

Features

- Double offset design reduces seal wear
- High quality, 316SS (CF8M) construction
- Reinforced Teflon (RTPFE) seats for expanded temperature range
- Heavy-duty, single piece cast & machined disc with integral mounting sleeve
- Spring loaded seat cover for easier removal and replacement of the valve seat
- Direct mount wafer butterfly valve with ISO5211 mount
- EPS- Electronic Positioning System with 4-20mA input
- Visual valve position indicator
- Rugged aluminum Type 4X weatherproof enclosure
- Heavy duty motors with overload protection
- Thermostatically controlled anti-condensation heater
- Manual override with end of travel mechanical stops
- Actuators CSA Listed per UL429 and CSA C22.2

Applications

High performance wafer butterfly valves are used to control the flow of waters, oils, air, certain caustics, and other media compatible with the materials of construction for general service and where an expanded temperature range or higher pressure is required. Actuators designed for 70% duty cycle.

Operation

Electric actuated valves with EPS- Electronic Positioning System provide an accurate valve positioning function whereby the movement of the actuator is controlled by either a field selectable 4-20mA input control signal. Any change in the control input signal results in a corresponding and proportional change in the position of the actuator (valve disc). Flow is adjustable anywhere between 0-100%. Unique electronic positioning module is fully potted to help protect the electronics from vibration/moisture resistance.

Construction

Valve Body	316 stainless steel CF8M
Disc	316 stainless steel CF8M
Disc Seat/ Liner	RPTFE
Stem/ Stem Seals	17-4PH/316SS/ V-ring (same material as seat)
Gear Drive	Heavy duty alloy steel/aluminum bronze, self locking
Actuator Enclosure	Aluminum, polyester powder painted, Type 4X, IP67
Visual Valve Position Indicator	Clear Polycarbonate cover, red/yellow open-closed indicator
Fasteners	Stainless Steel
EPS Module	Electronics mounted in potted ABS module



Description

Electric operated direct mount high performance butterfly valves with 316 stainless steel wafer body are designed for commercial and industrial applications. Valve mounts between two standard ANSI/ASME Class 125/150 flanges. Disc is precision machined 316SS. Double offset design to reduce seal wear. Rugged corrosion resistant electric actuator includes a manual override, auto calibration positioner module, thermostatically controlled anti-condensation heater, and over-torque protection.

Approvals

Actuators

- CSA Listed to:
 - UL429 and CSA C22.2 no 139
 - Type 4X, IP67 weatherproof enclosure

- CE conformance
 - ISO5211 Mounting

Valves- Standards

- (P4) + CE PED 20K/65/EU



Construction Features



Pressure Rating

Pressure Rating: 285 PSI (19.7 Bar)

Temperature Rating

Actuator Temperature Rating: -22 to +140° F (-30 to 60° C)

Valve Temperature Rating: RPTFE seals: -20 to 500° F (-29 to 260°C)

High temperature valve mounting kit available for extended temperature range or wall mounting applications

EPS - Electronic Positioning System

Valve positioning and how it works?

Valworx electric actuators with EPS - Electronic Positioning System provide an accurate valve positioning function whereby the movement of the actuator is controlled by a 4-20mA input control signal. Any change in the control input signal results in a corresponding and proportional change in the position of the actuator (valve).

Unique electronic positioning module is fully potted to help protect the electronics from vibration/moisture resistance.

An internal microprocessor on the EPS circuit board continuously monitors the analog input and output signals and compares them to the physical position via a precision potentiometer feedback system, moving the actuator as required to balance the signals.



Visual Valve Position Indicator

The EPS system is self-calibrating which virtually eliminates "hunting". The following functions are standard:

- Position monitoring output signal in same format as input. Ex: 4-20mA input, 4-20mA output
- Adjustable forward or reversing action.
- Sensitivity, Zero and Span adjustments
- Selectable fail mode: fail closed, fail open or stop in place (for loss of input command signal).
- Electric manual control with onboard selector switches
- Fault LED lights indicate valve jam or signal loss
- Electronic brake function

Specifications (English units)

