

Features

- Lug body 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
- Type IP66 & IP68 weatherproof actuator
- Rugged scotch yoke construction tested for 1 million+ cycles
- Highly visible valve position indicator
- Anodized aluminum body with epoxy-polyester end covers
- Actuator factory lubricated for normal life
- Namur and ISO mounting standards
- Dry or lubricated pilot air supply

Applications

Air actuated lug body butterfly valves are used to control the flow of water, oils, air, vacuum and other media compatible with the materials of construction. Valves available with either spring return or double acting actuators.

Three seal options are available:

EPDM: Water service, other compatible media.

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

FPM (Viton): Hydrocarbons, oils, other compatible chemicals/media.

Scotch yoke actuators should not be used for positioning applications.

Construction

Valve Body	Epoxy coated ductile iron
Disc	316 stainless steel CF8M
Disc Seat/Liner	Options: EPDM, NBR (Buna-N), FPM (Viton)
Stem/Stem Seals	420 stainless steel / V-ring (same material as seat)
Actuator Body/End Covers	Hard anodized aluminum/Polyester coated aluminum
Valve Position Indicator	Glass filled Polyamide
Fasteners	Stainless Steel
Actuator Seals	NBR



Operation

Spring return valves use a pilot air pressure signal to open the valve and springs (failsafe) to close the valve when exhausting of the pilot signal. Double acting valves use air pressure to open the valve and air pressure to close the valve.

Description

Air actuated direct mount butterfly valves with epoxy-coated ductile iron lug body are designed for commercial and industrial applications. Valve mounts between two standard ANSI/ASME Class 125/ 150 flanges. Integral 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

- Namur direct mount pilot solenoid valves
- Limit switch/Visual valve position indicator

Construction Features

Heavy duty rugged scotch yoke design

Anodized aluminum alloy covers with 40 micron polyester powder coating

Spring return models use multiple pre-compressed spring cartridges with polyester coating

Stainless steel fasteners

Unique wave line seat reduces torque and extends seal life

316SS disc with 2-piece stem design enhances flow capacity, reduces pressure drop

Visual valve position indicator

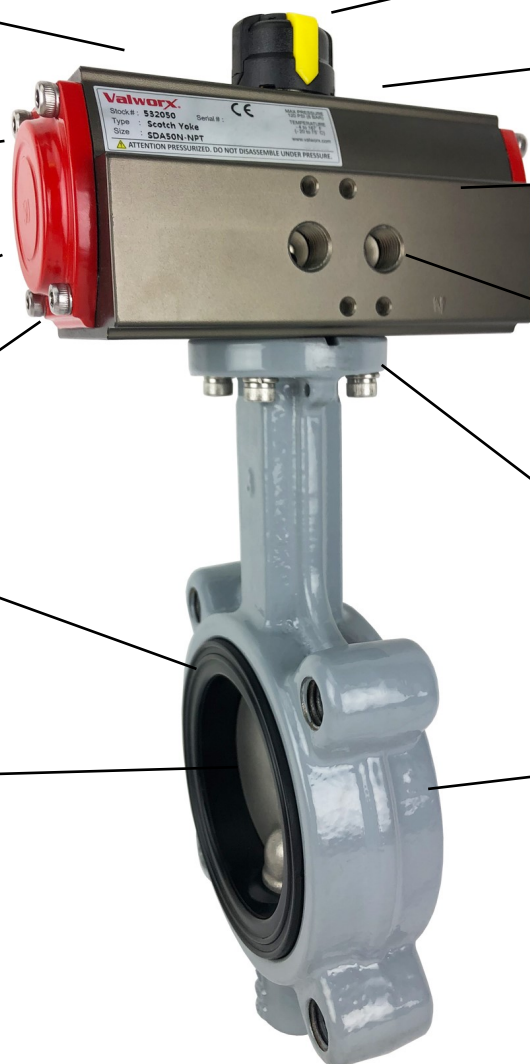
Standard Namur top mounting for optional switches

Extruded aluminum body with 35 micron hard anodizing

NPT pilot air ports and additional Namur VDI/VDE-3845 solenoid mounting pad

Direct mount wafer butterfly valve with standard ISO5211 mount, no brackets required

Ductile iron body with epoxy coating



Pressure Rating

Pressure Rating: 230 PSI (16 Bar), Vacuum 29in Hg

Temperature Rating

Actuator Temperature Rating: -4 to 167° F (-20 to 75° C)

Valve Temperature Rating: EPDM seals 0 to 266° F (-18 to 130°C)

NBR seals 5 to 185° F (-15 to 85°C)

