



**AVS** - the ISO9001-2015 UK experts for all your **electric valve actuation** needs.

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**UK's top  
Actuated  
Valve  
Supplier**

## 24-240V J3C S TYPE SMART ACTUATOR FEATURES

### IP67 Ingress protection

Fully weatherproof and even short term submersion.

### Multi-voltage 24-240V AC/DC

All external electrical connection. Saves installation time as no need to remove the cover to connect. Simply wire the 3 pin plugs supplied with the actuator.

### Power connector

Colour coded grey DIN plug for power.

### Control signal I/O connector

Colour coded black DIN plug.

### Volt-free remote position confirmation

Colour coded black DIN plug.

### Selectable manual override

Switches between manual and auto operation. Stays in manual until auto re-selected.

### Local dome mechanical position indicator

Shows flow path in 2 and 3 way valves.

### Multi-colour LED status light

Power 'on' light. Blue LED for positioner. Great for fault diagnosis. Blinks to advise fault. Blink sequence helps pinpoint the cause.

### Anti-condensation heater

Automatic when power is connected.

### Electronic over torque protection

Protects actuator against jammed valves.

### Multi-ISO5211 mount & star drive

Allows direct mounting to ISO5211 compliant valves.

**From an EU manufacturer**, who are market leaders in actuator innovation.



## AVS Actuated Valve Types

Most popular:

### BRASS BALL VALVES

2 and 3 way screwed ball valves for general purpose applications typically on water, air and oils.

### STAINLESS STEEL BALL VALVES

2 and 3 way ball valves for general purpose applications typically on water, air and oils and a wide range of compatible chemicals. Low pressure, high pressure. Ends can be screwed, weld, sanitary or flanged.

### PLASTIC BALL VALVES

2 and 3 way ball valves for general purpose applications typically on water and a wide variety of compatible chemicals.

The J3C-S electric actuator is ideal for plastic valves as it has a plastic housing.

### BUTTERFLY VALVES

Wafer or lugged and tapped, the J3C-S is used extensively with butterfly valves.

## MODULATING VERSION with the DPS Digital Positioning System

### MODULATING ELECTRIC ACTUATORS

A modulating electric actuator provides the capability to send the electric actuator to a position proportional to an input control signal. This input signal is the output typically from a process controller or PLC, where flow, level or temperature, for example, need to be controlled. The process variables are generally converted to a 4-20mA or a 0-10V output, which becomes the input to the AVS modulating electric actuator.

Many control circuits are 'open loop' whereby the control system assumes that a command has been correctly actioned, or 'closed loop' where the device receiving the command feeds back that the command has been completed. Closed loop control systems therefore provide positive confirmation.

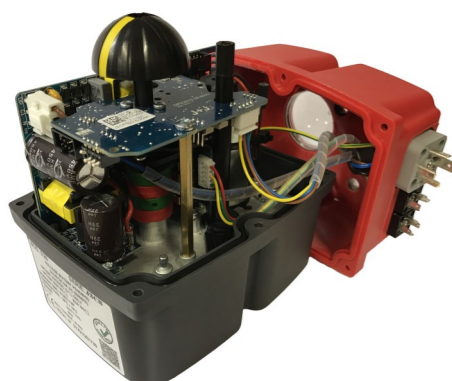
The DPS is a closed loop device as it provides a feedback (or output) signal as standard.

### What is the Digital Positioning System & how does it work?

This EU maker first to market with a user friendly plug and play function conversion kit that changed the function of a standard on-off AVS electric actuator to a modulating electric actuator. The DPS kit comprises of a replacement cover with the extra DIN plug fitted for the control I/O signal and a plug-in digital positioner in the form of a printed circuit board. The DPS self-calibrates, automatically setting the zero (closed) and span (open to closed).

The DPS constantly compares the input signal with the physical output shaft position and if a difference exists, automatically drives the modulating actuator in the direction required to eliminate the error (difference). In the J3C-S version the output shaft position monitors the output shaft position using digital magnetic sensing technology which eliminates the mechanical feedback potentiometer system used in earlier versions, which dramatically improves the accuracy of the DPS.

Options are provided to configure the response from the DPS in the event of a loss of control signal, with fail open, fail closed or fail freeze available. The J3C-S modulating actuator stays put on loss of external power.



J3C-S with DPS positioner installed