

## SERIES AT23000MR/3000MRS | ATEX APPROVED PHOTOHELIC® SWITCH/GAGE

### 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
- Flame-proof ATEX enclosure with optional glass window and aluminum housing protects the device in hazardous areas while giving local visibility to process pressure and set point status

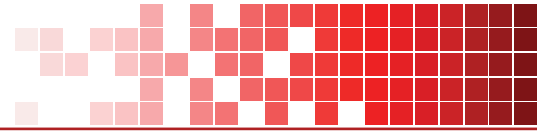
### APPLICATIONS

- Hazardous area pressure measurement and switching
- Pneumatic conveying
- Air conditioning systems
- Clean rooms
- Fume exhaust systems

### DESCRIPTION

Using solid state technology, the **SERIES AT23000MR AND AT23000MRS** ATEX Approved Photohelic® Switch/Gages combine the functions of a precise, highly repeatable differential pressure switch with a large easy-to-read analog pressure gage. Gage reading is unaffected by switch operation and will indicate accurately even if power is interrupted. AT23000MR series employ versatile electromechanical relays with low amperage ratings-ideal for dry circuits. For applications requiring high cycle rates, choose AT23000MRS models with SPST (NO) solid state relays. Easy to adjust set point indicators are controlled by knobs located on the gage face (accessible opening case after de-energizing instrument). All models provide both low and high limit control. 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).





## SPECIFICATIONS

<b>Service</b>	Air and non-combustible, compatible gases.
<b>Wetted Materials</b>	Consult factory.
<b>Accuracy</b>	±2% of FS at 70°F (21.1°C). ±3% on -0, -60 Pa and ±4% on -00 models.
<b>Pressure Limits</b>	-20 in 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).
<b>Temperature Limits</b>	20 to 120°F. (-6.67 to 48.9°C). Option LT low temperature to -20°F (28.8°C); Case: -76 to 140°F (-60 to 60°C). <b>(Note: Product temperature limits differ from case).</b>
<b>Power Requirements</b>	24 VDC, regulated ±10%.
<b>Electrical Wiring</b>	Screw terminals.
<b>Mounting Orientation</b>	Diaphragm in vertical position.
<b>Dial Size</b>	4" (101.6 mm).
<b>Set Point Adjustment</b>	4" (101.6 mm).
<b>Enclosure Rating</b>	IP66. IP65 with option OPV, overpressure relief valve.
<b>Housing Material</b>	Aluminum.
<b>Finishing</b>	Texture epoxy coat RAL7038.
<b>Pressure Connections</b>	1/8" NPT female brass (SS optional). In presence of acetylene it is necessary to use SS.
<b>Electrical Connections</b>	Two 1/2" FNPT. Cable gland not included.
<b>Weight</b>	12.5 lb (5.7 kg).
<b>ATEX Approved Products from Comhas with ECN</b>	BVI 14ATEX0072.
<b>Agency Approvals</b>	CE 1370 II2 GD Ex d IIC Gb T6; -60°C ≤ Ta ≤ +60°C Ex tb IIIC Db T 85°C.

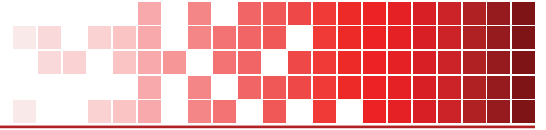
## 3000MR SWITCH SPECIFICATION

<b>Switch Type</b>	Each setpoint has 1 Form C relay (SPDT).
<b>Relay Contacts</b>	(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.

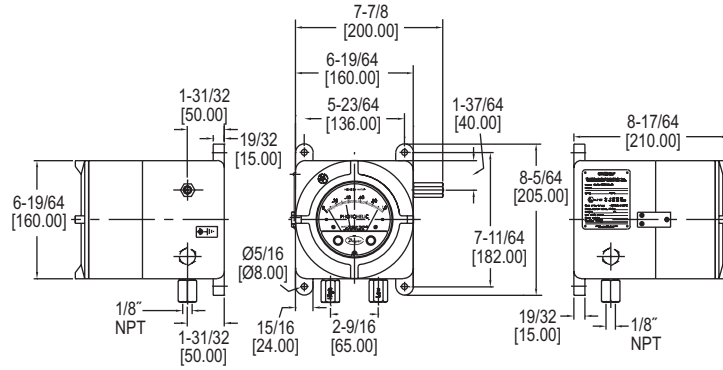
## 3000MRS SWITCH SPECIFICATIONS

<b>Switch Type</b>	Each setpoint has a solid state relay.
<b>Switching Voltage</b>	20 to 280 VAC (47 to 63 Hz).
<b>Switching Current</b>	1.0 amp (AC) max., 0.01 mA (AC) min., (2) SPST NO.

