

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
- Multi-voltage capable with auto-voltage sensing
- Long life brushless motor
- External LED power on and diagnostic light
- IP67 polyamide weatherproof enclosure with UV protection
- Electronic torque limiter - protects against valve jams
- Anti-condensation heater
- Manual override with dome style visual valve position indicator
- Electrical connections via external DIN plugs
- Auxiliary limit switches to confirm open/closed valve position

Applications

Butterfly valves with EPDM seals are typically used for on-off control of water and other media compatible with the materials of construction. Actuator designed for 75% duty cycle. Valve has multi-standard alignment holes, suitable for flange types: ANSI/ASME Class 125/150, EN1092, PN10, PN16, BS10 Table D, E and JIS B2239 10K, 16K.

Operation

Electric actuated valve uses power-to-open and power-to-close, stays in the last known position with power failure. On receipt of a continuous voltage signal, the motor runs and via a flat gear system rotates the disc 90°. The motor is automatically stopped by internal cams striking limit switches. On receipt of a reversing continuous signal, the motor turns in the opposite direction reversing the valve position.

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 Enclosure	Anti-corrosive Polyamide, UV protection
Manual Override/Position Indicator	Glass-filled Polyamide / Clear Polyamide Dome
Auxiliary Limit Switches	2 x SPST 3A@125/250VAC, 30VDC resistive load
Fasteners	Stainless Steel




Description

Electric operated direct mount butterfly valves with epoxy-coated ductile iron wafer body are designed for commercial and industrial applications. Valve mounts between two standard ANSI/ASME Class 150 flanges, and other international flange types. 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. Rugged long life brushless electric actuator includes a manual override, thermostatically controlled anti-condensation heater, and over-torque protection.

