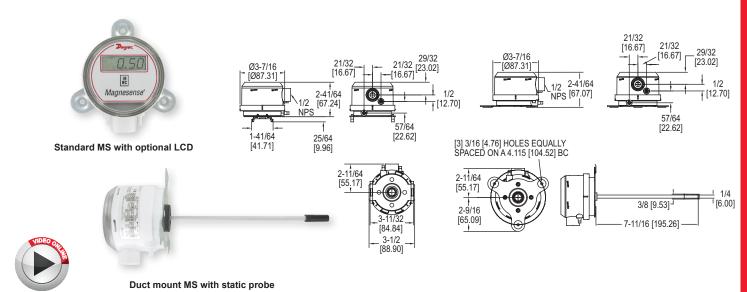


MAGNESENSE® DIFFERENTIAL PRESSURE TRANSMITTER

Monitors Pressure and Air Velocity





The Series MS Magnesense® Differential Pressure Transmitter is an extremely versatile transmitter for monitoring pressure and air velocity. This compact package is loaded with features such as:

FEATURES/BENEFITS

- · Field selectable English or Metric ranges
- · Field upgradeable LCD display
- · Adjustable damping of output signal (with optional display)
- · Ability to select a square root output for use with pitot tubes and other similar flow sensors

APPLICATIONS

MS-221

0-10 V

- · Building pressure monitoring
- · Duct pressure monitoring
- · Fan velocity measurement
- · Zone differential pressure monitoring
- · Filter condition monitoring

Along with these features, the patented magnetic sensing technology provides exceptional long term performance and enables the Magnesense® Differential Pressure Transmitter to be the single solution for your pressure and flow applications.

MODEL CHART			
Model	Output	Selectable Ranges	
MS-121*	4-20 mA	0.1 in, 0.25 in, 0.5 in w.c. (25, 50, 100 Pa)	
MS-321*	0-10 V	0.1 in, 0.25 in, 0.5 in w.c. (25, 50, 100 Pa)	
MS-721*	0-5 V	0.1 in, 0.25 in, 0.5 in w.c. (25, 50, 100 Pa)	
MS-111*	4-20 mA	1 in, 2 in, 5 in w.c. (250, 500, 1250 Pa)	
MS-311*	0-10 V	1 in, 2 in, 5 in w.c. (250, 500, 1250 Pa)	
MS-711*	0-5 V	1 in, 2 in, 5 in w.c. (250, 500, 1250 Pa)	
MS-131	4-20 mA	10 in w.c. (2 kPa)	
MS-141	4-20 mA	15 in w.c. (3 kPa)	
MS-151	4-20 mA	25 in w.c. (5 kPa)	
MS-331	0-10 V	10 in w.c. (2 kPa)	
MS-341	0-10 V	15 in w.c. (3 kPa)	
MS-351	0-10 V	25 in w.c. (5 kPa)	
MS-021	4-20 mA	±0.1 in, 0.25 in, 0.5 in w.c. (±25, 50, 100 Pa)	

MS-621 0-5 V ±0.1 in, 0.25 in, 0.5 in w.c. (±25, 50, 100 Pa) *Note: For duct mount static pressure probe, change last digit from 1 to 2. Example: MS-122

±0.1 in, 0.25 in, 0.5 in w.c. (±25, 50, 100 Pa)

SPECIFICATIONS

Service: Air and non-combustible, compatible gases.

Wetted Materials: Consult factory. Accuracy: ±1% for 0.25" (50 Pa), 0.5" (100 Pa), 2" (500 Pa), 5" (1250 Pa), 10" (2 kPa), 15" (3 kPa), 25" (5 kPa); ±2% for 0.1" (25 Pa), 1" (250 Pa) and all bidirectional ranges.

Stability: ±1% FS/year.

Temperature Limits: 0 to 150°F (-18 to

66°C).

Pressure Limits: 1 psi maximum,

operation; 10 psi, 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.

Loop Resistance: Current output: 0-1250 Ω max; Voltage output: min. load resistance 1 k Ω.

Current Consumption: 40 mA max. Display (optional): 4 digit LCD. Electrical Connections: 4-20 mA,

2-Wire: European style terminal block for 16 to 26 AWG; 0-10 V, 3-Wire: European style terminal block for 16 to 22 AWG.

Electrical Entry: 1/2" NPS thread; Accessory (A-151): Cable gland for 5 to 10 mm diameter cable.

Process Connections: 3/16" (5 mm) ID tubing. Maximum OD 9 mm.

Enclosure Rating: NEMA 4X (IP66). Mounting Orientation: Diaphragm in vertical position.

Weight: 8.0 oz (230 g). Agency Approvals: CE.

ACCESSORIES			
Model	Description		
A-151	Cable gland for 5 to 10 mm cable		
A-435	Field upgradeable LCD		
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-489	4" 303 SS straight static pressure tip with flange		
A-302F-A	303 SS Static pressure tip with mounting flange. For 3/16" ID rubber or		
	plastic tubing. 4" insertion depth. Includes mounting screws		
SCD-PS	100-240 VAC/VDC to 24 VDC power supply		

OPTIONS				
To order add suffix:	Description			
-LCD	Units with display			
Example: MS-121-LCD				
-NIST	NIST traceable calibration certificate			
Example: MS-021-NIST				
-FC	Factory calibration certificate			
Example: MS-021-FC				

Process Tubing Options: See page 453 (Gage Tubing Accessories)