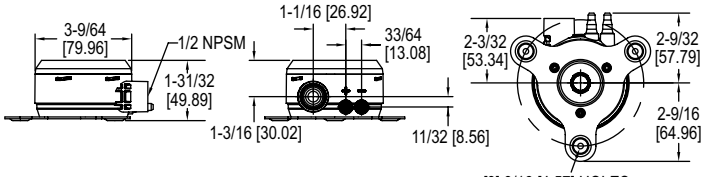
Dwyer

SERIES MSX

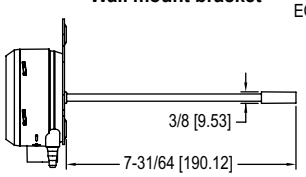
MAGNESENSE® DIFFERENTIAL PRESSURE TRANSMITTER

Monitors Differential Pressure, Air Velocity, and Volumetric Flow

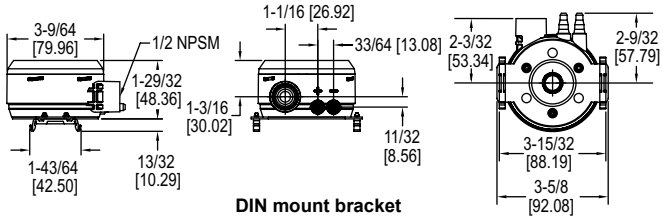


Wall mount bracket

[3] 3/16 [4.57] HOLES EQUALLY SPACED ON A 4-7/64 [104.53] BC



Duct mount bracket



DIN mount bracket

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 for calculating flow. Dual voltage and milliamp output signals can be used to provide both control and equipment output signal verification.

FEATURES/BENEFITS

- Rotatable 180° display for ease of reading
- Optional toolless terminal block allows for quick and easy wiring
- UL94 V-0 and plenum ratings that add safety to a variety of applications

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

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 and 3: 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).
Agency Approvals: CE.

MODEL CHART

Example	MSX	-W	1	3	-IN	-LCD	MSX-W13-IN-LCD
Series	MSX						Magnesense® differential pressure transmitter
Mounting		W U N					Wall mount Universal (wall or duct) mount DIN rail mount
Direction			1 2				Unidirectional Bidirectional
Range				0 1 2 3			.5 in w.c., 125 Pa, 12.5 mm w.c. 1 in w.c., 250 Pa, 25 mm w.c. 5 in w.c., 1250 Pa, 125 mm w.c. 28 in w.c., 7000 Pa, 700 mm w.c.
Pressure Unit					IN PA MM		Inches water column Pascal Millimeters water column
Options						A481 FC FP GLD LCD NIST STX TT WO	Installer kit, includes 2 plastic static pressure tips and 7 ft (2.1m) of PVC tubing Factory calibration certificate Filtered pickup with barb Liquid tight cable gland fitting Liquid crystal display NIST traceable calibration certificate Two (2) plastic static pressure tips Toolless terminal block LCD cover without LCD display

OPTIONS

Range	in w.c.	Pa low	Pa high	mm w.c.
Range 0	0.1 0.15 0.25 0.5*	25 30 40 50	60 75 100 125*	2.5 5 10 12*
Range 1	0.1 0.25 0.5 1*	25 40 50 60	100 150 160 250*	2.5 5 10 25*
Range 2	1 2 3 5*	250 300 400 500	600 750 1000 1250*	25 50 100 125*
Range 3	10 15 25 28*	1000 1500 2000 2500	3000 4000 5000 7000*	250 350 500 700*

*Indicated values are the positive full scale output values per range.

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