

J3CS Smart Electric Actuator Function: POWER OPEN - POWER CLOSE , STAYS PUT ON POWER FAILURE



Type: E4803GS

Electric actuator direct mounted



Type: E4813GS

Electric actuator fitted via kit

Main J3CS Smart electric actuator features:

- LED light for continual visual actuator status feedback.
- Fully weatherproof smart industrial actuator.
- Multi-voltage 24-240V capable actuator.
- All external electrical connections, no need to remove cover .
- Selectable manual override facility.
- Thermostatic anti-condensation heater.
- Electronic torque limiter.
- End of travel switches for remote open/ closed indication.
- CE marked.
- EU manufactured by J+J.

Applications:

Water, oil, air and most non-corrosive media, subject to compatibility with wetted parts in contact with media. Not recommended for use on steam. Do not use on potable water.

Electrical actuators sized on a maximum differential pressure of 10 bar wet service, operated at least once per day. If the intended duty differs from these parameters or is dry (air or gas), call to check JJ actuator sizing as a larger output valve actuator may be required.

Maximum working temperature of a direct mounted assembly is +70C. For higher working temperatures , consider models that have a mounting kit or TSM stem extension between the valve and actuator which uses air cooling to dissipate the rising heat from the valve away from the actuator. Should the J3CS smart actuator see more than +70C it will malfunction.

Specifications:	
Actuator housing	UV Protected Polyamide
Supply voltage range	24-240V AC or DC
IP Rating	IP67
Actuator temp limits	-20 to +70°C
Assembly temp limits	E4803GS +70°C Mounted direct
	E4813GS +130°C Mounted via kit
	E4823GS +100°C Mounted via ext'n
Valve body	Ductile Iron GGG40
Valve ball	304 Stainless steel
Valve seats	RPTFE
Valve Pressure rating	16 Bar
Valve temp limits	-30 to +180°C
Size range	1/2" to 6"

Ball valve information:

Full bore 2 piece construction, flanged PN16, providing full unrestricted flow and a very low pressure drop across the valve. Designed for automation with integrally cast ISO5211 actuator mounting platform. Turning the ball through 90° fully opens the valve, turning back through 90° fully closes the valve and isolates the flow. End connections are flanged PN16. Valve made in China.

These ball valves are ideal for general service applications.

Typical KV Values

Size	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
KV	22.3	47.7	83.5	150.4	255	435	672	947	1508

J3CS Smart Electric Actuator Function: POWER OPEN - POWER CLOSE , STAYS PUT ON POWER FAILURE

J3CS ON - OFF ELECTRIC ACTUATOR

Power open, power close, stays put on loss of external power.

Options:

It is possible to change the J3CS actuator's function by installing user friendly plug and play function conversion kits. These will provide the following alternative functions:

Failsafe J3CS Actuator

J3CS fails to pre-set position using our BSR (Battery 'Spring Return' system which creates an alternate power supply should the external power fail.

Modulating J3CS Actuator

Movement of the J3CS actuator is proportional to an input control signal, typically 4-20mA or 0-10V, by installing our DPS (Digital Positioning System) user friendly plug and play kit. There are options for how the J3CS modulating reacts to loss of the control signal, but it will stay put on loss of external power.

Configuration options:

- 1) Closes on loss of control signal
- 2) Opens on loss of control signal
- 3) Stays put on loss of control signal

Failsafe Modulating J3CS Actuator

Failsafe modulating by installing the J+J BSR (Battery 'Spring Return') plug and play kit, operates functionally as a modulating electric actuator as described above, but will fail as per the DPS setting on loss of external power, as follows:

Configuration options:

- 1) Closes on loss of control signal, or on loss of power
- 2) Opens on loss of control signal, or on loss of power
- 3) Stays put on loss of control signal

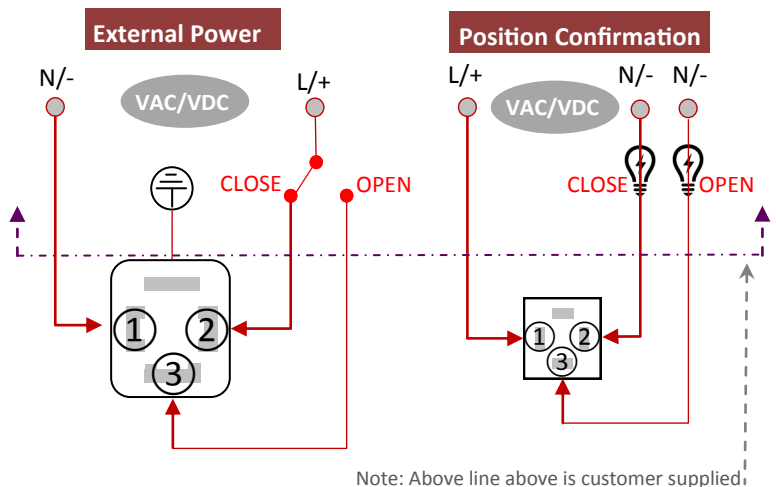
Installing J+J Plug & Play function conversion kits

Failsafe and/or modulating function is quick and easy to achieve in the J3CS smart electric actuator by the fitting of the user friendly failsafe and/or modulating plug & play function conversion kits to the standard on-off J3CS smart valve actuator. When actuated valves are ordered with failsafe, modulating or failsafe modulating function, J+J install and test the plug and play function conversion kits. They can however be easily retro-fitted to J3CS smart electric actuators should the on-off function requirement (supplied as standard function), change.