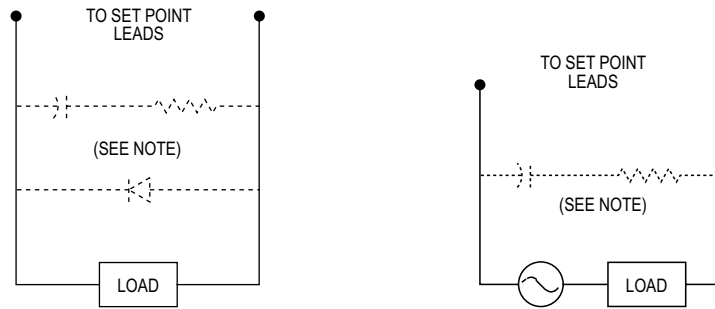


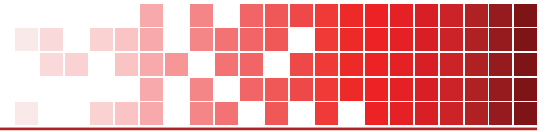


## DIMENSIONS



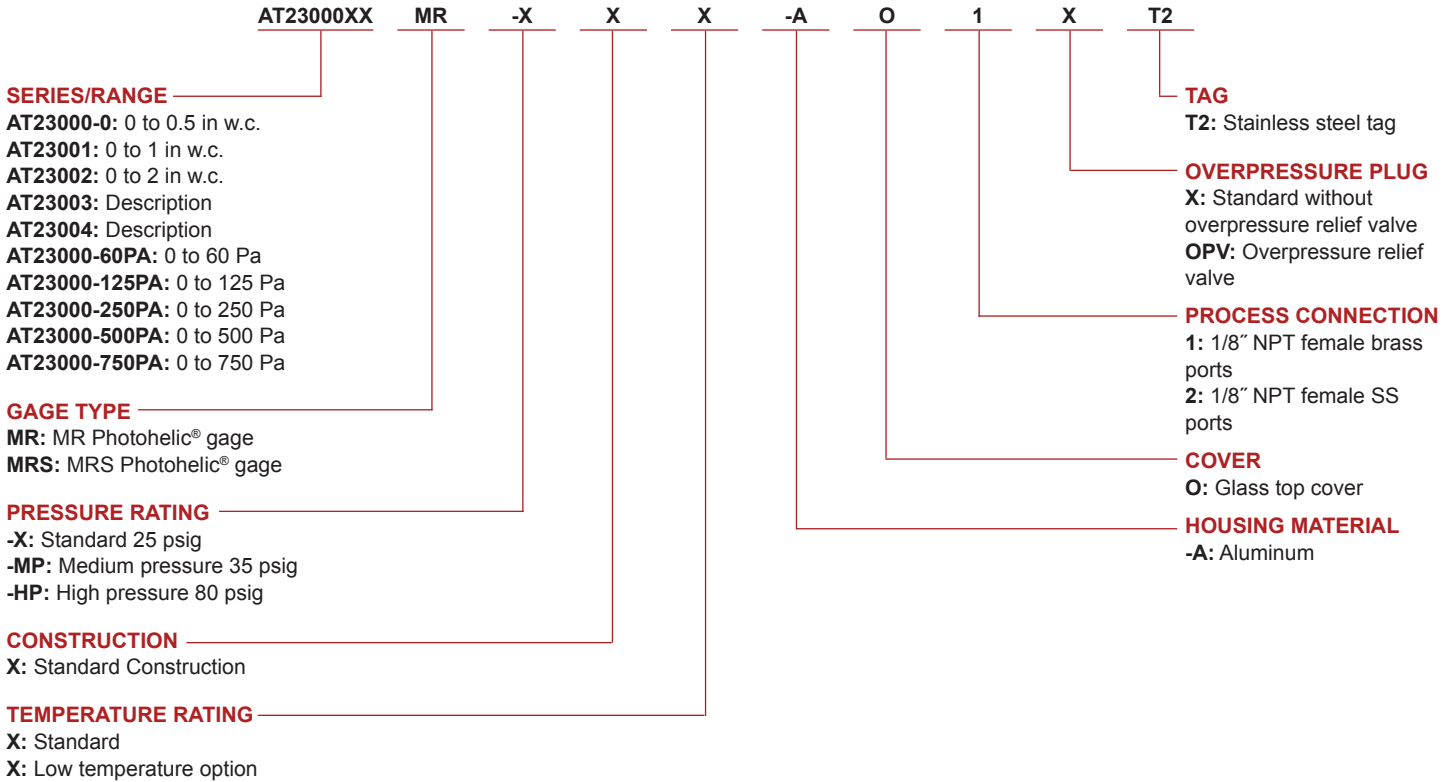
## WIRING DIAGRAM





## HOW TO ORDER

Use the **bold** characters from the chart below to construct a product code.



\*Only our most popular models and options are listed. For additional available models, please visit:  
<https://www.dwyer-inst.com/Product/Pressure/DifferentialPressure/Gage-Switches-Dial/SeriesAT23000MR-3000MRS>

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