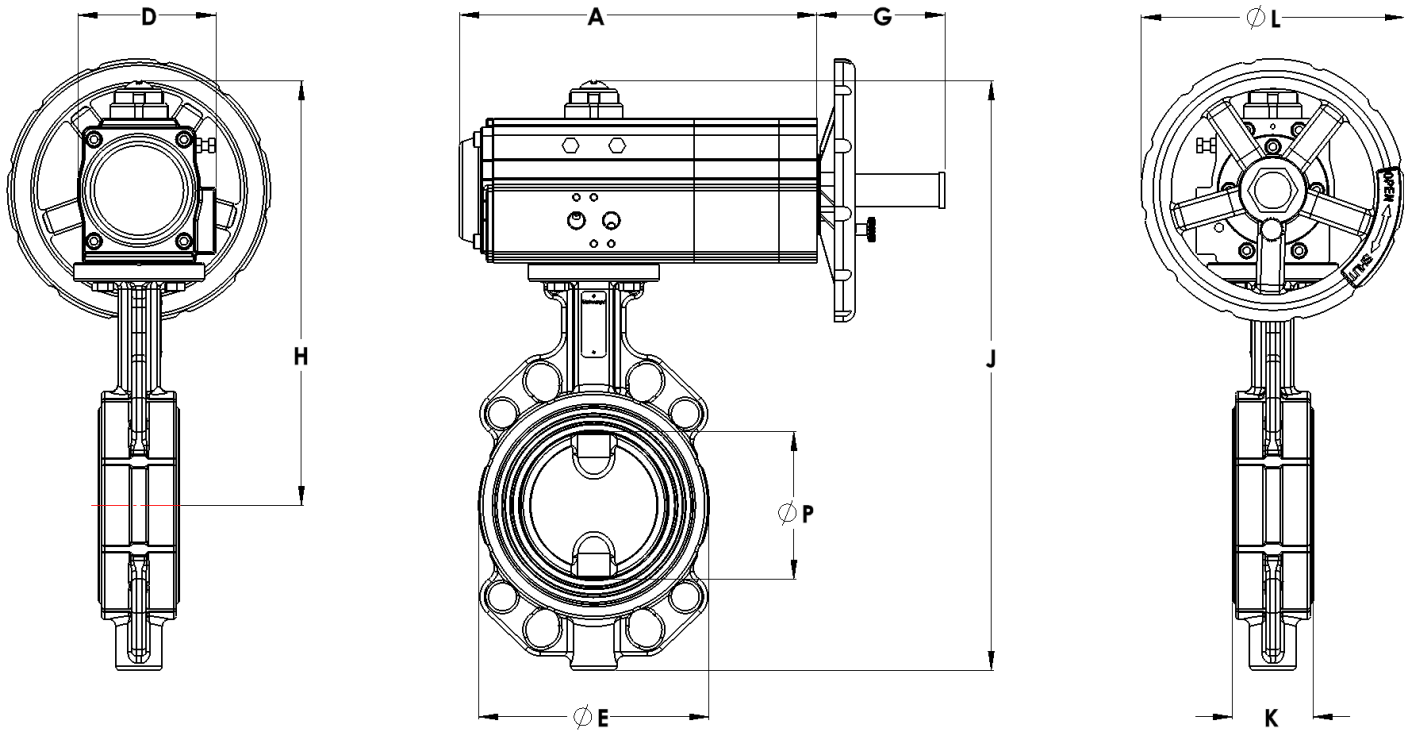
Kv = The number of m³ per hour of 20° C water at 1 bar pressure drop

