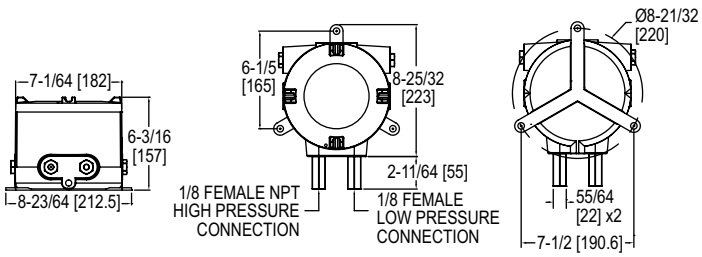
ATEX/IECEX APPROVED PHOTOHELIC® SWITCH/GAGE

3000MR or 3000MRS Series in Flameproof ATEX/IECEx Enclosures



AT-102NA-300MR/MRS, shown with VS0 port/valve configuration

Using solid state technology, the **Series AT-3000MR/MRS ATEX/IECEx Approved Photohelic® Switch/Gage** combines 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. The AT102-3000MR series employs versatile electromechanical relays with low amperage ratings-ideal for dry circuits. For applications requiring high cycle rates, choose AT102-3000MRS 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. Flameproof enclosures are available with a glass window which allows for viewing of set point needles and process pressure. Compatible with air and other non-combustible, non-corrosive gases.

BENEFITS/FEATURES

- 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
- Flameproof 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
- Increased response time at low pressures with LD port configuration

APPLICATIONS

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

Attention: Check local safety rules and warnings on unit and manual for a correct use of the instrument in hazardous areas.

SPECIFICATIONS

Service: Air and non-combustible, compatible gases.
Wetted Materials: Consult factory.
Housing Material: Aluminum.
Finishing: Texture epoxy coat RAL7015.
Accuracy: ±2% of FS at 70°F (21.1°C). ±3% on -0, -60PA and ±4% on -00 models.
Pressure Limits: See pressure limit chart.
Temperature Limits: 20 to 120°F. (-6.67 to 48.9°C). Option LT low temperature to -20°F (28.8°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 for versions VS1, VS2, and VL1).
Process Connections: 1/8″ NPT female brass (SS optional).
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: 13.2 lb (6 kg).
ATEX Certificate: INERIS 21ATEX0033X.
IECEx Certificate: IECEx INE 21.0064X.
Compliance: ATEX: CE 0080 Ex II 2G Ex db IIC T5, T6 Gb -60°C≤Ta≤+50°C (T6) -60°C≤Ta≤+60°C (T5); II 2D Ex tb IIIC T75°C Db
IECEx: Ex db IIC T5, T6 Gb -60°C≤Ta≤+50°C (T6) -60°C≤Ta≤+60°C (T5) Ex tb IIIC T75°C Db.

SWITCH SPECIFICATIONS (3000MR)
Switch Type: Each set point 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 set point has a solid state relay.
Switching Voltage: 20-280 VAC (47 to 63 Hz).
Switching Current: 1.0 amp (AC) max., 0.01 mA (AC) min., (2) SPST NO.

PRESSURE LIMITS

Port/Valve	One Pressure Port Connected	Both Pressure Ports Connected
VS0	10 kPa	10 kPa
VL0	10 kPa	10 kPa
VS1	20 kPa	15 kPa
VS2	40 kPa	20 kPa
VL1	20 kPa	15 kPa

RANGE CHART

Model	Range in w.c.	Minor Divis.	Model	Range in w.c.	Minor Divis.
3000-00	0 to 0.25	0.005	**3000-60PA**	0 to 60	2.0
3000-0	0 to 0.5	0.01	**3000-125PA**	0 to 125	5.0
3001	0 to 1.0	0.02	**3000-250PA**	0 to 250	5.0
3002	0 to 2.0	0.05	**3000-500PA**	0 to 500	10.0

MODEL CHART

Example	AT	-102NA	-3000	MR	-0	-24VDC	-XXX	-W	1	VS0	12	AT-102NA-3000MR-0-24VDC-XXX-W1VS012
Enclosure	AT											ATEX/IECEx approved enclosure
Housing Material		102NA										Aluminum enclosure
Range			3XXX									Specify range using range chart
Relay Type				MR MRS								Electromechanical relays Solid state relays
Additional Range					XX							Specify additional range using range chart
Power Requirements						24 VDC 24 VAC						Power requirements 24 VDC Power requirements 24 VAC
Options							XX XSF X LT					Standard construction Silicone free Standard temperature limit -6.67 to 48.9 (20 to -120°F) Low temperature to -28.8°C (-20°F)
Cover								B W				Blind Glass window
Port/Valve Material									1 2			Brass Stainless steel
Port/Valve Configurations										VS0 VL0 VS1 VS2 VL1		STD port/no valve LD port/no valve STD port/STD valve STD port/LD valve LD port/LD valve
Cable Entry											12	1/2″ NPT ANSI/ASME B1.20.1

USA: California Proposition 65
⚠**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go