# **Pressure Switches**

# **Series 3900**

Series 3900 pressure switches are widely used in pilot duty applications and incorporate field adjustable set points and internal switch contacts. These switches convert a pressure signal to an electrical output. In response to a change in pressure, movement of an elastomeric diaphragm opens or closes an electrical circuit based on a predetermined pressure set point. The Series 3900 feature a compact size and a cost effective, combination terminal design which allows electrical connection with either 1/4" quick connect or #8 screw terminals. Pressure ranges as low as 6" Water Column (W.C.)\* up to 5 PSI are available (1.5 kPa to 34.5 kPa). Series 3900 switches assure control stability through wide temperature and humidity conditions. As with all Tecmark\*

products, Series 3900 switches provide superior performance and uninterrupted service, even under extreme shock and vibration.

\*27.7" water column = 1 PSI

#### TYPICAL APPLICATIONS:

Commonly used as an interlock device to sense positive pressure in pneumatic or fluid flow systems. Series 3900 switches provide on/off control of a variety of electrical devices including gas, electric, electronic ignition and millivolt (standing pilot) heaters in fluid flow systems as well as other electrical equipment.

#### **BASIC CONSTRUCTION:**

- •Visual scale for adjusting pressure setting in the field
- •Elastomeric diaphragm eliminates the need for an oil barrier
- •Internal switch contacts
- •A combination terminal design offers both 1/4" quick connect and #8 screw terminals
- Built in over pressure protection designed to eliminate stress on other critical operating components
- •UL Recognized, CSA certified, as an operating, limit or safety control.
- •SPST switching logic

#### **AVAILABLE FEATURES:**

- •Pressure ranges as low as 6" WC up to 5 PSI (1.5 kPa to 34.5 kPa)
- •Factory calibration available upon request
- •A variety of mounting pan and pressure fitting materials; plated steel, stainless steel or injection molded plastic
- •Wide array of pressure fittings; 1/8" NPT male, 1/4" NPT male, 3/16" barbed, 1/8", 3/16" or 1/4" compression, or 1/8" NPT female with 1/2" conduit male external thread for mounting
- •Specialty diaphragm materials; Buna-N, EPDM, Hydrin
- •Models available with or without wiring enclosures

### **RATINGS AND SPECIFICATIONS:**

- Maximum Operating Pressure and Hydrostatic burst pressure, varies based on model configurations. Consult factory for specific application needs.
- •ELECTRICAL Resistive rating: 15 amps @ 6 V.DC.

8 amps @ 12 V.DC.

4 amps @ 24 V.DC.

Inductive rating: 1 amp @ 120 VAC

Pilot Duty: 72 VA pilot duty @ 24 VAC

120 VA pilot duty @ 120 VAC

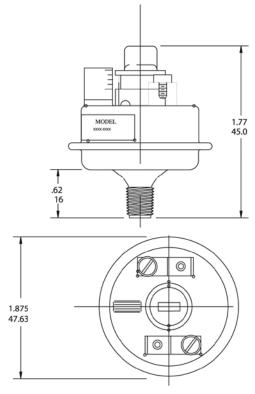
240 VA pilot duty @ 240 VAC

- •Field tested critical components specifically selected to operate reliably in temperature extremes of 32° to 190°F (0°C to 88°C)
- •100,000+ cycle life under full mechanical, electrical and thermal loads

The Series 3900 switches are intended for pilot duty control of electrical contactors and relays. In applications where the pressure switch carries higher electrical loads, use our Series 3000 or Series 4000 pressure switches.

#### **DESIGN FLEXIBILITY:**

Tecmark's manufacturing philosophy is unique. In an effort to provide you with a product that is most suited to your application, Series 3900 switches incorporate numerous interchangeable components for the ultimate in design flexibility. This means a product tailored to your needs without the high price and long lead times associated with custom manufacturing. If you have a need and don't see the features you require, please ask us!



## **Pressure Fittings**