Electrical Connection - Wiring of DIN Plugs

In J+J electric actuators all electrical connections are made externally using the external DIN plugs supplied with the actuator. There is no need to remove the valve actuator's cover to connect electrically. There are no terminals internally to connect to.

J3CS ON-OFF & FAILSAFE WIRING (Same connection for either)



Note: Above line above is customer supplied

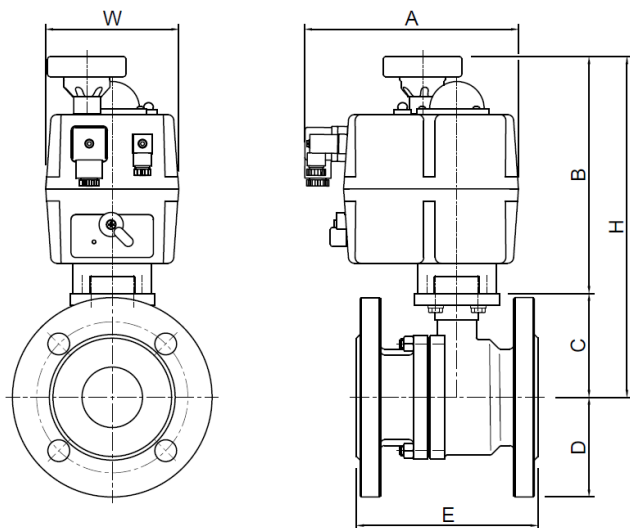
Optional Plug & Play Function Conversion Kits



BSR Failsafe plug & play kit

J3CS Smart Electric Actuator Function: POWER OPEN - POWER CLOSE , STAYS PUT ON POWER FAILURE

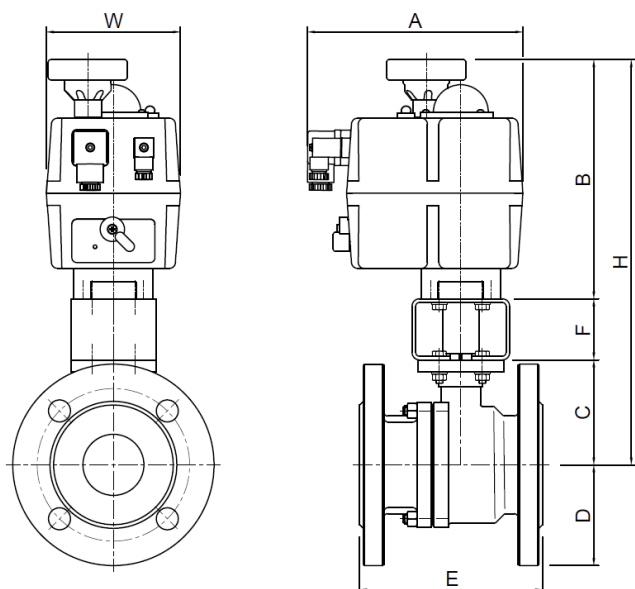
Type: E4803GS Actuator direct mounted to valve



Typical Dimensions:

E4803GS Dimensions remain unchanged for all versions						
- On-off, failsafe, modulating and failsafe modulating						
	Model	A	E	H	W	Kilos
1/2"	20	177	115	198	110	4.1
3/4"	20	177	120	203	110	4.7
1"	20	177	125	209	110	5.8
1 1/4"	35	177	130	244	128	7.0
1 1/2"	55	177	140	274	128	10.0
2"	55	177	150	282	128	12.4
2 1/2"	85	177	170	294	128	16.5
3"	85	177	180	309	128	23.0
4"	*140	235	190	390	214	27.6

Type: E4813GS Actuator fitted to valve via a bracket and drive adapter



E4813GS Dimensions remain unchanged for all versions							
- on-off, failsafe, modulating & failsafe modulating							
	Model	A	F	E	H	W	Kilos
1/2"	20	177	50	115	248	110	4.3
3/4"	20	177	50	120	253	110	5.0
1"	20	177	50	125	259	110	6.0
1 1/4"	35	177	50	130	294	128	7.2
1 1/2"	55	177	50	140	324	128	10.2
2"	55	177	50	150	332	128	12.6
2 1/2"	85	177	70	170	364	128	17.1
3"	85	177	70	180	379	128	23.6
4"	*140	235	70	190	460	214	28.2