



Failsafe version 'BSR' Battery 'Spring Return'



Doc: J3/BSR/01

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What it does and how it works

J+J's BSR system simply provides an alternative power supply to drive the actuator to a pre-set failsafe position in the event of a mains power failure. It has no mechanical springs, it uses internal battery power.



During normal operation the **J3**-BSR operates as a power open - power closed actuator, simultaneously maintaining the industrial re-chargeable battery at full strength from an internal trickle charging system.



The main advantage of **J+J's** BSR system is that it is more competitively priced compared to mechanical spring return actuators, as the **J+J** actuator has no mechanical springs to compress, or solenoids to release them - the actuator is the same size as that for an on-off version. This offers massive savings compared to true mechanical spring return electric actuators.

The industrial battery is deliberately oversized and whilst not necessary, can provide many cycles at full load. This offers a degree of protection in the unlikely event that the battery degrades and loses some charge.

In the event of a mains failure, if not already in that position, an internal switch changes to immediately draw battery power to drive the actuator to the failsafe position.



Following a battery driven cycle the actuator will need to charge for a short period to replace the energy used in the battery cycle.

This is particularly relevant if you intend to use the **J3** -BSR like a solenoid, eg: energise open, fail close.

The BSR fits inside the **J3** actuator housing eliminating extra piggy-backed housings, making the **J3** failsafe actuator very compact and lightweight. It can be supplied as a retrofit kit containing all the parts needed to convert a standard on-off actuator.



Quick guide to the **J3** electric actuator standard features :

Highly visible LED light gives continuous actuator status indication.

J3 L - 12-24V AC/DC

J3 H - 80-240V AC/DC

Multi-voltage capable with auto-voltage sensing:

*Torque output: range:
25~95Nm Break
20~80Nm Reset*

*Electronic torque limiter
Protects against valve jams*

Anti-condensation heater

Manual override

All connections via external DIN plugs ~ no need to remove cover to connect

Volt free end of travel confirmation switches

IP65 weatherproof housing

CE marked

Traceable sequential serial numbering system

Optional failsafe kit (Battery Back-up) - actuator fails to safe position on power failure

Optional modulating kit with digital positioning system, either 0-10V or 4-20mA