FPM seals 5 to 338° F (-15 to 170°C)



International standard ISO5211 valve mounting pad

Specifications - LUG Body, Spring Return (English units)

Stock Number	Pipe Size (inch)	Orifice Diam. (inch)	Cv Flow Factor	Pressure Max.(PSI)	Fluid Media*	Cycle Time/90° (seconds)	Recommended Air Pilot Pressure
Lug Body EPDM Seals: SPRING RETURN							
564302	2	2.00	124	230	Water	0.3 - 0.5	58-87
564303	2-1/2	2.50	247	230	Water	0.4 - 0.6	58-87
564304	3	3.00	470	230	Water	0.4 - 0.6	58-87
564305	4	4.00	929	230	Water	0.4 - 0.6	58-87
564307	6	6.00	2243	230	Water	0.7 - 1.2	58-87
Lug Body NBR (BUNA-N) Seals: SPRING RETURN							
564321	2	2.00	124	230	Air, Oil, Vacuum	0.3 - 0.5	58-87
564322	2-1/2	2.50	247	230	Air, Oil, Vacuum	0.4 - 0.6	58-87
564323	3	3.00	470	230	Air, Oil, Vacuum	0.4 - 0.6	58-87
564324	4	4.00	929	230	Air, Oil, Vacuum	0.4 - 0.6	58-87
564326	6	6.00	2243	230	Air, Oil, Vacuum	0.7 - 1.2	58-87
Lug Body FPM (VITON) Seals: SPRING RETURN							
564342	2	2.00	124	230	Hydrocarbon, Oil	0.3 - 0.5	58-87
564343	2-1/2	2.50	247	230	Hydrocarbon, Oil	0.4 - 0.6	58-87
564344	3	3.00	470	230	Hydrocarbon, Oil	0.4 - 0.6	58-87
564345	4	4.00	929	230	Hydrocarbon, Oil	0.4 - 0.6	58-87
564347	6	6.00	2243	230	Hydrocarbon, Oil	0.7 - 1.2	58-87

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 - LUG Body, Double Acting (English units)

Stock Number	Pipe Size (inch)	Orifice Diam. (inch)	Cv Flow Factor	Pressure Max.(PSI)	Fluid Media*	Cycle Time/90° (seconds)	Recommended Air Pilot Pressure
Lug Body EPDM Seals: DOUBLE ACTING							
564312	2	2.00	124	120	Water	0.3	58-87
564313	2-1/2	2.50	247	120	Water	0.3	58-87
564314	3	3.00	470	120	Water	0.3	58-87
564315	4	4.00	929	120	Water	0.4	58-87
564317	6	6.00	2243	120	Water	0.6	58-87
Lug Body NBR (BUNA-N) Seals: DOUBLE ACTING							
564331	2	2.00	124	120	Air, Oil, Vacuum	0.3	58-87
564332	2-1/2	2.50	247	120	Air, Oil, Vacuum	0.3	58-87
564333	3	3.00	470	120	Air, Oil, Vacuum	0.3	58-87
564334	4	4.00	929	120	Air, Oil, Vacuum	0.4	58-87
564336	6	6.00	2243	120	Air, Oil, Vacuum	0.6	58-87
Lug Body FPM (VITON) Seals: DOUBLE ACTING							
564352	2	2.00	124	120	Hydrocarbon, Oil	0.3	58-87
564353	2-1/2	2.50	247	120	Hydrocarbon, Oil	0.3	58-87
564354	3	3.00	470	120	Hydrocarbon, Oil	0.3	58-87
564355	4	4.00	929	120	Hydrocarbon, Oil	0.4	58-87
564357	6	6.00	2243	120	Hydrocarbon, Oil	0.6	58-87

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 - LUG Body, Spring Return (Metric units)

Stock Number	Pipe Size (DN)	Orifice Diam. (mm)	Kv Flow Factor	Pressure Max. (Bar)	Fluid Media*	Cycle Time/90° (seconds)	Recommended Air Pilot Pressure (Bar)
Lug Body EPDM Seals: SPRING RETURN							
564302	50	50	107	8	Water	0.3 - 0.5	4-6
564303	65	65	212	8	Water	0.4 - 0.6	4-6
564304	80	80	404	8	Water	0.4 - 0.6	4-6
564305	100	100	799	8	Water	0.4 - 0.6	4-6
564307	150	150	1929	8	Water	0.7 - 1.2	4-6
Lug Body NBR (BUNA-N) Seals: SPRING RETURN							
564321	50	50	107	8	Air, Oil, Vacuum	0.3 - 0.5	4-6
564322	65	65	212	8	Air, Oil, Vacuum	0.4 - 0.6	4-6
564323	80	80	404	8	Air, Oil, Vacuum	0.4 - 0.6	4-6
564324	100	100	799	8	Air, Oil, Vacuum	0.4 - 0.6	4-6
564326	150	150	1929	8	Air, Oil, Vacuum	0.7 - 1.2	4-6
Lug Body FPM (VITON) Seals: SPRING RETURN							
564342	50	50	107	8	Hydrocarbon, Oil	0.3 - 0.5	4-6
564343	65	65	212	8	Hydrocarbon, Oil	0.4 - 0.6	4-6
564344	80	80	404	8	Hydrocarbon, Oil	0.4 - 0.6	4-6
564345	100	100	799	8	Hydrocarbon, Oil	0.4 - 0.6	4-6
564347	150	150	1929	8	Hydrocarbon, Oil	0.7 - 1.2	4-6

