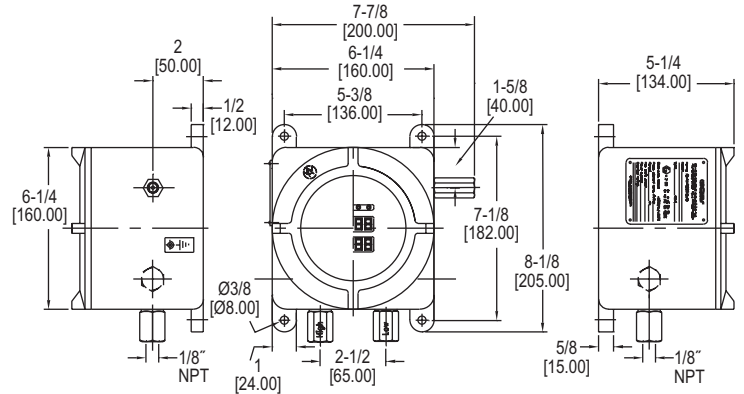


ATEX/IECEx APPROVED MAGNESENSE® DIFFERENTIAL PRESSURE TRANSMITTER

Series MS in Flame-Proof ATEX/IECEx Enclosure



The Series AT2MS ATEX/IECEx Approved Magnesense® Differential Pressure Transmitter is an extremely versatile transmitter for monitoring pressure and air velocity in hazardous areas. This transmitter is loaded with features such as: field selectable English or metric ranges, field upgradeable LCD display, adjustable dampening of output signal and the ability to select a square root output for use with pitot tubes and other similar flow sensors. Along with these features, the magnetic sensing technology provides exceptional long term performance and enables the Magnesense® transmitter to be the solution for a myriad of pressure and flow applications. Flame-proof enclosures are available in aluminum and can include a glass window for viewing process on the LCD.

FEATURES/BENEFITS

- ATEX/IECEx housing provides all the capabilities and value of the MS2 in a flame & explosion proof enclosure
- Durable and rugged housing and high-quality components combined provides long-service life and minimized down-time
- High impact strength and high temperature rated for applications where hazardous environments exist

APPLICATIONS

- Monitor pressures in ducts, rooms, or total building pressures
- Filter monitoring
- Local indication of clean room pressures with process signal sent to control room
- Hazardous area pressure measurement and transmitter

SPECIFICATIONS

Service: Air and non-combustible, compatible gases.
Wetted Materials: Consult factory.
Accuracy: MS-X21: 0.5 in w.c. & 0.25 in w.c.: ±1%; 0.1 in w.c.: ±2%; 100 Pa & 50 Pa: ±1%; 25 Pa: ±2%. MS-X11: 5 in w.c. & 2 in w.c.: ±1%; 1 in w.c.: ±2%; 1250 Pa & 500 Pa: ±1%; 250 Pa: ±2% (@ standard conditions).
Stability: ±1% FS/year.
Temperature Limits: 0 to 150°F (-18 to 66°C) (**Note:** Product temperature limits differ from case).
Pressure Limits: 1 psi max., operation; 10 psi, burst.
Power Requirements: 10 to 35 VDC (2-wire); 17 to 36 VDC or isolated 21.6 to 33 VAC (3-wire).
Output Signals: 4 to 20 mA (2-wire); 0 to 5 V, 0 to 10 V (3-wire).
Response Time: Field adjustable 0.5 to 15 s time constant. Provides a 95% response time of 1.5 to 45 seconds.
Zero & Span Adjustments: Digital push-button. In safe zone only.
Loop Resistance: Current output: 0 to 1250 Ω max.; Voltage output: min. load resistance 1 k Ω.
Current Consumption: 40 mA max. Display: 4 digit LCD.
Electrical Wiring: 4 to 20 mA, 2-wire: European style terminal block for 16 to 26 AWG. 0 to 10 V, 3-wire: European style terminal block 16 to 22 AWG.
Mounting Orientation: Diaphragm in vertical position.
Enclosure Rating: 4X IP66, IP65 with option OPV overpressure relief valve.
Housing Material: Aluminum.
Finishing: Texture epoxy coat RAL7038.
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.
Weight: 11 lb (5 kg).
ATEX Certificate: BVI 14ATEX0072.
Agency Approvals: ATEX Compliant CE 1370 Ex II 2G Ex d IIC T6 Gb / II 2D Ex tb IIIC T85°C Db, -60°C ≤ Tamb ≤ +60°C IECEx Compliant: Ex d IIC T6 Gb / Ex tb IIIC T85°C Db.

| MODEL CHART | | | | | | | | | | | |
|--------------------|-------|----|----|-----|------|----|---|---|---|-----|--|
| Example | AT2MS | -0 | -1 | 1 | -LCD | -A | O | 1 | X | T2 | AT2MS-0-11-LCD-AO1XT2 |
| Series | AT2MS | | | | | | | | | | ATEX/IECEx approved Magnesense® differential pressure transmitter |
| Output | | 0 | 1 | 2 | 3 | 6 | 7 | 8 | 9 | | Bidirectional, 4 to 20 mA Positive range, 4 to 20 mA Bidirectional, 0 to 10 VDC Positive range, 0 to 10 VDC Bidirectional, 0 to 5 VDC Positive range, 0 to 5 VDC Bidirectional, 0 to 5 VDC, 12 volt in Positive range, 0 to 5 VDC, 12 volt in |
| Range | | | 1 | 2 | 3 | 4 | 5 | | | | 1, 2, 5 in w.c. (200, 500, 1000 Pa) .1, .25, .5 in w.c. (25, 50, 100 Pa) 10 in w.c. (2 kPa) 15 in w.c. (3 kPa) 25 in w.c. (5 kPa) |
| Mounting | | | 1 | | | | | | | | Wall |
| Display | | | | LCD | | | | | | | With LCD |
| Housing | | | | | | 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 |

*Add on applies to range -2 only.