Approvals

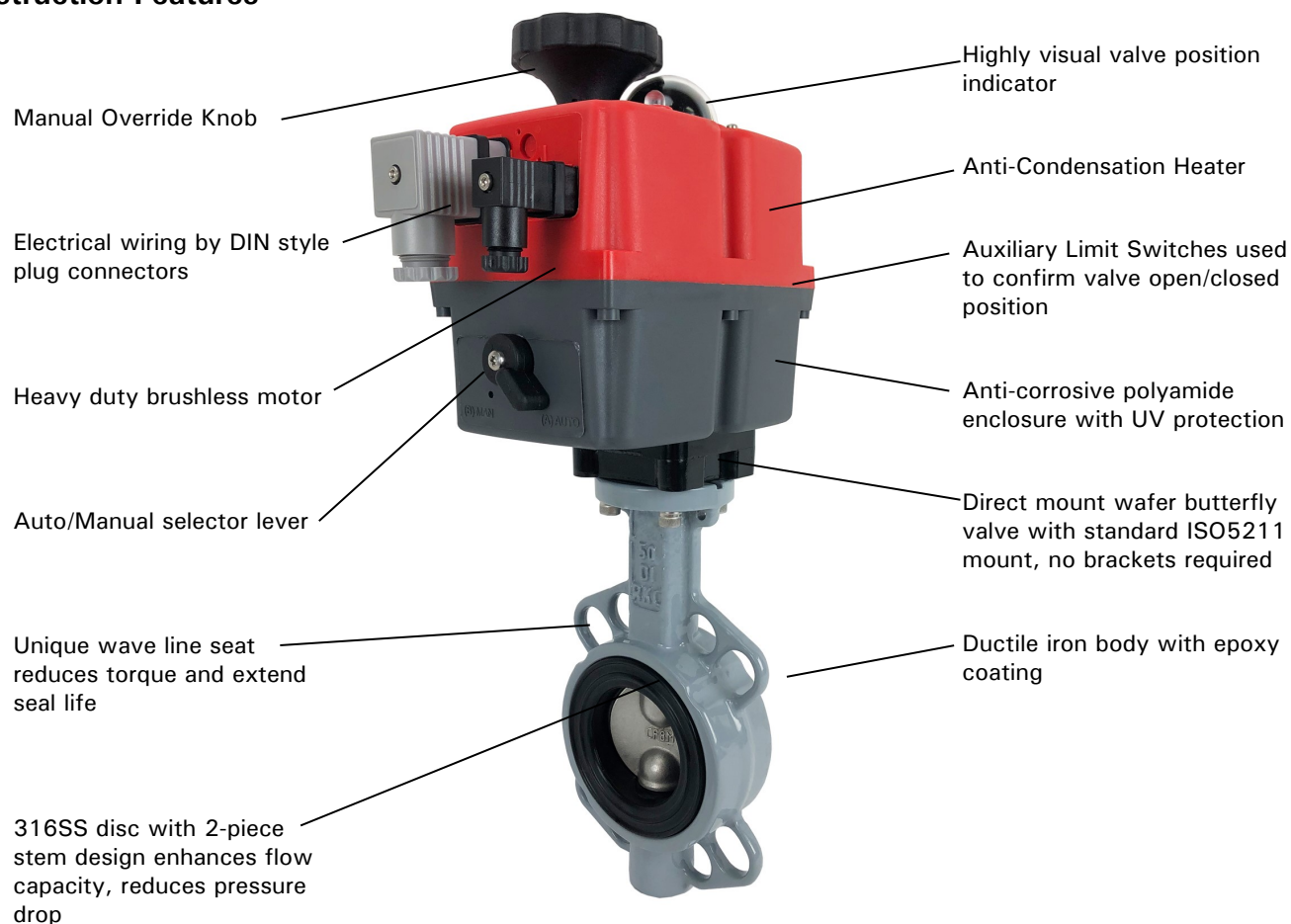
Actuators

- CE mark conforming to: 
 - Machinery directive
 - Low voltage directive
 - EMC Compatibility directive
- ISO5211 valve mounting

Valves

- Design complies with API-609, MSS SP-67
- Tests per API-598, AWWA C502-87
- CE according to PED 97/23/EC, ISO5208

Construction Features



Pressure Rating

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

Temperature Rating

Actuator Temperature Rating: -4 to +158° F (-20 to 70° C)
Valve Temperature Rating: EPDM seals 0 to 248° F (-18 to 120° C)
NBR seals 5 to 185° F (-15 to 85° C)

Optional Functions

BSR: Battery Spring Return Kit
- actuator fails to a safe position with loss of power
DPS: Digital Positioning System
- valve disc position controlled by 4-20mA or 0-10V control signal

Specifications (English units)

Stock Number	Pipe Size (inch)	Orifice Diam. (inch)	Cv Flow Factor	Pressure Max. (PSI)	Fluid Media*	Cycle Time /90° (sec) + /-10%	Max. Current Draw (Amps)			
							110VAC	240VAC	24VAC	24VDC
Wafer Body EPDM Seals: 24-240V AC or 24-135V DC										
562602C	2	2.0	124	230	Water	13	0.43	0.21	1.98	1.63
562603C	2-1/2	2.5	247	230	Water	13	0.43	0.21	1.98	1.63
562604C	3	3.0	470	230	Water	13	0.43	0.21	1.98	1.63
562605C	4	4.0	929	230	Water	13	0.43	0.21	1.98	1.63
562607C	6	6.0	2243	230	Water	58	0.8	0.5	3.3	2.7
562608C	8	8.0	3584	230	Water	58	0.8	0.5	3.3	2.7
562610C	10	10.0	4498	145	Water	58	0.8	0.5	3.3	2.7
Wafer Body NBR (Buna- N) Seals: 24-240V AC or 24-135V DC										
562621C	2	2.0	124	230	Air, Oil, Vacuum	13	0.43	0.21	1.98	1.63
562622C	2-1/2	2.5	247	230	Air, Oil, Vacuum	13	0.43	0.21	1.98	1.63
562623C	3	3.0	470	230	Air, Oil, Vacuum	13	0.43	0.21	1.98	1.63
562624C	4	4.0	929	230	Air, Oil, Vacuum	13	0.43	0.21	1.98	1.63
562626C	6	6.0	2243	230	Air, Oil, Vacuum	58	0.8	0.5	3.3	2.7
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 media. Suitable for vacuum up to 29 inHg										
Models with 240 volt are single phase										

Specifications (Metric units)

