Differential Pressure Transmitters

Magnesense® Differential Pressure Transmitter

Monitors Pressure & 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:

• Field selectable English or Metric ranges
• Field upgradable 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

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˝ (2 kPa), 15˝ (3 kPa), 25˝ (5 kPa) ±2% for 0.1˝ (25 Pa), 1˝ (250 Pa) and all bi-directional ranges.

**Stability:** ±1% / year F.S.O.

**Temperature Limits:** 0 to 150°F (-18 to 66°C).

**Pressure Limits:** 1 psi maximum, operation; 10 psi, burst.

**Power Requirements:** 10 to 35 VDC (2-wire); 17 to 36 VDC or isolated 21.6 to 33 VAC (3-wire).

**Output Signals:** 4 to 20 mA (2-wire); 0 to 5 V, 0 to 10 V (3-wire).

**Response Time:** Adjustable 0.5 to 15 sec. time constant. Provides a 95% response time of 1.5 to 45 seconds.

**Zero & Span Adjustments:** Digital push button.

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

**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

**Accessories**
- A-435, Field Upgradeable LCD
- A-480, Plastic Static Pressure Tip
- A-481, Installer Kit

### Accessories

- A-435, Field Upgradeable LCD: $49.00
- A-480, Plastic Static Pressure Tip: $0.80
- A-481, Installer Kit: Includes 2 plastic static pressure tips and 7 ft (2.1 m) of PVC tubing: $4.30

**Note:** Add -LCD to end of model for units with display. Models available with duct mount static pressure probe. Change last digit from 1 to 2. Ex. MS-122: add $36.00 to base price. MS-121*: add $20.00 to base price.

**Models and Prices**

<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˝, 0.25˝, 0.5˝ w.c. (25, 50, 100 Pa)</td>
<td>$79.00</td>
</tr>
<tr>
<td>MS-321*</td>
<td>0-10 V</td>
<td>0.1˝, 0.25˝, 0.5˝ w.c. (25, 50, 100 Pa)</td>
<td>79.00</td>
</tr>
<tr>
<td>MS-111*</td>
<td>4-20 mA</td>
<td>1˝, 2˝, 5˝ w.c. (250, 500, 1250 Pa)</td>
<td>79.00</td>
</tr>
<tr>
<td>MS-311*</td>
<td>0-10 V</td>
<td>1˝, 2˝, 5˝ w.c. (250, 500, 1250 Pa)</td>
<td>79.00</td>
</tr>
<tr>
<td>MS-131</td>
<td>4-20 mA</td>
<td>10˝ w.c. (2 kPa)</td>
<td>86.00</td>
</tr>
<tr>
<td>MS-141</td>
<td>4-20 mA</td>
<td>15˝ w.c. (3 kPa)</td>
<td>86.00</td>
</tr>
<tr>
<td>MS-151</td>
<td>4-20 mA</td>
<td>28˝ w.c. (5 kPa)</td>
<td>86.00</td>
</tr>
<tr>
<td>MS-721*</td>
<td>0-5 V</td>
<td>0.1˝, 0.25˝, 0.5˝ w.c. (25, 50, 100 Pa)</td>
<td>79.00</td>
</tr>
<tr>
<td>MS-711*</td>
<td>0-5 V</td>
<td>1˝, 2˝, 5˝ w.c. (250, 500, 1250 Pa)</td>
<td>79.00</td>
</tr>
<tr>
<td>MS-621</td>
<td>0-5 V</td>
<td>±0.1˝, 0.25˝, 0.5˝ w.c. (±25, 50, 100 Pa)</td>
<td>94.00</td>
</tr>
<tr>
<td>MS-331</td>
<td>0-10 V</td>
<td>10˝ w.c. (2 kPa)</td>
<td>86.00</td>
</tr>
<tr>
<td>MS-341</td>
<td>0-10 V</td>
<td>15˝ w.c. (3 kPa)</td>
<td>86.00</td>
</tr>
<tr>
<td>MS-351</td>
<td>0-10 V</td>
<td>25˝ w.c. (5 kPa)</td>
<td>86.00</td>
</tr>
<tr>
<td>MS-021</td>
<td>4-20 mA</td>
<td>±0.1˝, 0.25˝, 0.5˝ w.c. (±25, 50, 100 Pa)</td>
<td>94.00</td>
</tr>
<tr>
<td>MS-221</td>
<td>0-10 V</td>
<td>±0.1˝, 0.25˝, 0.5˝ w.c. (±25, 50, 100 Pa)</td>
<td>94.00</td>
</tr>
</tbody>
</table>

**Note:** Add -LCD to end of model for units with display. Models available with duct mount static pressure probe. Change last digit from 1 to 2. Ex. MS-122: add $36.00 to base price. MS-121*: add $20.00 to base price.

**Price:** 8.0 oz (230 g).

**Agency Approvals:** CE.

VISIT OUR WEBSITES: www.dwyer-inst.com • www.dwyer-inst.co.uk • www.dwyer-inst.com.au