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

Dimensions: Spring Return

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

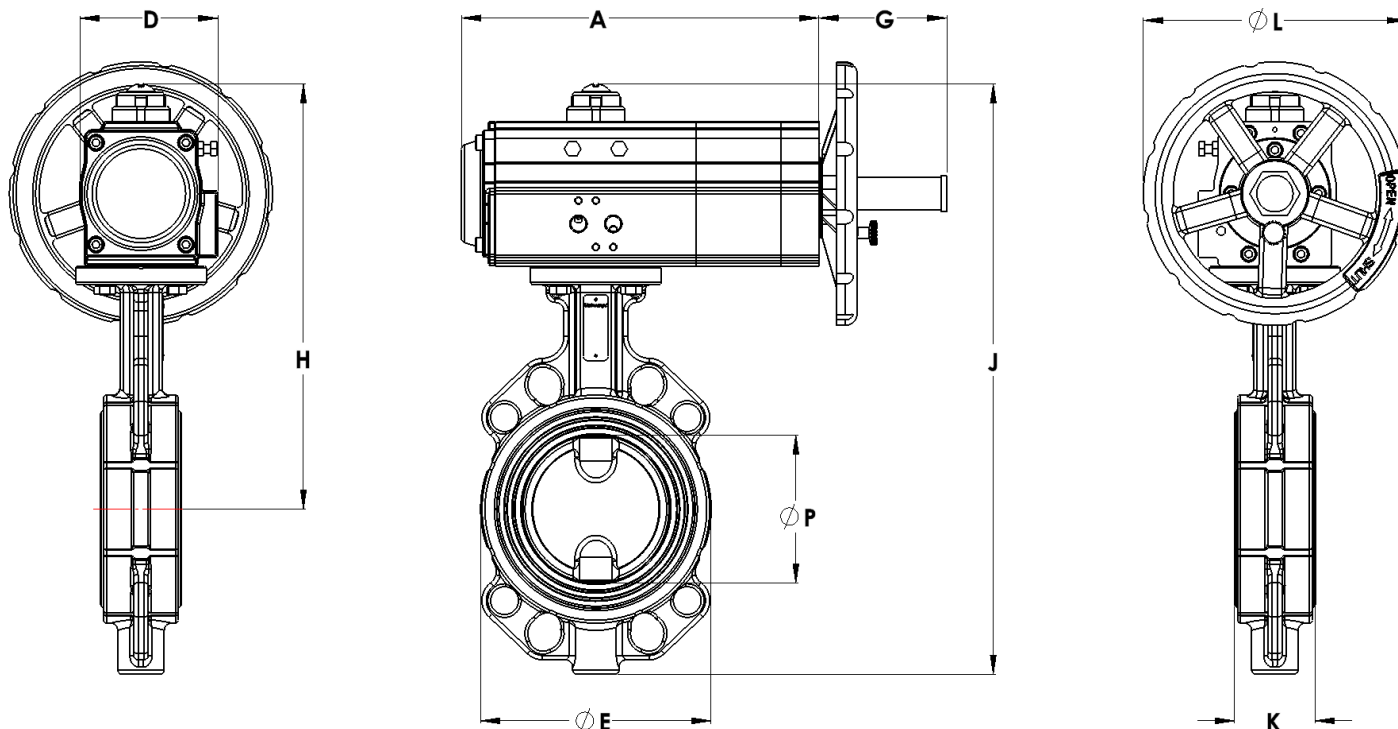


Pipe Size		A	D	E	G	H	J	K	L	P	Weight lbs (kg)
2	inch	9.2	2.8	3.9	3.3	9.3	12.3	1.8	7.7	1.9	14.2 lb
DN50	mm	233.7	71.1	99.0	83.8	236.2	312.4	46.0	195.0	50.0	6.5 kg
3	inch	10.7	3.6	5.1	4.0	11.3	15.1	1.9	7.7	3.2	20.3 lb
DN80	mm	271.8	91.4	129.0	101.6	287.0	383.5	49.0	195.0	80.0	9.2 kg
4	inch	13.4	3.9	6.2	4.3	12.0	16.5	2.2	9.8	3.9	32.2 lb
DN100	mm	340.4	99.1	157.0	109.2	304.8	419.1	56.0	250.0	100.0	14.6 kg
6	inch	15.8	5.0	8.4	5.2	14.9	20.4	2.3	15.7	5.9	60.9 lb
DN150	mm	401.3	127.0	213.0	132.1	378.5	518.2	59.0	400.0	150.0	27.7 kg

Dimensions: Double Acting

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	D	E	G	H	J	K	L	P	Weight lbs (kg)
2	inch	8.3	2.6	3.9	2.9	8.6	11.6	1.8	7.1	1.9	10.2 lb
DN50	mm	210.8	66.0	99.0	73.7	218.4	294.6	46.0	180.0	50.0	4.6 kg
3	inch	9.2	2.8	5.1	3.3	10.5	14.3	1.9	7.7	3.2	16.1 lb
DN80	mm	233.7	71.1	129.0	83.8	266.7	363.2	49.0	195.0	80.0	7.3 kg
4	inch	9.6	3.1	6.2	3.5	11.3	15.8	2.2	7.1	3.9	19.5 lb
DN100	mm	243.8	78.7	157.0	88.9	287.0	401.3	56.0	180.0	100.0	8.9 kg
6	inch	13.4	3.9	8.4	4.3	13.4	19.0	2.3	9.8	5.9	36.8 lb
DN150	mm	340.4	99.1	213.0	109.2	340.4	482.6	59.0	250.0	150.0	16.7 kg
8	inch	20.1	5.4	10.7	6.3	16.8	23.6	2.5	19.7	7.9	79.7 lb
DN200	mm	510.5	137.2	271.0	160.0	426.7	599.4	64.0	500.0	200.0	36.2 kg
10	inch	20.1	5.4	12.9	6.3	18.3	26.7	2.7	19.7	9.8	94.7 lb
DN250	mm	510.5	137.2	329.0	160.0	464.8	678.2	68.0	500.0	250.0	43.0 kg