Handheld Digital Manometer

High Accuracy (0.2%, 0.1% or 0.05%), Differential, Gage or Absolute

**SPECIFICATIONS**
- **Pressure Connection:** Hose; 4/6 mm or 1/8" NPT.
- **Accuracy:** Includes linearity, hysteresis, and repeatability; per order code.
  - ±0.20% full-scale ±1 digit
  - ±0.10% full-scale ±1 digit
  - ±0.05% full-scale ±1 digit.
- **Measuring Media:** Instrument air or inert gases. For HM28G3XXXXX, any material compatible with 18/8 stainless steel.
- **Storage Temperature:** 23 to 122°F (-5 to 50°C).
- **Humidity:** 30 to 95% RH, non-condensing.
- **Display:** 2 line, 16 character, dot matrix LCD, with switchable display sizes.
- **Power Requirements:** 9 V alkaline battery, installed functional, user replaceable. Can operate from external power supply of 7 to 14 VDC.
- **Current Consumption:** < 9 mA.
- **Memory:** 964 measured values. Recording intervals adjustable from manual, 1, 5, 10, 20, 30 seconds, 1, 2, 3, 5, 10, 30, 60 minutes.
- **Case Protection:** IP54 (NEMA 3).
- **Case Dimensions:** 6” x 3.27” x 1.34” (152 x 83 x 34 mm).
- **Weight:** 9.5 oz (270 g).

**Maximum Measurement Rates:** Stand alone: 2-1/2 readings/s (0.1% and 0.05% ratings), 5 readings/s (0.2% rating). Output to RS-232: 20 measurements/s (0.2% rating). 10 measurements/s (0.1% and 0.05% ratings).

**RS-232 Baud Rate:** Adjustable, 1200, 2400, 4800, or 9600 baud.

**Agency Approvals:** CE.

---

Series 490 Digital Manometers

Wet/Wet Handheld Digital Manometer, Liquid & Gas Pressure Measurement, ±0.5% FS Accuracy

**SPECIFICATIONS**
- **Service:** Compatible gases & liquids.
- **Wetted Materials:** Without valve: 316L SS. Additional wetted parts with 3-way valve option: Buna-N, silicone grease, PTFE, brass 360, copper, reinforced acetal copolymer.
- **Accuracy:** ±0.5% FS, 60 to 78°F (15.6 to 25.6°C); ±1.5% FS from 32 to 60°F and 78 to 104°F (0 to 15.6°C and 25.6 to 40°C). Pressure Hysteresis: ±0.1% of full scale.
- **Pressure Limits:** See chart.
- **Pressure Connection:** See chart.
- **Temperature Limits:** 32 to 104°F (0 to 40°C).

**Storage Temperature Limits:** -4 to 176°F (-20 to 80°C).

<table>
<thead>
<tr>
<th>Model</th>
<th>Range</th>
<th>bar</th>
<th>psi</th>
<th>in Hg</th>
<th>kPa</th>
<th>FTWC</th>
<th>in W.C.</th>
<th>mm Hg</th>
<th>mbar</th>
</tr>
</thead>
<tbody>
<tr>
<td>490-1</td>
<td>0-15.00 psi</td>
<td>1.034</td>
<td>15.00</td>
<td>30.54</td>
<td>103.4</td>
<td>34.60</td>
<td>415.2</td>
<td>7.75</td>
<td>1034</td>
</tr>
<tr>
<td>490-2</td>
<td>0-30.00 psi</td>
<td>2.069</td>
<td>30.00</td>
<td>61.08</td>
<td>206.9</td>
<td>69.20</td>
<td>911.00</td>
<td>15.51</td>
<td>2069</td>
</tr>
<tr>
<td>490-3</td>
<td>0-50.00 psi</td>
<td>3.447</td>
<td>50.00</td>
<td>101.8</td>
<td>344.7</td>
<td>115.3</td>
<td>1646.00</td>
<td>27.68</td>
<td>1646</td>
</tr>
<tr>
<td>490-4</td>
<td>0-100.00 psi</td>
<td>6.895</td>
<td>100.00</td>
<td>203.6</td>
<td>689.5</td>
<td>230.7</td>
<td>461.3</td>
<td>55.56</td>
<td>461.3</td>
</tr>
<tr>
<td>490-5</td>
<td>0-500.00 psi</td>
<td>34.47</td>
<td>500.00</td>
<td>1018</td>
<td>3447</td>
<td>1153</td>
<td>1646.00</td>
<td>27.68</td>
<td>1646</td>
</tr>
<tr>
<td>490-6</td>
<td>0-2000.00 psi</td>
<td>13.79</td>
<td>2000</td>
<td>407.2</td>
<td>1379</td>
<td>461.3</td>
<td>911.00</td>
<td>15.51</td>
<td>911.00</td>
</tr>
</tbody>
</table>

**Agency Approvals:** CE.

---

Series 490 Digital Manometers are versatile, hand-held, battery operated manometers available in several basic ranges for positive or positive differential pressure measurement and can tolerate most liquid media compatible with 316LSS. A memory function allows storage of up to 40 readings for later recall and a backlight provides auxiliary lighting for hard-to-see locations. Standard are a hold feature and both visual and audible overpressure alarms. A new feature added to the Series 490 is a field adjustable damping. This allows the user to choose the level of display averaging rate corresponding to the fluctuation level common in many applications. A 9 V alkaline battery is included that provides up to 100 hours of operation.

Series 490, Digital Manometers ................................................................. $299.00

<table>
<thead>
<tr>
<th>OPTION</th>
<th>Cost</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>For NIST traceable calibration certificate, add suffix -NIST to model numbers. Example: 490-1-NIST ............................................. $75.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**A-402A, Carrying Case** — Tough gray nylon pouch protects any Series 490 Wet/Wet Handheld Digital Manometer. Double zippered for quick and easy access. With belt loop that snaps closed. 7-1/2”H x 3”W x 2-1/4”D (191 x 76 x 57 mm) ............................................. $41.75