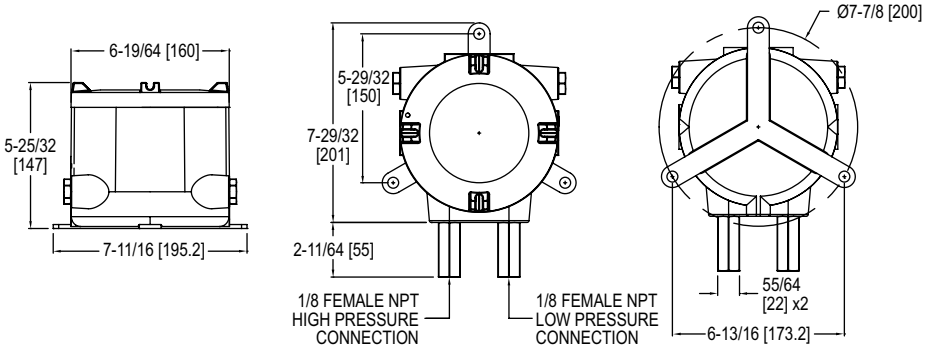
Dwyer

SERIES AT-MS

ATEX/IECEX APPROVED MAGNESENSE® DIFFERENTIAL PRESSURE TRANSMITTER

Series MS in Flameproof ATEX/IECEx Enclosure



AT-101NA-MS, shown with VS0 port/valve configuration

The **Series AT-MS 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 long-term performance and enables the Magnesense® transmitter to be the solution for a myriad of pressure and flow applications. Flameproof enclosures are available in aluminum and can include a glass window for viewing process on the LCD.

BENEFITS/FEATURES

- All the capabilities and value of the MS2 in an ATEX/IECEx approved enclosure
- Long service life and minimized downtime due to durable, rugged housing and high-quality components
- 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. and 0.25 in w.c.: ±1%; 0.1 in w.c.: ±2%; 100 Pa and 50 Pa: ±1%; 25 Pa: ±2%. MS-X11: 5 in w.c. and 2 in w.c.: ±1%; 1 in w.c.: ±2%; 1250 Pa and 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; See pressure limit chart for burst.
Power Requirements: 10-35 VDC (2-wire); 17-36 VDC or isolated 21.6-33 VAC (3-wire).
Output Signals: 4-20 mA (2-wire); 0-5 V, 0-10 V (3-wire).
Response Time: 300 ms.
Zero and Span Adjustments: Digital push-button. In safe zone only.
Loop Resistance: Current output: 0 to 1250 Ω max.; Voltage output: min. load resistance 1 kΩ.
Current Consumption: 40 mA max.
Display: 4 digit LCD.
Electrical Wiring: 4-20 mA, 2-wire: European style terminal block for 16 to 26 AWG. 0-10 V, 3-wire: European style terminal block 16 to 22 AWG.
Mounting Orientation: Diaphragm in vertical position.
Enclosure Rating: IP66.
Housing Material: Aluminum.
Finishing: Texture epoxy coat RAL7038.
Process Connections: 1/8″ NPT female brass (SS optional).
Electrical Connections: Two 1/2″ NPT female. Cable gland not included.
Weight: 11 lb (5 kg).
ATEX Certificate: EPT 19 ATEX 3192 X.
Agency Approvals: ATEX compliant: CE 0477 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 Compliant: 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

MODEL CHART

Example	AT	-101NA	-MS	-0	1	-LCD	-W	1	VS0	12	AT-101NA-MS-01-LCD-W1VS012
Enclosure	AT										ATEX/IECEx approved enclosure
Housing Material		101NA									Aluminum enclosure
Series			MS								Magnesense differential pressure transmitter
Output				0 1 2 3 6 7 8 9							Bidirectional 4-20 mA Positive range 4-20 mA Bidirectional 0-10 V Positive range 0-10 V Bidirectional 0-5 V Positive range 0-5 V Bidirectional 0-5 V output 0-12 VDC input (not all ranges) Positive range 0-5 V output 0-12 VDC input (not all ranges)
Range					1 2 3 4 5						1, 2, 5 in w.c. and 250, 500, 1250 Pa 0.1, 0.25, 0.5 in w.c. and 25.50, 100 Pa 10 in w.c. and 2 kPa 15 in w.c. and 3 kPa 25 in w.c. and 5 lPa
Options						LCD					With LCD
Cover							B W				Blind Glass window
Port/Valve Material								1 2			Brass Stainless steel
Port/Valve Configurations									VS0 VL0		STD port/no valve LD port/no valve
Cable Entry										12	1/2″ NPT ANSI/ASME B1.20.1

USA: California Proposition 65
⚠WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov