How an ASCO Solenoid valve works

ASCO are leading manufacturers of solenoid valves. In our latest article, MGA Controls discusses how ASCO solenoid valves work.

Solenoid valve operation principle

A solenoid valve comprises of two main parts, the solenoid and the valve body. In a Normally Closed valve, the core of the energised solenoid directly opens the orifice, while the orifice in a Normally Open valve closes when the solenoid is energised. Once the valve is de-energised, the valve returns to the original position.

How ASCO solenoid valves work

As the majority of flow control valves are either fully open or closed, they operate on an on/off basis. However, the function of an ASCO solenoid valve may vary depending on the type of valve in operation. Below, we outline the function of ASCO solenoid valves available from MGA Controls.

- **2/2-way solenoid valve**
  A two-way valve features an inlet and outlet pipe connection. The ports are used to either allow or shut-off a fluid flow throughout a machine. A Normally Closed two-way valve will open when the coil is energised, while a Normally Open two-way valve will close when energised.

  The Asco 210 Series Solenoid Valves are a general purpose, 2/2-way solenoid valve with forced lift. This allows them to operate without the need for differential pressure. They are available in sizes ranging from 3/8” up to 1.1/2” in brass or stainless steel bodies, and with a variety of seal materials to suit almost any industrial application.

- **3/2-way solenoid valve**
  Three way valves are made up of three pipe connections and two orifices. When one is open, the other will be closed and vice versa. An ASCO 3/2-way solenoid is often used to alternately apply pressure to and exhaust pressure from the diaphragm operator of a control valve, single acting cylinder or rotary actuator.

  The Asco 327 Series is a 3/2-Way Direct Acting Balanced Poppet Valve that has been designed for use in a wide range of applications. It has been certified according to IEC 61508 Functional Safety Data and has SIL-3 capability, ensuring maximum performance in the most demanding of applications. The 327 Series is often used as a pilot valve in high performance pneumatic applications where ultimate reliability is required. A wide range of Safe and Hazardous Area options are available, including Intrinsically Safe, and ATEX Ex d IIC T4/T6 (Flameproof).

Buying an ASCO solenoid valve from MGA Controls

MGA Controls are leading suppliers of ASCO solenoid valves. If you require more information about our complete range of ASCO solenoid valves, or would like a quote, please contact us today on 01704 898980 or email store@mgacontrols.co.uk.