Differential Pressure Transmitters

Dwyer Instruments, Inc. | dwyer-inst.com

**SERIES MS**

**MAGNESENSE® DIFFERENTIAL PRESSURE TRANSMITTER**

Monitors Pressure and Air Velocity

**CALIBRATION SERVICES AVAILABLE**

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**

- 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.

**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” (2500 Pa) ±2% for 0.1” (25 Pa), 1” (250 Pa) and all bi-directional 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 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 & Span Adjustments:** Digital push-button.

**ACCESSORIES**

- **Scd-PS:** 100-240 VAC/DC to 24 VDC power supply £31.00

**OPTIONS**

- **Units with display:** +£36.50
- **NIST traceable calibration certificate:** +£139.00
- **Factory calibration certificate:** +£30.00

- **Items are subject to Schedule B discounts.**

**PROCESS TUBING OPTIONS:** See page 455 (Gage Tubing Accessories)

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**MODEL CHART**

<table>
<thead>
<tr>
<th>Model</th>
<th>Output</th>
<th>Selectable Ranges</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS-121</td>
<td>4-20 mA</td>
<td>0.1 in, 0.25 in, 0.5 in w.c. (25, 50, 100 Pa)</td>
<td>£89.00</td>
</tr>
<tr>
<td>MS-221</td>
<td>0-10 V</td>
<td>0.1 in, 0.25 in, 0.5 in w.c. (25, 50, 100 Pa)</td>
<td>£89.00</td>
</tr>
<tr>
<td>MS-721</td>
<td>0-5 V</td>
<td>0.1 in, 0.25 in, 0.5 in w.c. (25, 50, 100 Pa)</td>
<td>£89.00</td>
</tr>
<tr>
<td>MS-111</td>
<td>4-20 mA</td>
<td>1 in, 2 in, 5 in w.c. (250, 500, 1250 Pa)</td>
<td>£89.00</td>
</tr>
<tr>
<td>MS-311</td>
<td>0-10 V</td>
<td>1 in, 2 in, 5 in w.c. (250, 500, 1250 Pa)</td>
<td>£89.00</td>
</tr>
<tr>
<td>MS-711</td>
<td>0-5 V</td>
<td>1 in, 2 in, 5 in w.c. (250, 500, 1250 Pa)</td>
<td>£89.00</td>
</tr>
<tr>
<td>MS-131</td>
<td>4-20 mA</td>
<td>10 in w.c. (2 kPa)</td>
<td>£96.00</td>
</tr>
<tr>
<td>MS-141</td>
<td>4-20 mA</td>
<td>15 in w.c. (3 kPa)</td>
<td>£96.00</td>
</tr>
<tr>
<td>MS-151</td>
<td>4-20 mA</td>
<td>25 in w.c. (5 kPa)</td>
<td>£96.00</td>
</tr>
<tr>
<td>MS-331</td>
<td>0-10 V</td>
<td>10 in w.c. (2 kPa)</td>
<td>£96.00</td>
</tr>
<tr>
<td>MS-341</td>
<td>0-10 V</td>
<td>15 in w.c. (3 kPa)</td>
<td>£96.00</td>
</tr>
<tr>
<td>MS-351</td>
<td>0-10 V</td>
<td>25 in w.c. (5 kPa)</td>
<td>£96.00</td>
</tr>
<tr>
<td>MS-621</td>
<td>4-20 mA</td>
<td>±0.1 in, 0.25 in, 0.5 in w.c. (±25, 50, 100 Pa)</td>
<td>£106.00</td>
</tr>
<tr>
<td>MS-622</td>
<td>0-10 V</td>
<td>±0.1 in, 0.25 in, 0.5 in w.c. (±25, 50, 100 Pa)</td>
<td>£106.00</td>
</tr>
<tr>
<td>MS-623</td>
<td>0-25 mA</td>
<td>±0.1 in, 0.25 in, 0.5 in w.c. (±25, 50, 100 Pa)</td>
<td>£106.00</td>
</tr>
</tbody>
</table>

*Note: For duct mount static pressure probe, change last digit from 1 to 2 and +£21.75. Example: MS-122*

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**Example:**

- **MS-111:** 1 in, 2 in, 5 in w.c. (250, 500, 1250 Pa) £89.00
- **MS-151:** 25 in w.c. (5 kPa) £96.00
- **MS-621:** ±0.1 in, 0.25 in, 0.5 in w.c. (±25, 50, 100 Pa) £106.00

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**Duct mount MS with static probe**

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**Accessories**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-151</td>
<td>Cable gland for 5 to 10 mm diameter cable</td>
<td>£2.60</td>
</tr>
<tr>
<td>A-435</td>
<td>Field upgradeable LCD</td>
<td>£50.00</td>
</tr>
<tr>
<td>A-480</td>
<td>Plastic static pressure tip</td>
<td>£0.90</td>
</tr>
<tr>
<td>A-481</td>
<td>Installer kit. Includes 2 plastic static pressure tips and 7 ft (2.1 m) of PVC tubing</td>
<td>£4.40</td>
</tr>
<tr>
<td>A-489</td>
<td>4” 303 SS straight static pressure tip with flange</td>
<td>£6.90</td>
</tr>
<tr>
<td>A-302F-A</td>
<td>303 SS static pressure tip with mounting flange. For 3/16” ID plastic tubing.</td>
<td>£9.50</td>
</tr>
</tbody>
</table>

**Process Tubing Options:** See page 455 (Gage Tubing Accessories)

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**WARRANTY**

5 YEAR LIMITED WARRANTY

**Manufacturer’s Warranty:**

- **Warranty Period:** 5 years
- **What is Covered:** All parts except those which are expendable or subject to wear with normal use (e.g. o-rings, pins, etc.)
- **Who is Covered:** Only the original consumer purchaser
- **What is Not Covered:** Damage resulting from accident, abuse, mishandling, or improper installation or operation
- **What Dwyer Instruments, Inc. Will Do:** Repair or replace at our option any product which is proven to be defective in material or workmanship during the warranty period
- **What You Must Do:** Return defective product to Dwyer Instruments, Inc. transportation prepaid. A return authorization number must be obtained prior to return.

**Dwyer Instruments, Inc. — Assurance of Quality**

- **Quality Control:** All products are subjected to a series of tests and checks before being shipped to ensure complete customer satisfaction
- **Customer Service:** Our goal is complete customer satisfaction. If you have any problems or service needs, please contact us immediately.

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**Agency Approvals:**

- **NEMA 4X (IP66):** Enclosure Rating
- **CE:** Electrical Entry
- **UL:** Service
- **GOST:** Process Tubing Options

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