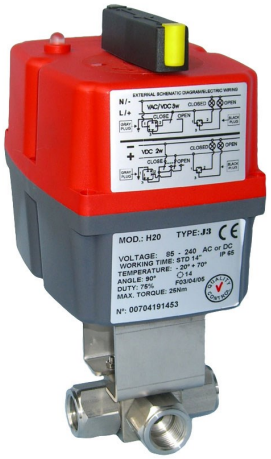
Electric High Pressure Stainless 3 Way Ball Valve

(6,000psi rated) Failsafe Electric Actuator Type: E2914S

J3CS Smart Electric Actuator Function: POWER OPEN - POWER CLOSE , FAILS 'SAFE' ON POWER FAILURE

Note: Image shows J3 actuator, awaiting updated image showing the J3CS, released in late 2016.



Type: E2914S

Electric actuator fitted via kit

BALL VALVE MADE IN BRITAIN

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.

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	E2914S +130°C
Valve body	316 S11 to NACE
Valve ball	316 S11 to NACE
Valve seats	PVDF (x2)
Valve Pressure rating	UTI 2" 414 bar at max +150°C
Valve temp limits	-20 to +150°C
Size range	1/4" to 1"

Applications:

Water, oil, air and many corrosive medias, subject to compatibility with wetted parts in contact with media.

J3 Electricactuators 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 electric actuator may be required.

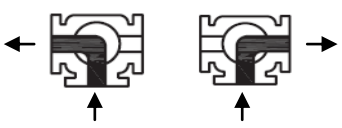
Maximum working temperature of a direct mounted assembly is +130C. For higher working temperatures , contact us for options on mounting kit height, which uses air cooling to dissipate the rising heat from the valve away from the actuator. The taller the kit, the higher the working temperature. Should the J3CS smart actuator see more than +70C it will malfunction.

Ball valve information:

Block body 3 piece 2 seat 3 way diverting ball valve. High quality parts produced, assembled and tested in the UK. These valves have a special configuration of stem to allow them to be used with electric actuators. End connections are threaded BSP female. NPT ends available as an option. Turning the ball through 90° fully opens the valve, turning back through 90° fully closes the valve and isolates the flow.

As standard 316 stainless steel construction is offered, but other materials, including super duplex, hasteloy, incoloy, 6M0, titanium and monel are available on request. Certs to EN 10204 3.1b.

Flow path: 'L' port (diverting) only



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J3CS FAILSAFE ELECTRIC ACTUATOR

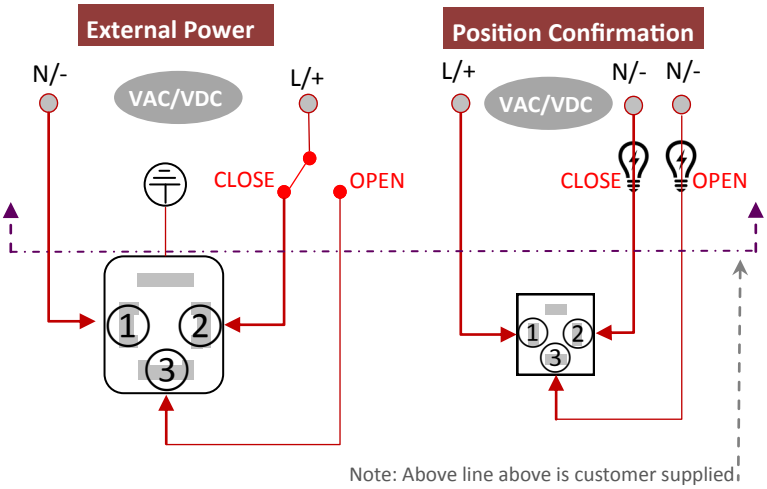
Power open, power close, fails to pre-set position on loss of external power. Typically fails closed, but can be set to fail open. BSR Failsafe conversion kit pre-installed by J+J.

How this electric 1/4 turn valve works (on-off):

Electrically operated valves are driven by a motor and gear-box. On receipt of a continuous voltage signal the motor runs and, via a gearbox in the J+J smart electric actuator, rotates the valve stem. The motor stops at the desired position (usually 0° or 90°) by internal cams striking micro-switches. The smart valve actuator remains in this position, with the voltage still applied continuously, until switched and a continuous voltage reversing signal is applied, which runs the motor in the opposite direction, reversing the rotation until separate set of internal cams strike separate set of micro-switches.

Electrical Connection - Wiring of DIN Plugs

J3CS FAILSAFE WIRING



Note: Above line above is customer supplied

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.

Options:

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

Failsafe Modulating J3CS Actuator

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

DPS Modulating plug & play kit can be installed with the BSR failsafe kit to create failsafe modulating function.

Pre-installed Plug & Play Function Conversion Kit:

BSR Failsafe plug & play kit (already installed by J+J in the failsafe version)

How the BSR (Battery 'Spring Return') system works:

The user friendly BSR failsafe function plug and play conversion kit adds an industrial NiCad rechargeable battery and PCB to the standard power open, power close J3CS actuator. The electric actuator continues to operate power open, power close, and whilst doing so, the battery is constantly trickle charged to keep it fully charged.

When external power is lost, a switch in the BSR PCB draws internal power from the battery to send the J3CS to the desired pre-set 'safe' position, if not already in that position.

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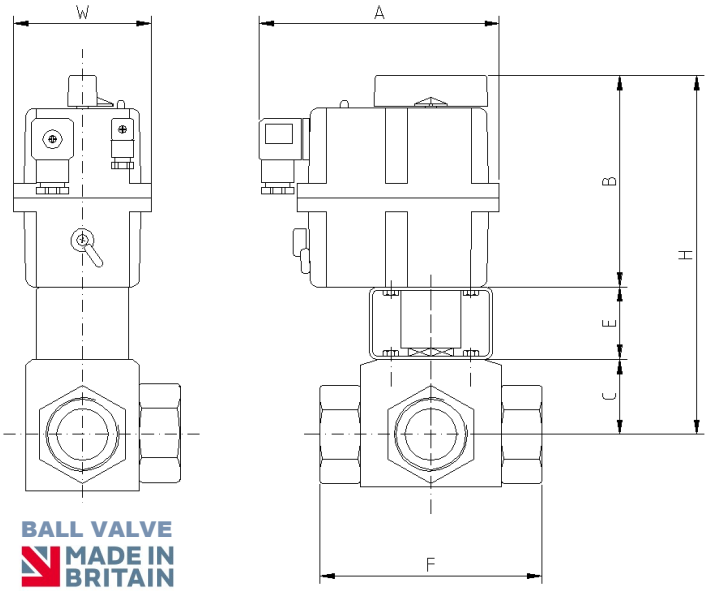
Typical Dimensions:

Type: E2914S Actuator fitted to valve via a bracket and drive adapter

Note: Drawing shows J3 actuator, awaiting updated drawing showing the J3CS, released in late 2016.



Note: Available with bottom entry style valve, details on request.

E2914S Dimensions remain unchanged for all versions

- on-off, failsafe, modulating & failsafe modulating

	Model	A	E	F	H	W	Kilos
1/4"	20	177	50	71	215	110	2.2
3/8"	20	177	50	77	215	110	2.2
1/2"	20	177	50	85	215	110	2.3
3/4"	20	177	50	90	218	110	2.6
1"	35	177	50	111	246	110	3.7