Stock Number	Pipe Size (inch)	Orifice Diam. (inch)	Cv Flow Factor	Pressure Max. (PSI)	Cycle Time/90° (seconds)	Voltage	Current (amps)	Duty Cycle	Electrical Dwg.
120 VAC ELECTRIC ACTUATED HIGH PERFORMANCE WAFER BODY BUTTERFLY VALVE, RPTFE SEALS EPS POSITIONER 4-20mA input									
569203	3	2.9	165	285	30/25	110 VAC, 50/60Hz	0.7	70%	E
569204	4	3.8	400	285	30/25	110 VAC, 50/60Hz	0.7	70%	E
569206	6	5.6	1050	285	30/25	110 VAC, 50/60Hz	0.7	70%	E
569208	8	7.4	2200	285	45/37	110 VAC, 50/60Hz	1.3	70%	E
24 VDC ELECTRIC ACTUATED HIGH PERFORMANCE WAFER BODY BUTTERFLY VALVE, RPTFE SEALS EPS POSITIONER 4-20mA input									
569403	3	2.9	165	285	30	DC24	1.7	70%	GE
569404	4	3.8	400	285	30	DC24	1.7	70%	GE
569406	6	5.6	1050	285	30	DC24	1.7	70%	GE

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

* See P/T Chart

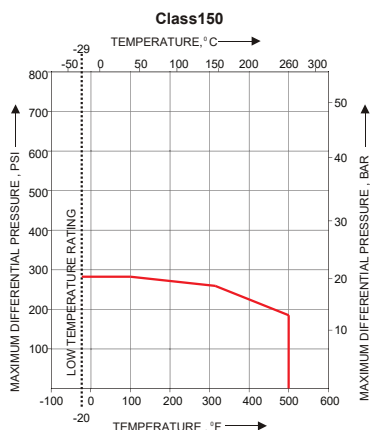
Specifications (Metric units)

Stock Number	Pipe Size (DN)	Orifice Diam. (mm)	Kv Flow Factor	Pressure Max. (Bar)	Cycle Time/90° (seconds)	Voltage	Current (amps)	Duty Cycle	Electrical Dwg.
120 VAC ELECTRIC ACTUATED HIGH PERFORMANCE WAFER BODY BUTTERFLY VALVE, RPTFE SEALS EPS POSITIONER 4-20mA input									
569203	80	73.7	143	19.7	30/25	110 VAC, 50/60Hz	0.7	70%	E
569204	100	96.5	346	19.7	30/25	110 VAC, 50/60Hz	0.7	70%	E
569206	150	142.2	908	19.7	30/25	110 VAC, 50/60Hz	0.7	70%	E
569208	200	188.0	1903	19.7	45/37	110 VAC, 50/60Hz	1.3	70%	E
24 VDC ELECTRIC ACTUATED HIGH PERFORMANCE WAFER BODY BUTTERFLY VALVE, RPTFE SEALS EPS POSITIONER 4-20mA input									
569403	80	73.7	143	19.7	30	DC24	1.7	70%	GE
569404	100	96.5	346	19.7	30	DC24	1.7	70%	GE
569406	150	142.2	908	19.7	30	DC24	1.7	70%	GE

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

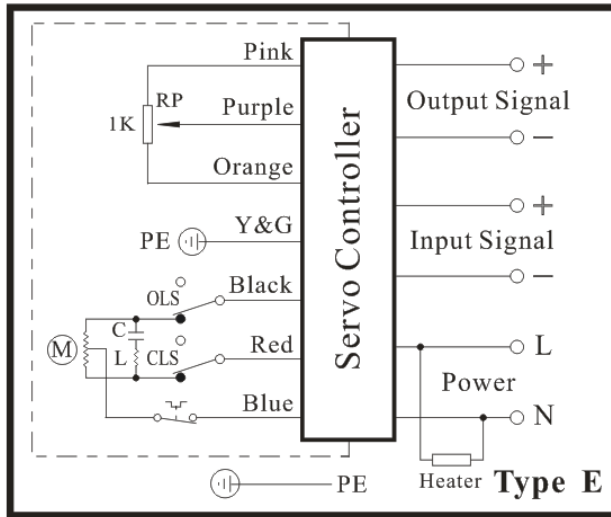
* See P/T Chart



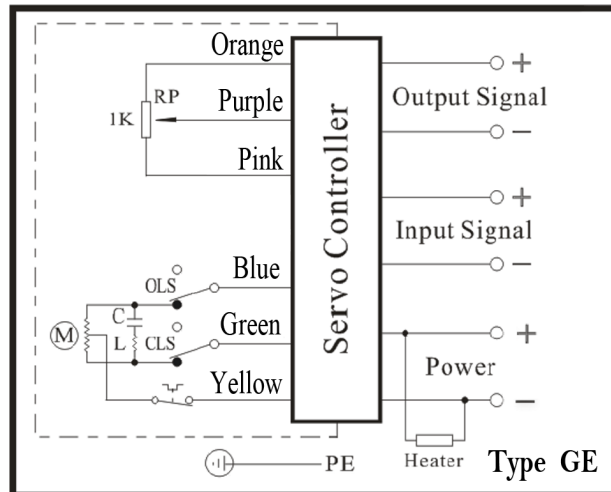
Rated value for 150 Lb body			
Temperature °F	Temperature °C	CF8M (PSI)	CF8M (bar)
-20.2 to 100.4	-29 to 38	275.6	19.0
199.4	93	235.0	16.2
300.2	149	214.7	14.8
399.2	204	194.4	13.4
500	260	169.7	11.7

