



SERIES MSX | MAGNESENSE® DIFFERENTIAL PRESSURE TRANSMITTER



MSX with optional LCD

BENEFITS/FEATURES

- Read LCD values easier with rotatable 180° display
- Quick and easy wiring via the optional toolless terminal block
- Add safety to variety of applications with UL94 V-0 and plenum ratings

APPLICATIONS

- Filter monitoring in air handler units
- Building pressure in pharmaceutical/semiconductor clean rooms
- Duct static pressure in commercial buildings
- Air velocity/flow in VAV systems

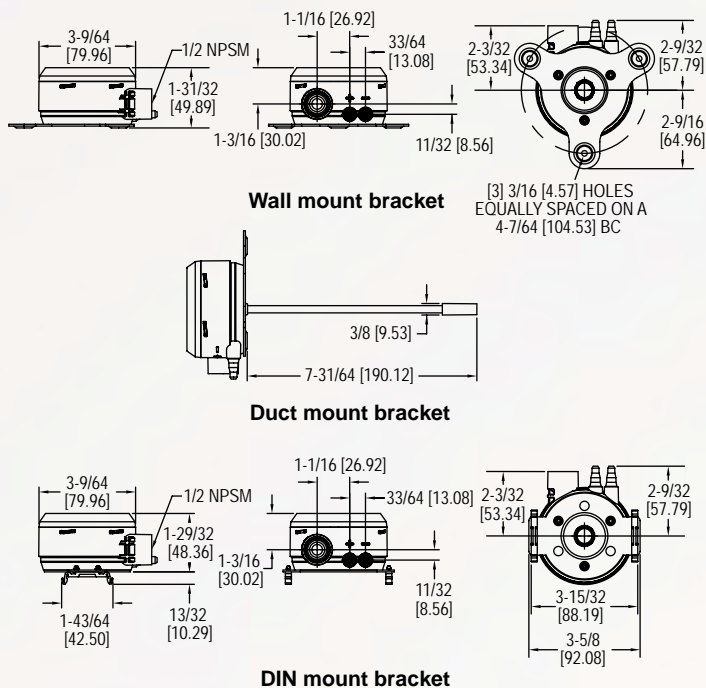
DESCRIPTION

The **Series MSX Magnesense® Differential Pressure Transmitter** combines the stability and versatility of the original Series MS2 Magnesense® II transmitter for use in building control applications. The MSX simplifies the ordering process to deliver the desired configuration, which reduces product setup time. Pressure ranges are available in Pa, mm w.c., and in w.c. All pressure ranges can be configured in unidirectional or bidirectional modes, providing a total of 32 ranges. The MSX transmitter can provide a linear pressure output or a linear velocity output with the square root extraction from the transmitter. Additional parameters have been included to expand the square root capability to calculate flow. Dual voltage and milliamp output signals can be used to provide both control and equipment output signal verification.

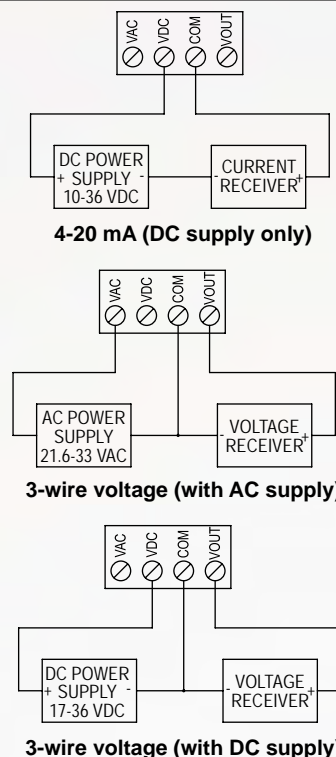
SPECIFICATIONS

| | |
|----------------------------------|--|
| Service | Air and non-combustible, compatible gases. |
| Wetted Materials | Consult factory. |
| Accuracy | ±1% FSO. |
| Stability | ±1% FSO/year. |
| Temperature Limits | -4 to 158°F (-20 to 70°C). |
| Pressure Limits | Ranges 0 and 1: 3.6 psi max operation, 6 psi burst; Ranges 2, 3 and 4: 6 psi max operation, 6 psi burst. |
| Power Requirements | 10-36 VDC (2-wire), 17-36 VDC or isolated 21.6-33 VAC (3-wire). |
| Output Signals | 4-20 mA (2-wire); 0-10 V or 0-5 V selectable (3-wire). |
| Response Time | Instantaneous (default) or 3 s (selectable). |
| Zero and Span Adjustments | Digital push-button. |
| Loop Resistance | Current output: 0-1250 Ω max; Voltage output: min. load resistance 1 kΩ. |
| Current Consumption | 21 mA max continuous. |
| Electrical Connections | 4-wire removable European style terminal block for 16 to 26 AWG. |
| Electrical Entry | 1/2" NPS thread. |
| Display (optional) | 4 digit LCD. |
| Process Connections | 1/8", 3/16", 1/4", 5 mm, and 6 mm ID flexible tubing. |
| Enclosure Rating | NEMA 4X (IP66); UL 2043 (Plenum); UL94 V-0. |
| Mounting Orientation | Pressure sensor measurement unaffected by orientation. |
| Weight | 8.0 oz (230 g). |
| Compliance | CE. |

DIMENSIONS



WIRING DIAGRAM



HOW TO ORDER

Use the **bold** characters from the chart below to construct a product code.

| | | | | | | | |
|---|------------|-----------|----------|----------|------------|-------------|--|
| SERIES | MSX | -W | 1 | 3 | -IN | -LCD | OPTIONS |
| MSX: Magnesense® differential pressure transmitter | | | | | | | -A481: Installer kit |
| MOUNTING | | | | | | | -COM: BACnet/Modbus® communications |
| -W: Wall mount | | | | | | | -FC: Factory calibration certificate |
| -U: Universal (wall or duct) mount | | | | | | | -FP: Filtered pickup with barb |
| DIRECTION | | | | | | | -GLD: Liquid tight cable gland fitting |
| 1: Unidirectional | | | | | | | -LCD: Liquid crystal display |
| 2: Bidirectional | | | | | | | -NIST: NIST traceable calibration certificate |
| -N: DIN rail mount | | | | | | | -STX: Two (2) plastic static pressure tips |
| RANGE | | | | | | | -TT: Toolless terminal block |
| 0: .5 in w.c., 125 Pa, 12.5 mm w.c. | | | | | | | -WO: LCD cover without LCD display |
| 1: 1 in w.c., 250 Pa, 25 mm w.c. | | | | | | | PRESSURE UNIT |
| 2: 5 in w.c., 1250 Pa, 125 mm w.c. | | | | | | | -IN: Inches water column |
| 3: 28 in w.c., 7000 Pa, 700 mm w.c. | | | | | | | -PA: Pascal |
| 4: 15 in w.c., 4000 Pa, 400 mm w.c. | | | | | | | -MM: Millimeters water column |

ACCESSORIES

| Model | Description |
|------------------|---|
| A-480 | Plastic static pressure tip |
| A-481 | Installer kit, includes 2 plastic static pressure tips and 7 ft (2.1 m) of PVC tubing |
| A-MSX-LCD | Replacement display for the Series MSX |

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