**Series HM28**

**Handheld Digital Manometer**

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

**SPECIFICATIONS**

- **Pressure Connection:** Hose; 4/8 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.
- **Temperature Limits:** 23 to 122°F (-5 to 50°C).
- **Storage Temperature:** -4 to 140°F (-20 to 60°C).
- **Humidity:** 30 to 95% RH, non-condensing.
- **Display:** 2 line, 16 character, dot matrix LCD, with switchable display sizes.
- **BATTERY:** 9V alkaline (included). 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.

**Case Dimensions:** 6 x 3.27 x 1.34 in (152 x 83 x 34 mm).

**Weight:** 9.5 oz (270 g).

**Maximum Measurement Rates:**
- Stand alone: 2-1/2 readings/sec (0.1% and 0.05% ratings), 6 readings/sec (0.2% rating).
- Output to RS-232: 20 measurements/sec (0.2% rating), 10 measurements/sec (0.1% and 0.05% ratings).

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

**Agency Approvals:** CE.

**OPTIONS**

- 3V, 3-way Valve Package

**Note:** Option only available on ranges up to 100 psi.

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**Series 490**

**Wet/Wet Handheld Digital Manometer**

Liquid & Gas Pressure Measurement, ±0.5% F.S. Accuracy

**SPECIFICATIONS**

- **Service:** Compatible gases & liquids.
- **Wetted Materials:** Without valve: 316L SS; Additional wetted parts with 3-way valve option: Euna-N, silicone grease, PTFE, brass 360, copper, reinforced acetal copolymer.
- **Accuracy:** ±0.5% F.S., 60 to 78°F (15.6 to 25.6°C); ±1.5% F.S. 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.

**Temperature Limits:** 32 to 104°F (0 to 40°C).

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

**Display:** 0.42” (10.6 mm) 4 digit LCD.

**Resolution:** See chart.

**Power Requirements:** 3 volt alkaline battery. Battery included but not connected.

**Weight:** 14.1 oz (400 g).

**Connections:** Two 1/8” (3.18 mm) female NPT.

**Agency Approvals:** CE.

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**Accessories**

- HM28-0, 1/8” NPT Adaptor 1 piece
- HM28-1, Communication Software & Cable
- HM28-2, Universal Power Adaptor

**Part Number**

- HM28A3I10000: For Absolute pressure
- HM28D3M31000: 0-100 psi (700 kPa)
- HM28D3K30000: 0-120 in w.c. (30 kPa)
- HM28D3H30000: 0-14.5 psi (100 kPa)
- HM28D3F10000: 0-28 in w.c. (7 kPa)
- HM28D3C10000: 0-30.00 psi
- HM28D3B10000: 0-50.00 psi
- HM28D3A10000: 0-100.0 psi
- HM28D3H10000: 0-120 in w.c. (30 kPa)
- HM28D3F10000: 0-28 in w.c. (7 kPa)
- HM28D3C10000: 0-30.00 psi
- HM28D3B10000: 0-50.00 psi
- HM28D3A10000: 0-100.0 psi

**Availability**

- **Pressure Units:** Bar, psi, in Hg, kPa, FTWC, in w.c., mm Hg, mmbar
- **Pressure Ratings:** 0-5536 bar
- **Pressure Measurements:** <9 mA.
- **Current Consumption:** <9 mA.
- **Agency Approvals:** CE.

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**Options**

- 3V, 3-way Valve Package

**Note:** Option only available on ranges up to 100 psi.

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**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.

**Dimensions:** 7-1/2”H x 3”W x 2-1/4”D (191 x 76 x 57 mm)

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**Order Information**

- **U.S. Phone:** 219 879-8000
- **U.K. Phone:** (+44) (0)1494-461707
- **Australia Phone:** (+61) (0) 2 4272 2055