Electrical Wiring

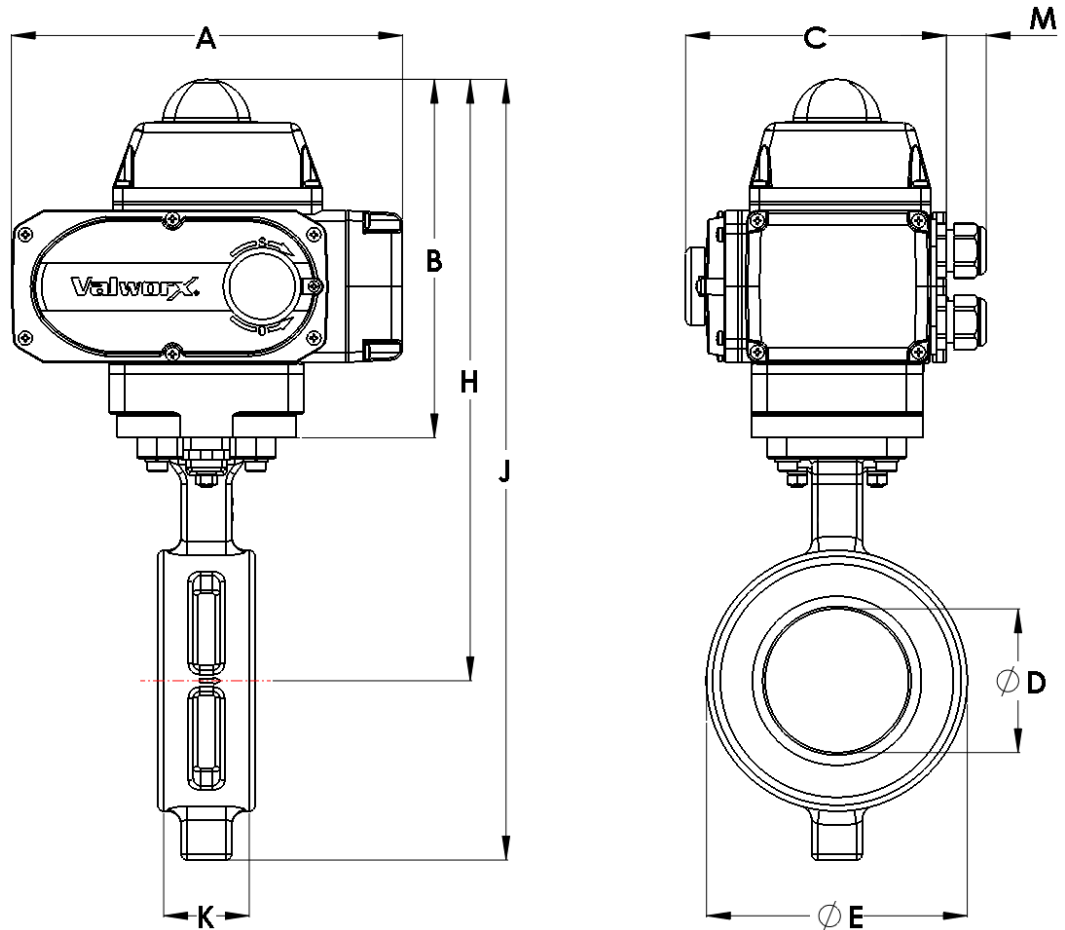
Valves with EPS Positioners AC Voltages



Valves with EPS Positioners DC Voltages



Dimensions: (110AC)

