

# PHOTOHELIC GAUGE



## 3000MR/3000MRS Series

### Description

Using solid state technology, the SERIES 3000MR & 3000MRS Photohelic® Switches/Gauges combine the functions of a precise, highly repeatable differential pressure switch with a large easy-to-read analog pressure gauge employing the durable, time-proven Magnehelic® gauge design. Switch setting is easy to adjust with large external knobs on the gauge face. Gauge reading is unaffected by the switch operation will indicate accurately even if power is interrupted. Solid state design now results in greatly reduced size and weight. Units can be flush mounted or surface mounted with hardware supplied. 3000MR models employ versatile electromechanical relays with gold over silver contacts – ideal for dry circuits. For applications requiring high cycle rates, choose 3000MRS models with SPST (N.O.) solid state relays. All models provide both low and high limit control and include 18-inch (45 cm) cable assemblies for electrical connections.

Compatible with air and other non-combustible, non-corrosive gases, they can be used in systems with pressures to 25 psig (1.725 bar). Optional construction is available for use to either 35 psig (2.42 bar) or 80 psig (5.51 bar).

### Gauge Specifications

**Service:** Air and non-combustible, compatible gases.

**Wetted Materials:** Consult factory.

**Accuracy:** ±2% of FS (3000-0 ±3% of FS). (3000-00 ±4% of FS).

**Pressure Limit:** -20" Hg to 35 psig (-0.677 bar to 1.72 bar). MP option: 35 psig (2.41 bar), HP option: 80 psig (5.52 bar).

**Temperature Limits:** 20 to 120°F (-6.67 to 48.9°C).

### FEATURES:

- Gauge reading unaffected by switch operation and will continue to read pressure even during power loss
- Zero and range adjustments outside of gauge means no disassembly in normal service
- Solid state design allows for switching in high cycle rate applications without degradation

**Process Connections:** 1/8" (3.18 mm) female NPT (duplicated side and back).

**Size:** 4" (101.6 mm) dial face, 5" (127 mm) OD x 3-1/8" (79.38 mm); -SS Bezel: 4-3/4" (120.7 mm) OD x 2-21/32" (67.5 mm).

**Weight:** 1.8 lb (816 g).

### 3000 MR Switch Specifications

**Switch Type:** Each set point has 1 form C relays (SPDT)

Relay Contacts: (Resistive load) 1 form C rated 1.0 A @ 30 VDC, 0.3 A @ 110 VDC or 0.5 A @ 125 VAC. Gold over clad silver – suitable for dry circuits.

**Electrical Connections:** 18" (46 cm) cable assembly with 8 conductors. Optional lengths to 100' (30.5 m).

**Power Requirements:** 24 VDC, regulated 10%.

# CAMCORP

A MEMBER OF THE SCHEUCH GROUP

# PHOTOHELIC GAUGE

**Mounting Orientation:** Diaphragm in vertical position. Consult factory for other position orientations.

**Set Point Adjustment:** Adjustable knobs on face.

**Agency Approvals:** CE.

## 3000MRS Specifications

**Switch Type:** Each set point has a solid state relay.

**Switching Voltage:** 20 to 280 VAC (47 to 63 Hz).

**Switching Current:** 1.0 A (AC) max., 0.01 mA (AC) min., (2) SPST NO.

**Electrical Connections:** 18" (46 cm) cable assembly with 6 conductors, optional lengths to 100' (30.5 m).

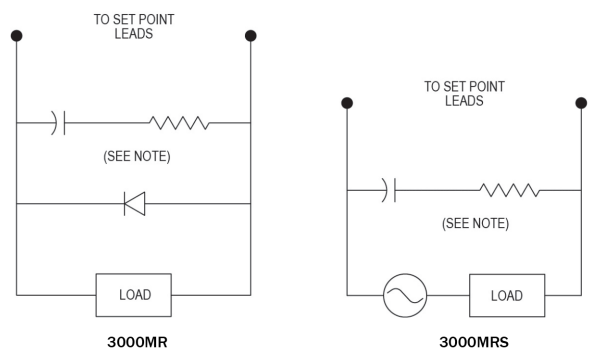
**Power Requirements:** 24 VDC, regulated  $\pm 10\%$ .

**Mounting Orientation:** Diaphragm in vertical position. Consult factory for other position orientations.

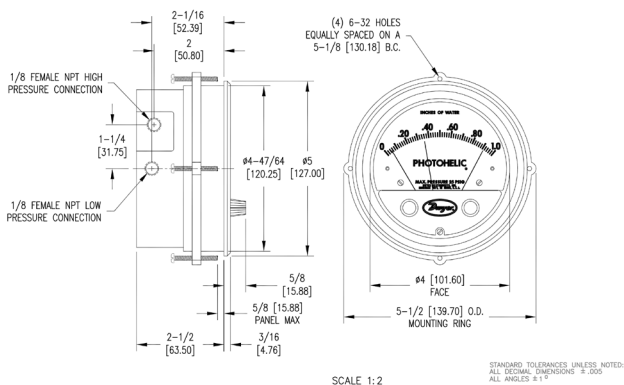
**Set Point Adjustment:** Adjustable knobs on face.

**Agency Approvals:** CE.

## Wiring Diagram



## Dimensions



# CAMCORP

A MEMBER OF THE SCHEUCH GROUP

ALL STATED SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE OR OBLIGATION. VISIT CAMCORPINC.COM FOR THE LATEST INFORMATION.

photohelicgauge3000 rev. 11/18 ©CAMCORP, INC.