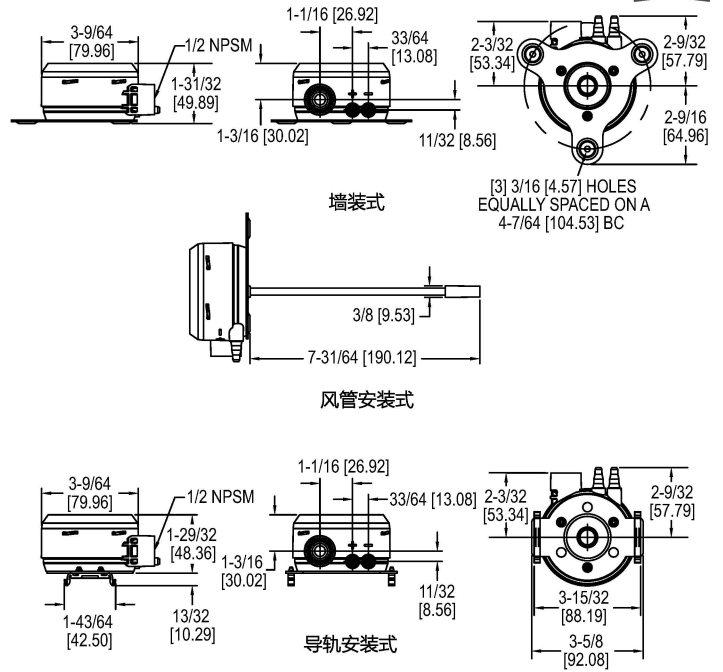


# MAGNESENSE® 差压变送器

## 监测差压，风速，风量



MSX系列Magnesense®差压变送器传承了MS2系列Magnesense®II差压变送器的稳定性和多功能性等特点，应用于楼宇自动化控制系统。它简化了订购流程，可由工厂按客户需求配置，节约产品安装设置时间。压力单位可选Pa，毫米水柱或英寸水柱，每个型号都有32个量程可选用，均可配置成单向或正负组合量程。MSX系列差压变送器可线性输出差压信号，或开方后线性输出风速风量信号。它能同时输出电压和电流信号，便于维护和检修。

### 功能/特点

- 清晰读数的LCD显示屏可转180°显示
- 可选配免工具快速接线端子排，方便快速接线
- UL94 V-0和UL 2043等级的阻燃和阻烟外壳，在各种应用场合更加安全

### 应用

- 空气处理机组中的过滤器状态监测
- 制药，半导体，洁净室的室内压力监测
- 商业和专业建筑中的风管静压测量
- 变风量调节系统中的风速/风量

型号表							
举例	MSX	-W	1	3	-IN	-LCD	MSX-W13-IN-LCD
系列号	MSX						MSX Magnesense® 差压变送器
安装方式		W U N					墙装式 通用安装式（墙装或风管安装） DIN导轨安装式
量程方式			1 2				单向量程 正负组合量程
量程代码				0 1 2 3			0.5 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.
压力单位					IN PA MM		英寸水柱 Pa 毫米水柱
选项						A481	安装套件：包括2只塑料静压取压头和一根7英尺（2.1米）PVC软管 工厂校准证书 带软管接头的过滤器配件 电缆密封接头 液晶显示屏 NIST可追溯的校准证书 2个塑料静压取压头 免工具快速接线端子排 开窗前盖

### 技术指标

<b>介质：</b> 空气和不可燃的兼容气体。	<b>回路电阻：</b> 电流输出：0-1250Ω（最大）；电压输出：最小负载1kΩ。
<b>材质：</b> 请咨询工厂。	<b>精度：</b> 满量程的±1%FSO。
<b>精度：</b> 满量程的±1%FSO。	<b>电流消耗：</b> 最大21mA。
<b>稳定性：</b> 每年±1%FSO。	<b>电气连接：</b> 4线可移除的欧式端子排，线径：16-26AWG。
<b>温度范围：</b> -4 - 158°F (-20 - 70°C)。压力限制：量程0和1：最大操作压力为3.6psi，爆裂压力为6psi；量程2和3：最大工作压力为6psi，爆裂压力为6psi。	<b>进线方式：</b> 1/2"NPS螺纹。
<b>电源要求：</b> 10-36VDC(2线)，17-36VDC或隔离的21.6-33VAC(3线)。	<b>显示（可选）：</b> 4位LCD显示屏。
<b>输出信号：</b> 4-20mA（2线）；0-10V或0-5V（3线）。	<b>过程连接：</b> 1/8"，3/16"，1/4"，5mm和6mm内径软管。
<b>响应时间：</b> 瞬时（默认）或3秒（可选）。	<b>外壳防护等级：</b> NEMA 4X (IP66)，阻烟等级UL 2043，阻燃等级UL94 V-0。
<b>零点和量程调整：</b> 数字按钮。	<b>安装方向：</b> 任意。
	<b>重量：</b> 8.0盎司（230克）。
	<b>机构认证：</b> CE。

