



Series  
477

# Handheld Digital Manometer

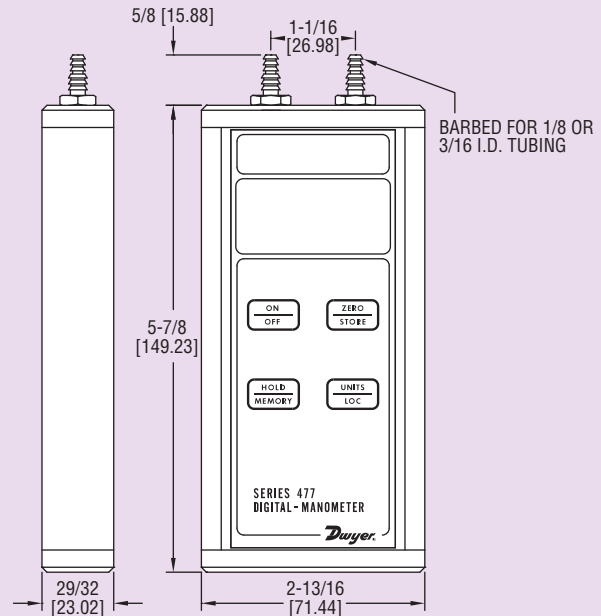
Selectable Pressure Units,  $\pm 0.5\%$  Accuracy, FM Approved Intrinsically

Safe for Hazardous Locations, Class 1, Div. 1, Group A, B, C, D, T4



TEST EQUIPMENT

Manometers,  
Portable



**Series 477 Handheld Digital Manometers** are packed with features you need to make pressure measurement and recording faster, easier and more accurate than ever. First, you can instantly select from up to nine of the most widely used pressure units without having to waste time and risk mistakes with tedious conversions. Next, a non-volatile memory function enables storage of up to 40 readings — perfect for HVAC technicians making Pitot tube traverses of airflow readings across a duct. The FM approved models are intrinsically safe for hazardous locations, Class 1, Div. 1, Group A, B, C, D, T4.

When working in poorly lighted areas, just switch on the handy backlight feature. It automatically shuts itself off after 20 minutes to minimize battery drain. Electronic zeroing means you simply touch a single key to perfectly null out any minor pressure differences. A display HOLD key freezes the current pressure for those all-too-common situations where readings fluctuate. We even included an audible alarm to warn you of overpressure plus a visual alarm warning in case ambient noise levels are too high to hear the alarm. Audible alarm also confirms a value has been stored, eliminating the need to observe display during a duct traverse.

## FEATURES

- New low pressure ranges
- Instant selection from up to nine english/metric units
- Stores 40 readings in memory for later reference
- Measure positive, negative or differential pressures
- Large easy-to-read 0.4" LCD display includes switchable backlight for great visibility — anywhere
- Both audible and visual overpressure alarms
- Includes + and - indicators plus low battery warning
- Operates up to 100 Hours on a single 9 V battery

## SPECIFICATIONS

**Service:** Air and compatible gases. FM models air and compatible combustible gases.

**Wetted Materials:** Consult factory.

**Accuracy:**  $\pm 0.5\%$  full-scale, 60 to 78°F (15.6 to 25.6°C);  $\pm 1.5\%$  full-scale from 32 to 60°F and 78 to 104°F (0 to 15.6°C and 25.6 to 40°C).

**Pressure Hysteresis:**  $\pm 0.1\%$  of full-scale.

**Pressure Limits:** See chart.

**Temperature Limits:** 0 to 140°F (-17.8 to 60°C).

**Compensated 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.

**Response Time:** 1 s.

**Resolution:** See chart.

**Power Requirements:** 9 V alkaline battery, installed non-functional, user replaceable.

**Weight:** 10.2 oz (289 g).

**Process Connections:** Two barbed connections for use with 1/8" (3.18 mm) or 3/16" (4.76 mm) ID tubing. Two compression fittings for use with 1/8" (3.18 mm) ID x 1/4" (6.35 mm) OD tubing for 477-7-FM & 477-8-FM only.

**Agency Approvals:** CE, FM.

## ACCESSORIES

**A-402A, Carrying Case** — Tough gray nylon pouch protects any Series 477 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)

**UHH-C1, Soft carrying case**

## OPTION

For NIST traceable calibration certificate, add suffix -NIST to model numbers. Example: 477-1-FM-NIST.



| Model*     | Range           | Available Pressure Units |       |       |       |         |       |       |         |       | Maximum Pressure |
|------------|-----------------|--------------------------|-------|-------|-------|---------|-------|-------|---------|-------|------------------|
|            |                 | bar                      | psi   | in Hg | kPa   | in w.c. | mm Hg | mbar  | mm w.c. | Pa    |                  |
| 477-000-FM | 0-1.000 in w.c. |                          |       | .0736 | .2491 | 1.000   | 1.868 | 2.491 | 25.40   | 249.1 | 5 psig           |
| 477-00-FM  | 0-4.000 in w.c. |                          | .1445 | .2942 | 0.996 | 4.000   | 7.473 | 9.96  | 101.6   | 996   | 5 psig           |
| 477-0-FM   | 0-10.00 in w.c. |                          | .3613 | .7355 | 2.491 | 10.00   | 18.68 | 24.91 | 254.0   | 2491  | 5 psig           |
| 477-1-FM   | 0-20.00 in w.c. | .0498                    | .7225 | 1.471 | 4.982 | 20.00   | 37.36 | 49.82 | 508.0   | 4982  | 10 psig          |
| 477-2-FM   | 0-40.00 in w.c. | .0996                    | 1.445 | 2.942 | 9.96  | 40.00   | 74.73 | 99.6  | 1016    | 9964  | 10 psig          |
| 477-3-FM   | 0-200.0 in w.c. | .4982                    | 7.225 | 14.71 | 49.82 | 200.0   | 373.6 | 498.2 | 5080    |       | 30 psig          |
| 477-4-FM   | 0-10.00 psi     | .6895                    | 10.00 | 20.36 | 68.95 | 276.8   | 517.1 | 689.5 | 7031    |       | 30 psig          |
| 477-5-FM   | 0-20.00 psi     | 1.379                    | 20.00 | 40.72 | 137.9 | 553.6   | 1034  | 1379  |         |       | 60 psig          |
| 477-6-FM   | 0-30.00 psi     | 2.069                    | 30.00 | 61.08 | 206.9 | 830.4   | 1551  | 2069  |         |       | 60 psig          |
| 477-7-FM   | 0-100.0 psi     | 6.895                    | 100.0 | 203.6 | 689.5 | 2768    | 5171  | 6895  |         |       | 150 psig         |
| 477-8-FM   | 0-150.0 psi     | 10.34                    | 150.0 | 305.4 | 1034  | 4152    | 7757  |       |         |       | 200 psig         |

Process Tubing Options: See page 547 (Gage Tubing Accessories)