

Delphi On/Off Transmission Actuators

Delphi On/Off Transmission Actuators control fluid flow in automatic transmissions to enable reliable shift control and torque converter clutch control. They feature a simple, low-cost design and are available in two-port or three-port designs. Both designs can be supplied as a normally closed or as a normally opened device to suit customer requirements.

► Benefits

- Reduced manufacturing variation provides consistent performance characteristics
- Feature simple hydraulic and magnetic designs that are robust to small contamination (less than 250 microns)
- Optional filters enable robust performance to large contamination (larger than 250 microns)
- Designs optimized to minimize the number of components
- Robust designs proven in the field for low warranty
- Mounting configurations available with brackets, clips or twist-lock features

► Typical Applications

Delphi On/Off Transmission Actuators are suitable for most automatic transmission applications in passenger cars and light trucks as well as other larger vehicle programs. They can also be used for other automotive or non-automotive applications that require flow control of hydraulic fluid.

► Performance Characteristics

System voltage range	8 to 16 V
Maximum operating supply pressure	210 psi
Maximum proof pressure	330 psi
Life cycles	1 million
Operating temperature range	-40° C to 150° C
Nominal coil resistance	16 to 20 ohms

► Performance Advantages

The simple hydraulic and magnetic design of Delphi On/Off Transmission Actuators makes them especially robust to small particle contamination (less than 250 microns). Delphi also offers optional filters to make the actuators robust to large particle contamination (greater than 250 microns). Delphi's unique manufacturing processes reduce performance variation, thus providing consistent performance characteristics. Delphi offers a broad product and process technology base to provide customers with creative designs that will meet each application's unique requirements.



Delphi On/Off Transmission Actuators are available in various package sizes and configurations to meet customer requirements.

▶ **Typical Installation**

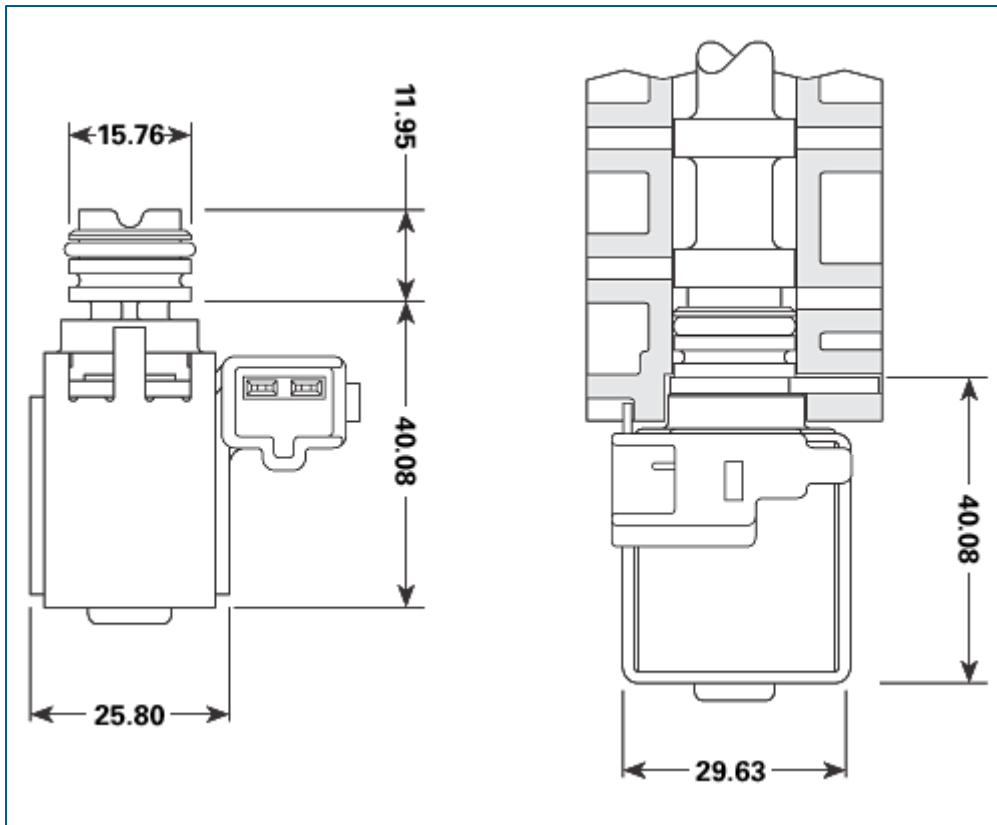


Diagram shows typical dimensions and installation data for a Delphi On/Off Transmission Actuator. All measurements are in millimeters.

▶ **The Delphi Advantage**

Delphi has a long history of actuator design, development and manufacturing expertise. Delphi is continually developing new and improved actuating technologies that help automotive manufacturers meet objectives for performance, reliability and value. Delphi has the capability to provide a single actuating device or a multifunctional "smart" module to meet specific customer needs.

As a global leader in engine and powertrain management systems technology, Delphi can help manufacturers around the world meet emissions requirements, improve fuel economy and enhance performance. Delphi is a source for high value solutions and our systems expertise is built into every product. Delphi's flexible engineering approach encourages collaboration. And, Delphi has a thorough understanding of automotive markets around the world and a global network of resources.