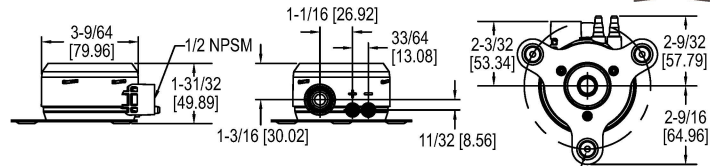
选项				
量程	英寸水柱	Pa (低)	Pa (高)	毫米水柱
量程 0	0.1	25	60	2.5
	0.15	30	75	5
	0.25	40	100	10
	0.5*	50	125*	12*
量程 1	0.1	25	100	2.5
	0.25	40	150	5
	0.5	50	160	10
	1*	60	250*	25*
量程 2	1	250	600	25
	2	300	750	50
	3	400	1000	100
	5*	500	1250*	125*
	10	1000	3000	250
量程 3	15	1500	4000	350
	25	2000	5000	500
	28*	2500	7000*	700*

\*是指每个量程代码下的正满量程输出值。

配件	
型号	描述
A-480	塑料静压取压头
A-481	安装套件：含2只塑料静压取压头和一根7英尺(2.1米)PVC软管
A-MSX-LCD	MSX系列的可替换显示屏

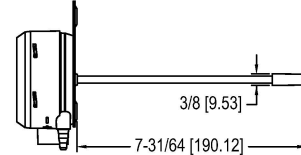
# MAGNESENSE® DIFFERENTIAL PRESSURE TRANSMITTER

Monitors Differential Pressure, Air Velocity, and Volumetric Flow

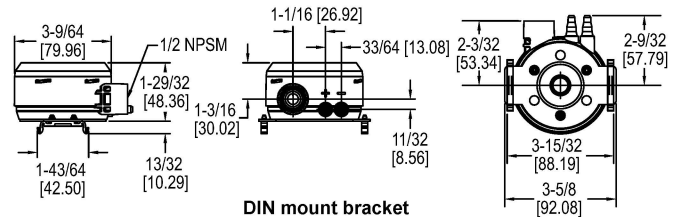


Wall mount bracket

[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**

<p><b>Service:</b> Air and non-combustible, compatible gases.</p> <p><b>Wetted Materials:</b> Consult factory.</p> <p><b>Accuracy:</b> ±1% FSO.</p> <p><b>Stability:</b> ±1% FSO/year.</p> <p><b>Temperature Limits:</b> -4 to 158°F (-20 to 70°C).</p> <p><b>Pressure Limits:</b> Ranges 0 and 1: 3.6 psi max operation, 6 psi burst; Ranges 2 and 3: 6 psi max operation, 6 psi burst.</p> <p><b>Power Requirements:</b> 10-36 VDC (2-wire), 17-36 VDC or isolated 21.6-33 VAC (3-wire).</p> <p><b>Output Signals:</b> 4-20 mA (2-wire); 0-10 V or 0-5 V selectable (3-wire).</p> <p><b>Response Time:</b> Instantaneous (default) or 3 s (selectable).</p> <p><b>Zero and Span Adjustments:</b> Digital push-button.</p>	<p><b>Loop Resistance:</b> Current output: 0-1250 Ω max; Voltage output: min. load resistance 1 kΩ.</p> <p><b>Current Consumption:</b> 21 mA max continuous.</p> <p><b>Electrical Connections:</b> 4-wire removable European style terminal block for 16 to 26 AWG.</p> <p><b>Electrical Entry:</b> 1/2" NPS thread.</p> <p><b>Display (optional):</b> 4 digit LCD.</p> <p><b>Process Connections:</b> 1/8", 3/16", 1/4", 5 mm, and 6 mm ID flexible tubing.</p> <p><b>Enclosure Rating:</b> NEMA 4X (IP66), UL 2043 (Plenum), UL94 V-0.</p> <p><b>Mounting Orientation:</b> Pressure sensor measurement unaffected by orientation.</p> <p><b>Weight:</b> 8.0 oz (230 g).</p> <p><b>Agency Approvals:</b> CE.</p>
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MODEL CHART							
Example	MSX	-W	1	3	-IN	-LCD	MSX-W13-IN-LCD
<b>Series</b>	MSX						Magnesense® differential pressure transmitter
<b>Mounting</b>		W U N					Wall mount Universal (wall or duct) mount DIN rail mount
<b>Direction</b>			1 2				Unidirectional Bidirectional
<b>Range</b>			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.
<b>Pressure Unit</b>					IN PA MM		Inches water column Pascal Millimeters water column
<b>Options</b>						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	25	60	2.5
	0.15	30	75	5
	0.25	40	100	10
	0.5*	50	125*	12*
Range 1	0.1	25	100	2.5
	0.25	40	150	5
	0.5	50	160	10
	1*	60	250*	25*
Range 2	1	250	600	25
	2	300	750	50
	3	400	1000	100
	5*	500	1250*	125*
Range 3	10	1000	3000	250
	15	1500	4000	350
	25	2000	5000	500
	28*	2500	7000*	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