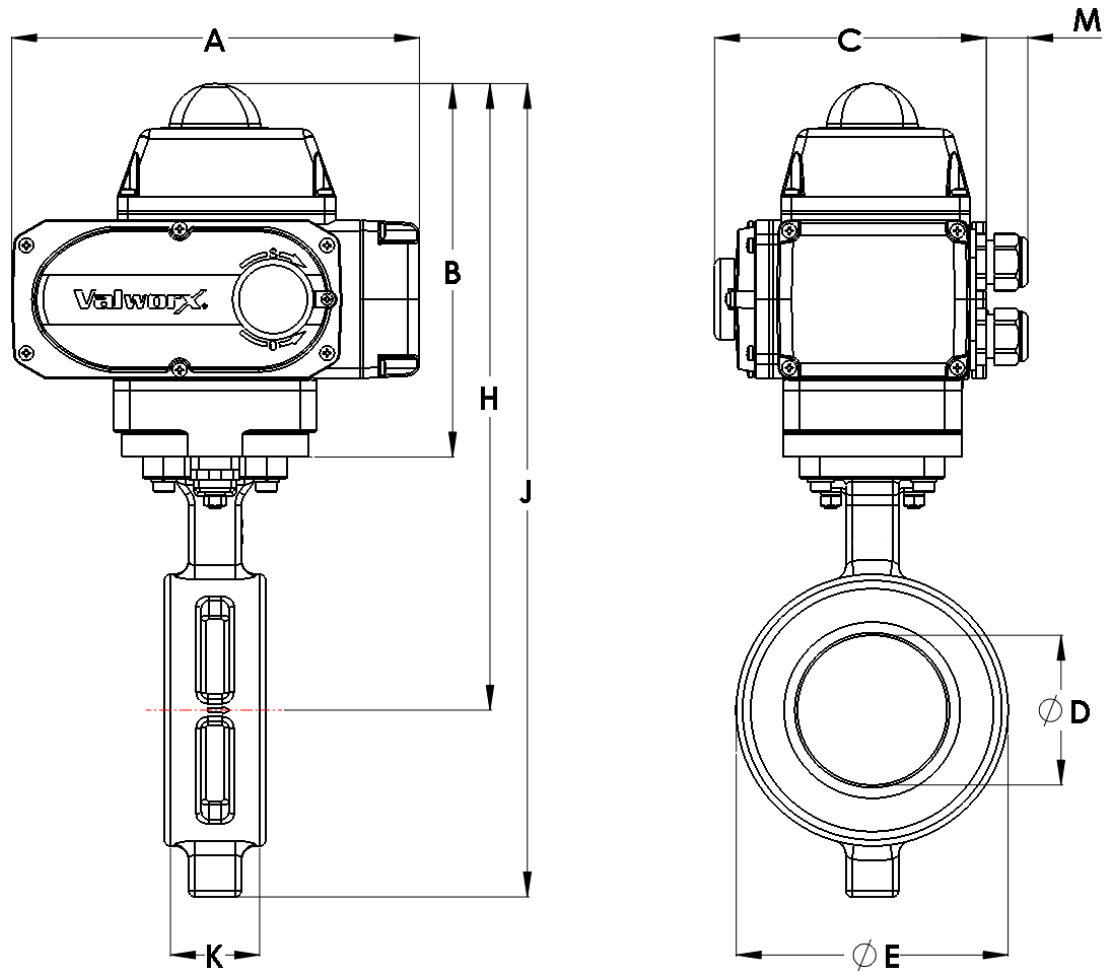


Suitable between flanges:

- ◆ 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	H	J	K	M	Weight (AC)
3	inch	10.1	8.5	6.4	2.8	5.2	13.3	15.4	1.9	1.0	20.7 lb
	mm	256.5	215.9	162.6	72	131	337.8	391.2	49	25.4	13.4 kg
4	inch	10.1	8.5	6.4	3.7	6.1	13.8	16.5	2.1	1.0	32.9 lb
	mm	256.5	215.9	162.6	94	155	350.5	419.1	54	25.4	14.9 kg
6	inch	10.1	8.5	6.4	5.5	8.5	15.1	20.5	2.2	1.0	45.4 lb
	mm	256.5	215.9	162.6	140	216	383.5	520.7	57	25.4	20.5 kg
8	inch	10.1	8.5	6.4	7.3	10.6	17.0	23.1	2.5	1.0	59.8 lb
	mm	256.5	215.9	162.6	185	270	431.8	586.7	64	25.4	27.1 kg

Dimensions: (24DC)



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	H	J	K	M	Weight (DC)
3 DN80	inch	10.1	8.5	6.4	2.8	5.2	13.3	16.8	1.9	1.0	20.7 lb
	mm	256.5	215.9	162.6	72	131	337.8	426.7	49	25.4	13.4 kg
4 DN100	inch	10.1	8.5	6.4	3.7	6.1	13.8	17.9	2.1	1.0	32.9 lb
	mm	256.5	215.9	162.6	94	155	350.5	454.7	54	25.4	14.9 kg
6 DN150	inch	10.1	8.5	6.4	5.5	8.5	15.1	20.5	2.2	1.0	45.4 lb
	mm	256.5	215.9	162.6	140	216	383.5	520.7	57	25.4	20.5 kg