Stock Number	Pipe Size (DN)	Orifice Diam. (mm)	Kv Flow Factor	Pressure Max. (Bar)	Fluid Media*	Cycle Time /90° (sec) + /-10%	Max. Current Draw (Amps)			
							110VAC	240VAC	24VAC	24VDC
Wafer Body EPDM Seals: 24-240V AC or 24-135V DC										
562602C	50	50	107	16	Water	14	0.43	0.21	1.98	1.63
562603C	65	65	212	16	Water	14	0.43	0.21	1.98	1.63
562604C	80	80	404	16	Water	14	0.43	0.21	1.98	1.63
562605C	100	100	799	16	Water	14	0.43	0.21	1.98	1.63
562607C	150	150	1929	16	Water	58	0.8	0.5	3.3	2.7
562608C	200	200	3100	16	Water	58	0.8	0.5	3.3	2.7
562610C	250	250	5200	10	Water	58	0.8	0.5	3.3	2.7
Wafer Body NBR (Buna- N) Seals: 24-240V AC or 24-135V DC										
562621C	50	50	107	16	Air, Oil, Vacuum	14	0.43	0.21	1.98	1.63
562622C	65	65	212	16	Air, Oil, Vacuum	14	0.43	0.21	1.98	1.63
562623C	80	80	404	16	Air, Oil, Vacuum	14	0.43	0.21	1.98	1.63
562624C	100	100	799	16	Air, Oil, Vacuum	14	0.43	0.21	1.98	1.63
562626C	150	150	1929	16	Air, Oil, Vacuum	58	0.8	0.5	3.3	2.7

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

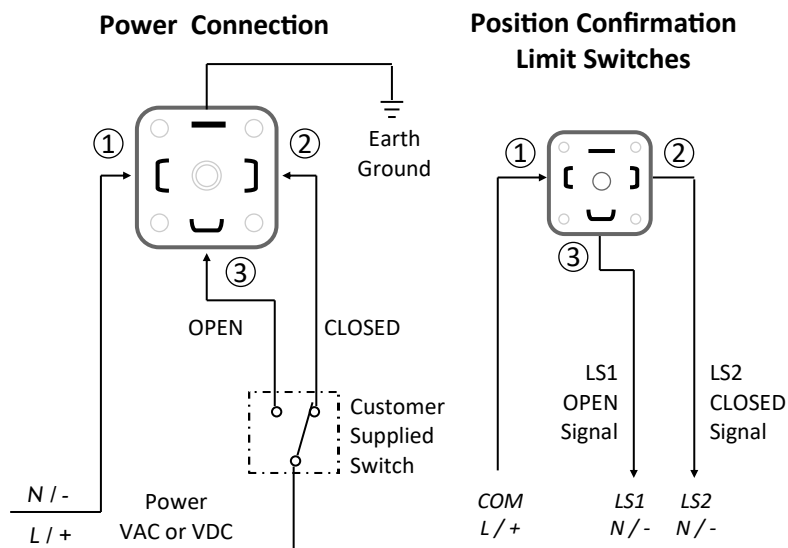
* Consult compatibility chart for other media. Suitable for vacuum up to 29 inHg

Models with 240 volt are single phase

Electrical Wiring: On/Off and BSR Battery Spring Return Versions

Voltage: 24-240 Volts AC or 24-135 Volts DC, 1ph, -0/+ 5%

Auto-voltage sensing



Function: ON-OFF version

Power Connections

Power to PIN 1 and 2
- actuator CLOSED (pos 1)

Power to PIN 1 and 3
- actuator OPEN (pos 2)

Stays in last known position
with loss of power.

Function: ON-OFF version with BSR option

Wiring is the same as standard ON-OFF version.

Power to open, power to close - maintain power to trickle
charge the battery system in either open or closed position.

Actuator sent by battery power to failsafe position with power
failure.

Actuator returns to pre-failure position on power resumption.

