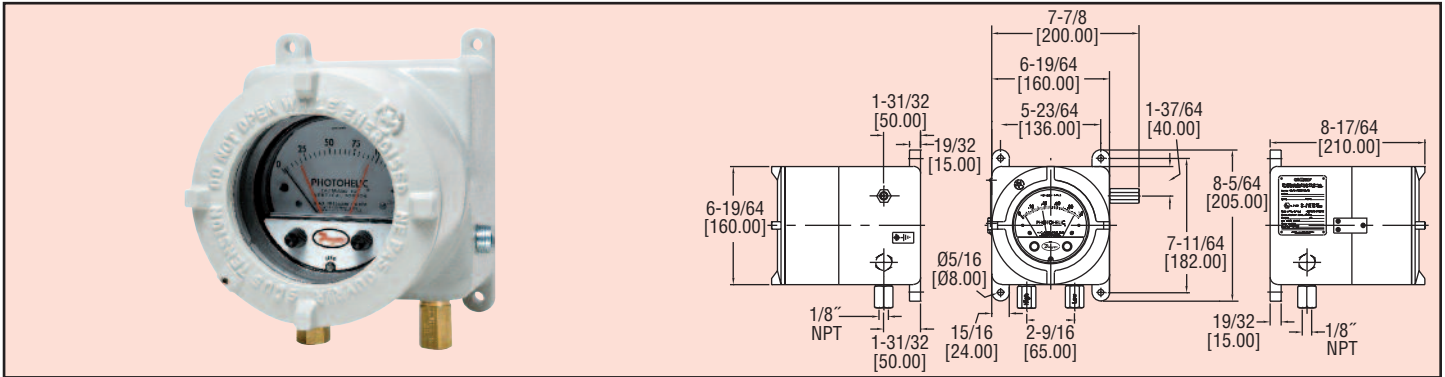




Series
AT2
3000MR

ATEX Approved Photohelic® Switch/Gages with 24 VDC Power

3000MR or 3000MRS Series in Flame-Proof ATEX Enclosures



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). Flame-proof ATEX enclosures are available with glass window which allows for viewing of set point needles and process pressure.

Important notes for installation:

- Cables must be fitted through 1/2" NPT cable gland or ATEX conduit (not supplied with instrument).
- Make sure after cabling to close tight cover and cable gland, in order to keep IP66 rating (IP65 with option OPV, overpressure relief valve).
- Open cover only after de-energizing instrument.
- **Attention:** Check local safety rules and warnings on unit and manual for a correct use of the instrument in hazardous area.

Range Chart

Model	Range, in w.c.	Minor Divs.	Model	Range, Pa	Minor Divs.
3000-00	0 to 0.25	.005	3000-60 Pa	0 to 60	2.0
3000-0	0 to 0.5	.01	3000-125 Pa	0 to 125	5.0
3001	0 to 1.0	.02	3000-250 Pa	0 to 250	5.0
3002	0 to 2.0	.05	3000-500 Pa	0 to 500	10.0

Example	AT2	3001	MR	X	X	X	A	B	1	X	T2	AT23001MR-XXX-AB1XT2
Housing	AT2											ATEX Approved Series 3000 MR/MRS Photohelic® Switch/Gages
Range		3XXX										Specify range by using Photohelic® model number. See range chart.
Relay			MR MRS									Electromechanical relay Solid state relay
Pressure Rating				-X -MP -HP								Standard -25 in Hg to 25 psig Medium pressure max. static 35 psig High pressure max. static 80 psig
Construction					X							Standard silicone construction
Temperature Rating						X	LT					Standard temperature 20 to 120°F Low temperature to -20°F
Housing Material								-A				Aluminum
Cover										B O		Blind Glass top cover
Process Connection											1 2	1/8" NPT female brass ports 1/8" NPT female SS ports
Overpressure Plug										X OPV		Standard without overpressure relief valve Overpressure relief valve Material same as ports
Tag											T2	SS information label

SPECIFICATIONS

Service: Air and non-combustible, compatible gases.
Wetted Materials: Consult factory.
Housing Material: Aluminum.
Finishing: Texture epoxy coat RAL7038.
Accuracy: ±2% of FS at 70°F (21.1°C). ±3% on -0, -60 Pa and ±4% on -00 models.
Pressure Limits: -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).
Temperature Limits: 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). **(Note:** Product temperature limits differ from case).
Power Requirements: 24 VDC, regulated ±10%.
Electrical Wiring: Screw terminals.
Mounting Orientation: Diaphragm in vertical position.
Enclosure Rating: IP66. IP65 with option OPV, overpressure relief valve.

Process Connections: 1/8" NPT female brass (SS optional). In presence of acetylene it is necessary to use SS.
Electrical Connections: Two 1/2" NPT female. Cable gland not included.
Dial Size: 4" (101.6 mm).
Set Point Adjustment: Adjustable knobs on face behind enclosure cover. Follow instructions and safety warnings to open cover.
Weight: 12.5 lb (5.7 kg).
ATEX Approved Products from Comhas with ECN: BVI 14ATEX0072.
Agency Approvals: CE 1370 Ex II 2 GD Ex d IIC Gb T6; -60°C ≤ Ta ≤ +60°C Ex tb IIIC Db T 85°C.

SWITCH SPECIFICATIONS (3000MR)

Switch Type: Each setpoint has 1 Form C relay (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.

SWITCH SPECIFICATIONS (3000MRS)

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