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

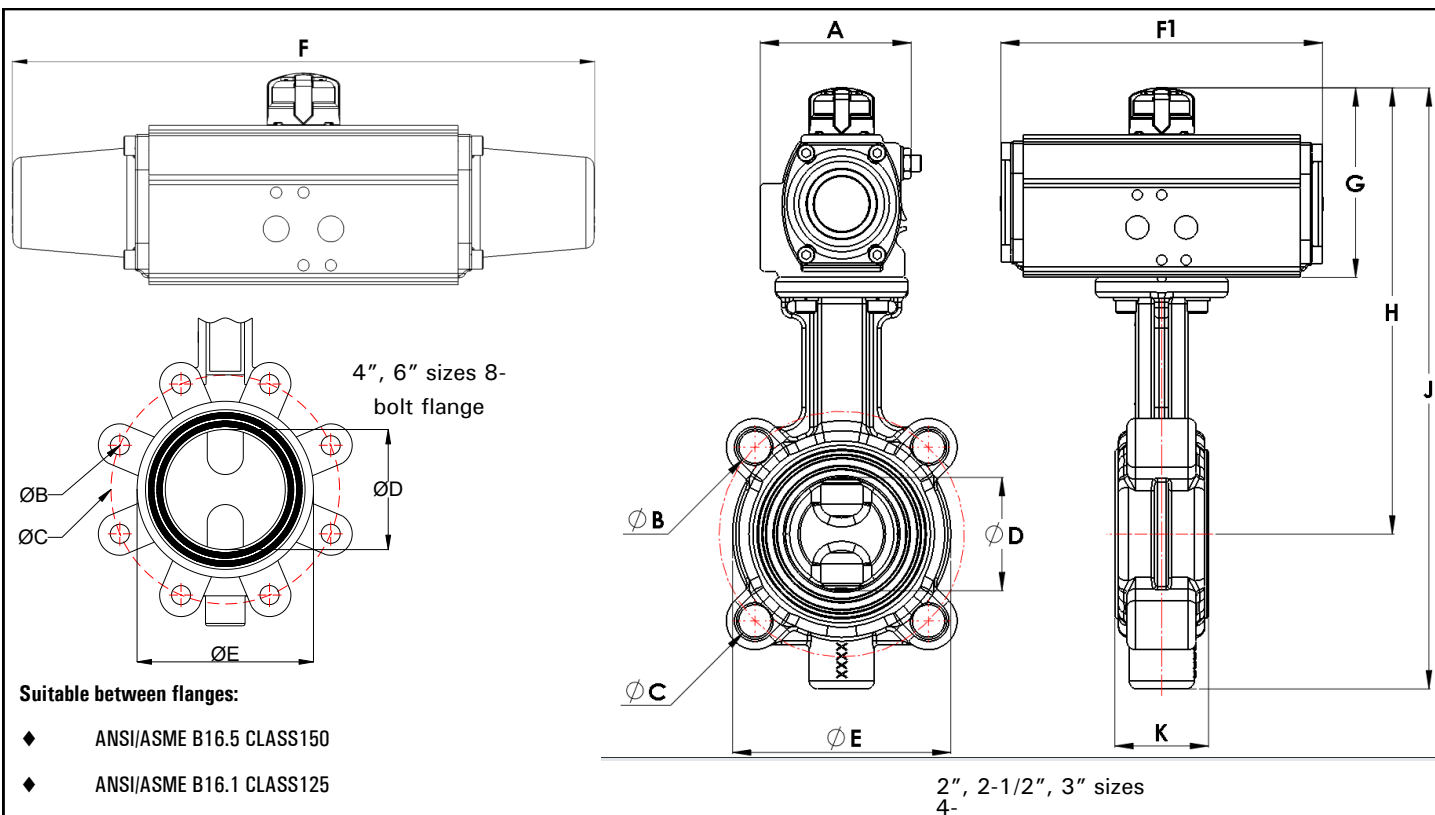
Specifications - LUG Body, Double Acting (Metric units)