Function: Position confirmation limit switches

Dry contact 3A @ 125/250
VAC, 30VDC resistive load

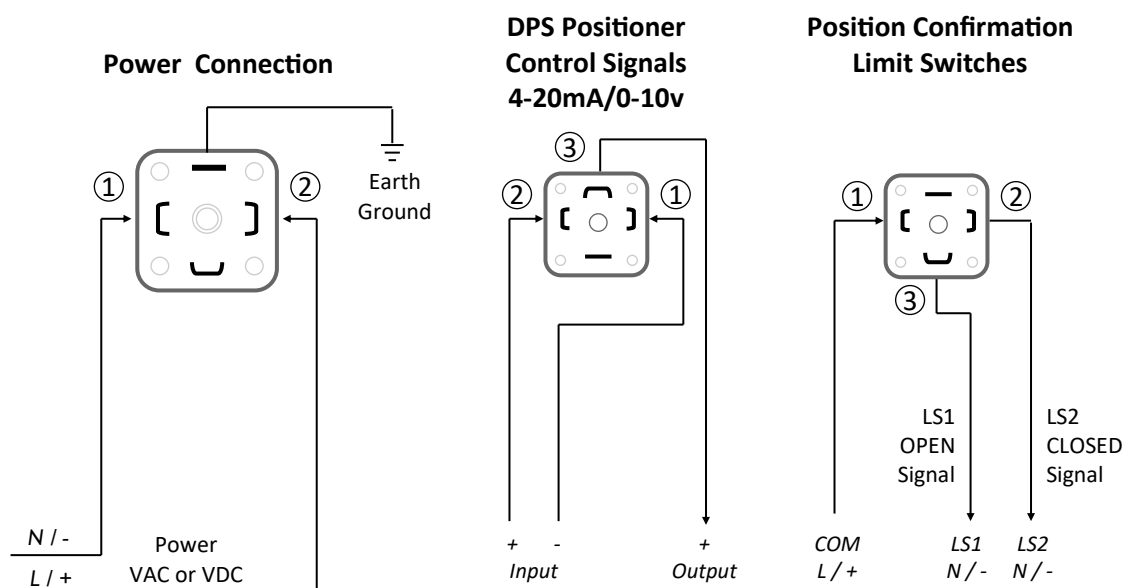
PIN 1 (COM) and 2 to confirm
actuator is closed

PIN 1 (COM) and 3 to confirm
actuator is open

Electrical Wiring: Actuators with DPS Digital Positioner Option

Voltage: 24-240 Volt AC or 24-135 Volts DC Models (auto-voltage sensing)

Control Signal: 4-20mA or 0-10 VDC



Function: Actuators with DPS—Digital Positioner Option

Power open, power close - actuator movement controlled by 4-20mA or 0-10VDC input signal.

Standard operation: 4mA or 0V = actuator closed, 20mA or 10V = actuator open (can be set-up reverse acting).

Actuator closes with loss of control signal, stays in last known position with loss of main power.

Output monitoring signal (in same format as supply signal) provided as standard.

