



Series  
HM28

# Handheld Digital Manometer

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



## STANDARD FEATURES

- Microprocessor based
- Differential, Gage, or Absolute
- High Accuracy, 0.2%, 0.1%, or 0.05% with Calibration Certificate
- Selectable Scales
- Resolution to 0.000 of Selected Unit
- Peak and Valley Indication
- Hold Function
- Programmable Display
- Memory for up to 964 Readings
- Output for Optional Printer or Computer Interface

The Love Controls Series HM28 Digital Hand-Held Manometer is a precision instrument designed to measure a wide range of pressures to a very high accuracy. The unit incorporates a variety of features in an easy to use format that makes it useful in a wide variety of applications. Features include: measurement in all common pressure ranges, display resolution to 0.001, differential or relative measurement, two line liquid crystal display, and adjustable auto power off to conserve battery.

We are so proud of the accuracy of the HM28 that we provide a certificate of calibration with the unit at no additional cost. Depending on your application, the HM28 can be used as a secondary calibration standard for your other pressure instrumentation.

## INPUT RANGES

RANGE (US)	RANGE (METRIC)	OVERPRESSURE
Gauge, underpressure and differential pressure		
0-10 in H <sub>2</sub> O	0-2.5 kPa	12.5 kPa (50 in H <sub>2</sub> O)
0-28 in H <sub>2</sub> O	0-7 kPa	35.0 kPa (140 in H <sub>2</sub> O)
0-80 in H <sub>2</sub> O	0-20 kPa	150 kPa (600 in H <sub>2</sub> O)
0-120 in H <sub>2</sub> O	0-30 kPa	150 kPa (600 in H <sub>2</sub> O)
0-200 in H <sub>2</sub> O	0-50 kPa	400 kPa (1600 in H <sub>2</sub> O)
0-14.5 psi	0-100 kPa	400 kPa (58 psi)
0-29 psi	0-200 kPa	700 kPa (100 psi)
0-100 psi	0-700 kPa	1700 kPa (246 psi)
0-145 psi	0-1000 kPa	2700 kPa (390 psi)
0-245 psi	0-1700 kPa	2700 kPa (390 psi)
for Gauge, media compatible with 18/8 SS (DIN 1.4305)		
0-14.5 psi	0-100 kPa	200 kPa (29 psi)
0-29 psi	0-200 kPa	400 kPa (58 psi)
0-100 psi	0-700 kPa	1400 kPa (203 psi)
0-145 psi	0-1000 kPa	3400 kPa (493 psi)
0-245 psi	0-1700 kPa	3400 kPa (493 psi)
0-435 psi	0-3000 kPa	7000 kPa (1015 psi)
0-1000 psi	0-7000 kPa	14000 kPa (2030 psi)

## Accessories

- HM28-0** 1/8" NPT Adaptor 2 pieces . . . . .
- HM28-1** Communication Software & Cable . . . . .
- HM28-2** Universal Power Adaptor . . . . .



## 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.

**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), 5 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.

## MODELS

Part Number	Features
<b>Error limit 0.2% F.S. for gauge, underpressure and differential pressure</b>	
HM28D3B10000	0-10 in H <sub>2</sub> O (2.5 kPa)
HM28D3C10000	0-28 in H <sub>2</sub> O (7 kPa)
HM28D3F10000	0-120 in H <sub>2</sub> O (30 kPa)
HM28D3H10000	0-14.5 psi (100 kPa)
<b>Error limit 0.05% F.S. for gauge, underpressure and differential pressure</b>	
HM28D3C30000	0-28 in H <sub>2</sub> O (7 kPa)
HM28D3F30000	0-120 in H <sub>2</sub> O (30 kPa)
HM28D3H30000	0-14.5 psi (100 kPa)
HM28D3K30000	0-100 psi (700 kPa)
HM28D3M30000	0-245 psi (1700 kPa)
<b>For Absolute pressure</b>	
HM28A3I10000	0-15.9 pisa (0.2% F.S. (110 kPa abs)