Using solid state technology, the SERIES 3000MR & 3000MRS Photohelic® Switch/Gages combine the functions of a precise, highly repeatable differential pressure switch with a large easy-to-read analog pressure gage employing the durable, time-proven Magnehelic® gage design. Switch setting is easy to adjust with large easy-to-read knobs on the gage face. Gage reading is unaffected by 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 electronic 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 (2.41 bar) or 80 psig (5.52 bar).

FEATURES/BENEFITS

- Gage reading unaffected by switch operation and will continue to read pressure even during power loss.
- Zero and range adjustments outside of gage means no disassembly in normal service.
- Solid-state design allows for switching in high cycle rate applications without degradation.
- Stainless steel bezel is the same installation diameter as Magnehelic® gage and simplifies field upgrade to Photohelic® switch/gage.

APPLICATIONS

- Pneumatic conveying
- Air conditioning systems
- Clean rooms

### SWITCH SPECIFICATIONS 3000MR

**Switch Type:** Each setpoint has 1 form C relay (SPDT).
**Relay Contacts:** (Resistive load) 1 form (duplicated side and back).
**Process Connections:** (1/8” NPT adapters, (2) 1/8” NPT pipe plugs, (4) 6-32 x 1-1/4” RH machine screws (panel mounting), (3) 6-32 x 5/16” RH machine screws (surface mounting).

- **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).

**SPECIFICATIONS**

- **Accuracy:** ±3% of FS (3000-0 ±4% of FS).
- **Pressure Limit:** 20” Hg to 25 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 (-6.7 to 48.9°C).
- **Process Connections:** 1/8” female NPT (duplicated side and back).
- **Diaphragm:** Small 25 mm, Large 60 mm, 100 mm.
- **Temperature Range:** -20°F to 25 psig (-29.4°C to -1.72 bar). MP option: -20°F to 35 psig (-29.4°C to 2.41 bar), HP option: -20°F to 80 psig (-29.4°C to 5.52 bar).

**A-Cessories**

**A-Cessories - Standard**

- **Mounting Accessories:** (2) 1/8” NPT pipe plugs, (4) 6-32 x 1-1/4” RH machine screws (surface mounting).

**Options**

- **To order add suffix:** Description
  - **-LT** Low temperature option; for use under 20°F (-6.7°C)
  - **-MP** Medium pressure; increases maximum rated pressure to 35 psig (2.41 bar)
  - **-HP** High pressure; increases maximum rated pressure to 80 psig (5.52 bar)
  - **-NIST** Weatherproof housing option

**Examples**

- **3001MR-SS**
- **3001MR-LT**
- **3001MR-MP**
- **3001MR-HP**
- **3001MR-NIST**

**Processing Tubing Options:** See page 489 (Gage Tubing Accessories).