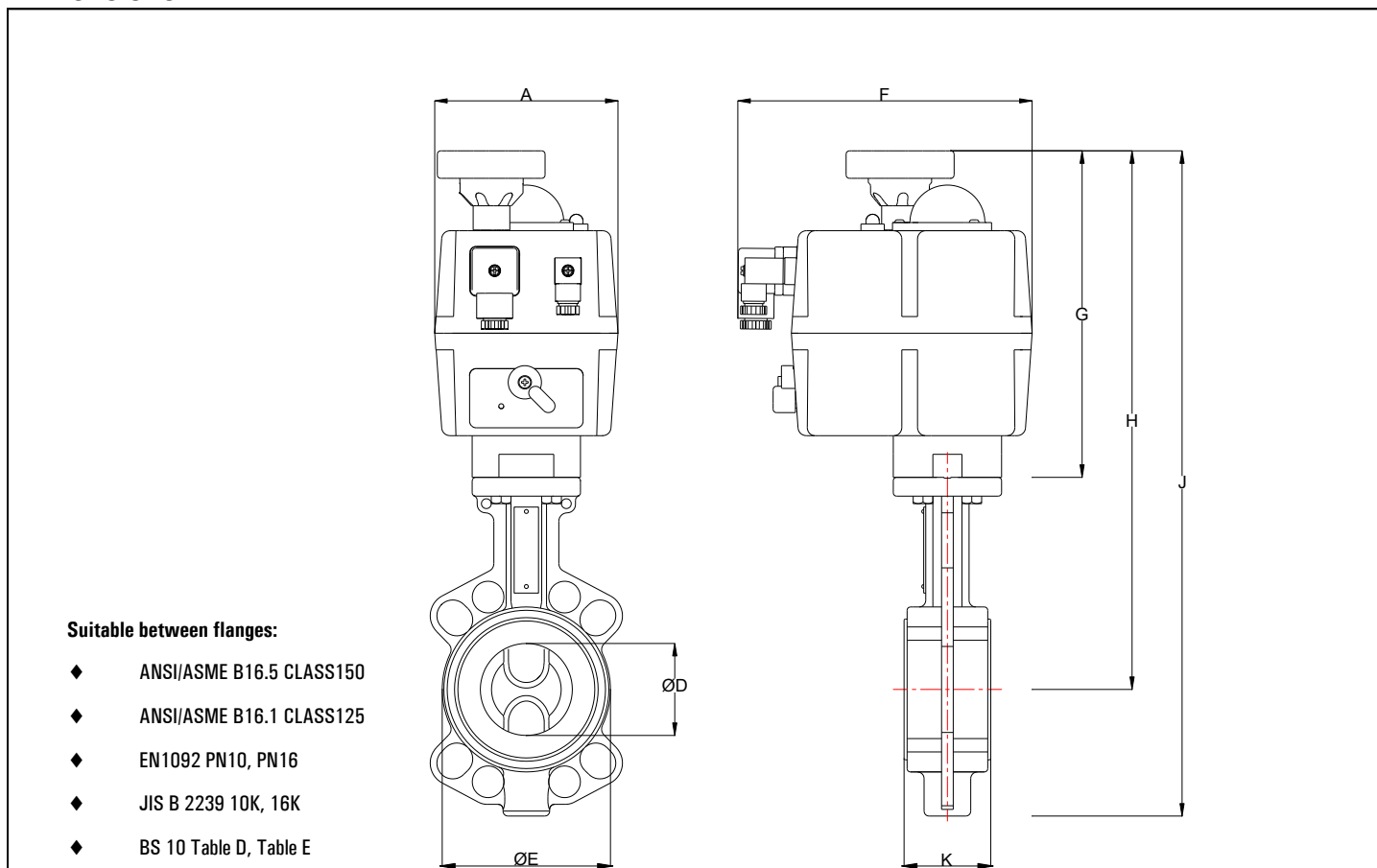
Function: Position confirmation limit switches

Dry contact 3A @ 125/250 VAC, 30VDC resistive load

PIN 1 (COM) and 2 to confirm actuator is closed

PIN 1 (COM) and 3 to confirm actuator is open

Dimensions:



Pipe Size		A	D	E	F	G	H	J	K	ISO	Weight
2 DN50	inch	4.3	2.0	3.9	7.0	7.7	12.7	15.7	1.8	F05	9.7 lb
	mm	110.0	50.0	99.0	177.0	196.0	322.0	398.0	46.0		4.4 kg
2-1/2 DN65	inch	4.3	2.6	4.5	7.0	7.7	13.0	16.2	1.9	F05	10.8 lb
	mm	110.0	65.0	113.0	177.0	196.0	330.0	412.0	49.0		4.9 kg
3 DN80	inch	4.3	3.2	5.1	7.0	7.7	13.9	17.7	1.9	F05	12.6 lb
	mm	110.0	80.0	129.0	177.0	196.0	353.0	449.0	49.0		5.7 kg
4 DN100	inch	4.3	3.9	6.2	7.0	7.7	14.3	18.8	2.2	F05/F07	16.1 lb
	mm	110.0	100.0	157.0	177.0	196.0	363.0	477.0	56.0		7.3 kg
6 DN150	inch	8.5	5.9	8.4	9.1	10.0	18.0	23.6	2.3	F07	28.3 lb
	mm	217.0	150.0	213.0	232.0	255.0	457.0	599.0	59.0		12.8 kg
8 DN200	inch	8.5	7.9	10.7	9.1	10.0	18.9	25.8	2.5	F10	35.4 lb
	mm	217.0	200.0	271.0	232.0	255.0	480.1	655.3	64.0		16.1 kg
10 DN250	inch	8.5	9.8	13.0	9.1	10.0	20.5	28.9	2.7	F10	49.1 lb
	mm	217.0	250.0	329.0	232.0	255.0	520.7	734.1	68.0		22.3 kg

Dimensions remain unchanged for all versions (On-Off, BSR failsafe & DPS positioning)