Stock Number	Pipe Size (DN)	Orifice Diam. (mm)	Kv Flow Factor	Pressure Max.(Bar)	Fluid Media*	Cycle Time/90° (seconds)	Recommended Air Pilot Pressure
Lug Body EPDM Seals: DOUBLE ACTING							
564312	50	50	107	8	Water	0.3	4-6
564313	65	65	212	8	Water	0.3	4-6
564314	80	80	404	8	Water	0.3	4-6
564315	100	100	799	8	Water	0.4	4-6
564317	150	150	1929	8	Water	0.6	4-6
Lug Body NBR (Buna-N) Seals: DOUBLE ACTING							
564331	50	50	107	8	Air, Oil, Vacuum	0.3	4-6
564332	65	65	212	8	Air, Oil, Vacuum	0.3	4-6
564333	80	80	404	8	Air, Oil, Vacuum	0.3	4-6
564334	100	100	799	8	Air, Oil, Vacuum	0.4	4-6
564336	150	150	1929	8	Air, Oil, Vacuum	0.6	4-6
Lug Body FPM (VITON) Seals: DOUBLE ACTING							
564352	50	50	107	8	Hydrocarbon, Oil	0.3	4-6
564353	65	65	212	8	Hydrocarbon, Oil	0.3	4-6
564354	80	80	404	8	Hydrocarbon, Oil	0.3	4-6
564355	100	100	799	8	Hydrocarbon, Oil	0.4	4-6
564357	150	150	1929	8	Hydrocarbon, Oil	0.6	4-6

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



Spring Return Dimensions: inches (mm)

Pipe Size (inch)	A	B	C	D	E	F-SR	G	H	J	K	Weight lbs (kg)
2	2.9 (75)	5/8-11	4.75 (120.5)	1.97 (50)	3.74 (95)	10.1 (257)	3.7 (93)	8.6 (219)	11.6 (295)	1.81 (46)	10.1 (4.6)
2-1/2	3.5 (89)	5/8-11	5.50 (139.7)	2.56 (65)	4.13 (105)	12.4 (314)	4.3 (110)	9.6 (244)	12.8 (326)	1.93 (49)	15 (6.8)
3	3.5 (89)	5/8-11	6.00 (152.4)	3.15 (80)	4.72 (120)	12.4 (314)	4.3 (110)	10.5 (267)	14.3 (362)	1.93 (49)	17.8 (8.1)
4	3.5 (89)	5/8-11	7.50 (190.5)	3.94 (100)	5.79 (147)	12.4 (314)	4.3 (110)	10.9 (277)	15.4 (390)	2.19 (56)	22.5 (10.2)
6	5.1 (164)	3/4-10	9.50 (241.3)	5.91 (150)	8.07 (205)	19.7 (500)	5.9 (151)	13.9 (353)	19.5 (496)	2.31 (59)	41.5 (18.8)

Double Acting Dimensions: inches (mm)

Pipe Size (inch)	A	B	C	D	E	F1-DA	G	H	J	K	Weight lbs (kg)
2	2.9 (75)	5/8-11	4.75 (120.5)	1.97 (50)	3.74 (95)	4.25 (162)	3.7 (93)	8.6 (219)	11.6 (295)	1.81 (46)	9.7 (4.4)
2-1/2	2.9 (75)	5/8-11	5.50 (139.7)	2.56 (65)	4.13 (105)	4.25 (162)	3.7 (93)	8.9 (227)	12.2 (309)	1.93 (49)	11.5 (5.2)
3	2.9 (75)	5/8-11	6.00 (152.4)	3.15 (80)	4.72 (120)	4.25 (162)	3.7 (93)	9.6 (245)	13.6 (345)	1.93 (49)	14.3 (6.5)
4	3.5 (89)	5/8-11	7.50 (190.5)	3.94 (100)	5.79 (147)	4.92 (125)	4.3 (110)	10.9 (277)	15.4 (390)	2.19 (56)	21 (9.5)
6	3.9 (101)	3/4-10	9.50 (241.3)	5.91 (150)	8.07 (205)	5.31 (135)	5.1 (129)	13 (331)	18.7 (474)	2.31 (59)	38.4 (17.4)

Notes: Sizes 2, 2-1/2, 3 inch valves have 4-bolt flange mounting. Sizes 4 and 6 inch have 8-bolt mounting.