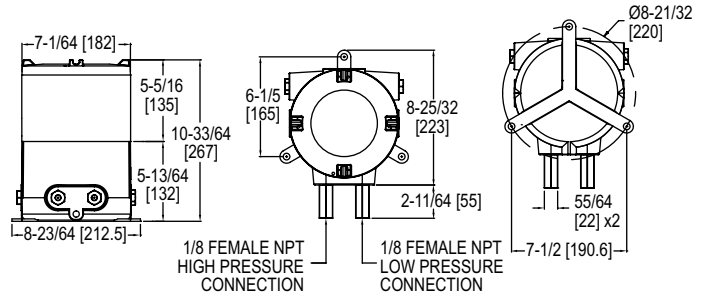


ATEX/IECEx APPROVED PHOTOHELIC® PRESSURE SWITCH/GAGE

Photohelic® Switch/Gages in Flameproof ATEX/IECEx Enclosures



AT-102PA-A3000, shown with VS0 port/valve configuration

Flameproof approved Series AT-A3000 ATEX/IECEx Approved Photohelic® Pressure Switch/Gage functions as versatile, highly repeatable pressure switches combined with a precise pressure gage employing the time-proven Magnehelic® gage design. The Photohelic® switch/gage measures and controls positive, negative or differential pressures of air and compatible gases. Two phototransistor actuated, DPDT relays are included for low/high limit control. Easy-to-adjust set point indicators are controlled by knobs located on the gage face (accessible opening case after de-energizing instrument). Set points can be interlocked to provide variable dead band which is ideal for control of fans, dampers, etc. Gage reading is continuous and unaffected by switch operation, even during loss of electrical power. Flameproof enclosures are available in aluminum with a glass window which allows for viewing of set point needles and process pressure.

BENEFITS/FEATURES

- Saves inventory, installation time, and money by consolidating several instruments into one ATEX/IECEx approved product
- 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
- 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.

| RANGE CHART | | | | | |
|-------------|---------------|-------|---------------|-------|---------------|
| Model | Range in w.c. | Model | Range in w.c. | Model | Range in w.c. |
| A3000-00 | 0 to .25 | A3006 | 0 to 6.0 | A3040 | 0 to 40 |
| A3000-0 | 0 to .50 | A3008 | 0 to 8.0 | A3050 | 0 to 50 |
| A3001 | 0 to 1.0 | A3010 | 0 to 10 | A3060 | 0 to 60 |
| A3002 | 0 to 2.0 | A3015 | 0 to 15 | A3080 | 0 to 80 |
| A3003 | 0 to 3.0 | A3020 | 0 to 20 | A3100 | 0 to 100 |
| A3004 | 0 to 4.0 | A3025 | 0 to 25 | A3150 | 0 to 150 |
| A3005 | 0 to 5.0 | A3030 | 0 to 30 | | |

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 and ±4% on -00 models.
Pressure Limits: See pressure limit chart.
Temperature Limits: 20 to 120°F (-6.67 to 48.9°C) LT low temperature option to -20°F available (**Note:** Product temperature limits differ from case).
Dial Size: 4" (101.6 mm).
Mounting Orientation: Diaphragm in vertical position.
Set Point Adjustment: Adjustable knobs on Photohelic® gage face behind enclosure cover. Follow instructions and safety warnings to open cover.

SWITCH SPECIFICATIONS

Switch Type: Each set point has 2 form C relays (DPDT).
Repeatability: ±1% of FS.
Electrical Rating: 10 A @ 28 VDC, 10 A @ 120, 240 VAC.
Electrical Wiring: Screw terminals.
Power Requirements: 120 VAC, 50/60 Hz; 240 VAC and 24 VAC power optional.
Enclosure Rating: IP66 (IP65 for versions VS1, VS2, VL1).
Process Connections: 1/8" NPT female brass (SS optional).
Electrical Connections: Two 1/2" NPT female. Cable gland not included.
Weight: 19.8 lb (9 kg).
ATEX Certificate: INERIS 21ATEX0033X.
IECEx Certificate: IECEx IINE 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.

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 |

MODEL CHART

| Example | AT | -102PA | -A3001 | -120VAC | -XSFX | -W | 1 | VS0 | 12 | AT-102PA-A3001-120VAC-XSFX-W1VS012 |
|---------------------------|----|--------|--------|---------------------------|---------------------|--------|--------|---------------------------------|----|---|
| Enclosure | AT | | | | | | | | | ATEX/IECEx approved enclosure |
| Housing Material | | 102PA | | | | | | | | Aluminum enclosure |
| Range | | | A3XXX | | | | | | | Photohelic switch/gage, specify range using range chart |
| Power | | | | 120VAC 240VAC 24VAC | | | | | | 120 VAC 240 VAC 24 VAC |
| Options | | | | | XXX XSFX XXLT | | | | | Standard construction and standard temperature limits -6.67 to 48.9 (20 to -120°F) Silicon free and standard temperature limits -6.67 to 48.9 (20 to -120°F) Standard construction and low temperature to -28.8°C (-20°F) |
| Cover | | | | | | B W | | | | Blind Glass window |
| Port/Valve Material | | | | | | | 1 2 | | | Brass SS |
| 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 to www.P65Warnings.ca.gov.

Differential Pressure Gages/Switches, Dial