PHOTOHELIC® SWITCH/GAGES
Combines Differential Pressure Gage with Low/High Set-Points, Compact Size

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 analog pressure gage employing the durable, stainless steel bezel. 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.

FEATURES/BENEFITS
- Gage reading unaffected by switch operation and 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.
- Optional 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

APPLICATIONS
- Clean rooms

SPECIFICATIONS
GAGE SPECIFICATIONS
- Service: Air and non-combustible gases.
- 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 (-6.67 to 48.6°C).
- Process Connections: 1/8˝ female NPT (duplicated side and back). Steel with gray hammertone epoxy finish. Optional lengths to 100´ (30.5 m).
- Switching Voltage: 20-280 VAC (47-63 Hz).
- Switching Current: 1.0 amp (AC) max., 0.1 mA (AC) min., 110 VAC, 250 mA.
- Weight: 1.8 lb (816 g).

Switch SPECIFICATIONS 3000MR
- Switch Type: Each setpoint has 1 form C relay (SPDT).
- Relay Contacts: (Resistive load) 1 form C rated 1.0A @ 30 VDC, 0.5A @ 125 VAC.
- Weight: 0.50 lb (227 g).

Electrical Connections: 18” (46 cm) cable assembly with 8 conductors. Optional lengths to 100’ (30.5 m). Power Requirements: 24 VDC, regulated ±10%.

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

Set Point Adjustment: Adjustable knobs on face. Agency Approvals: CE.

SWITCH SPECIFICATIONS 3000MRS
- Switch Type: Each setpoint has a solid state relay.
- Switching Voltage: 20-280 VAC (47-63 Hz).
- Switching Current: 1.0 amp (AC) max., 0.1 mA (AC) min., 110 VAC, 250 mA.
- Electrical Connections: 18” (46 cm) cable assembly with 6 conductors. Optional lengths to 100’ (30.5 m).
- Power Requirements: 24 VDC, regulated ±10%.

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

Set Point Adjustment: Adjustable knobs on face. Agency Approvals: CE.

OPTIONS
To order, select either MR or MRS suffix to Series 3000 number.

Example: 3001MR-SS

Accessories
- SS 304 brushed stainless steel bezel. "Backward compatible with standard Magnehelic® gage installation diameter.

Example: 3001MRS-SS

- TAMP Tamper-proof knobs; require spanner key (supplied) to change setpoints
- 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 (5.6 bar)
- WP Weatherproof housing option
- NIST NIST traceable calibration certificate

Example: 3001MR-NIST

Process Tubing Options: See page 489 (Gage Tubing Accessories)