



Series  
477A

# Handheld Digital Manometer

Precise Air Pressure Measurement,  $\pm 0.1\%$  F.S. Accuracy



The Popular Model 477 is now available with 0.1% full scale accuracy in the new Series 477A. The 477A contains a highly accurate differential pressure sensor that offers a 0.1% full scale accuracy on air ranges from 20" w.c. to 100 psid. Series 477A Handheld Digital Manometers are packed with features needed to make pressure measurement and recording faster, easier and more accurate than ever. Instantly select from up to nine of the most widely used pressure units without having to waste time and risk mistakes with tedious conversions. 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 477A is also ideal for maintenance personnel or technicians that require a highly accurate standard to check their instrumentation or equipment to ensure proper performance.

When working in poorly lighted areas, just switch on the handy backlight feature. The manometer 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. Included is an audible alarm to warn 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.

Clear, concise operating instructions for all functions are printed on the rear of the rugged extruded aluminum case for quick reference. One-piece front membrane fully protects all keys from dust and moisture; wipes clean in seconds. Detailed written instructions, a wrist strap and 9 volt alkaline battery are included.

## SPECIFICATIONS

**Service:** Air and non-combustible compatible gases.

**Wetted Parts:** Consult factory.

**Accuracy:**  $\pm 0.10\%$  of full scale from 60 to 78°F (15.6 to 25.6°C);  $\pm 1\%$  of full scale from 32-60 and 78-104°F (0-15.6 and 25.6-40°C).

**Pressure Hysteresis:**  $\pm 0.1\%$  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:** 9 volt alkaline battery. Battery included but not connected.

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

**Connections:** Two barbed connections for use with 1/8" (3.18 mm) or 3/16" (4.76 mm) I.D. tubing for 477A-1, 477A-2, 477A-3, 477A-4 and 477A-5 only. Two compression fittings for use with 1/8" (3.18 mm) I.D. x 1/4" (6.35 mm) O.D. tubing for 477A-6 and 477A-7 only.

## FEATURES

- Measure positive, negative, or differential pressures
- Instant selection from up to nine english/metric units
- Stores 40 readings in memory for later reference
- Both audible and visual overpressure alarms
- Operates up to 100 hours on a single 9 volt battery
- New adjustable damping feature for averaging fluctuating reading

Model	Range	Available Pressure Units										Maximum Pressure
		bar	psi	in Hg	kPa	in w.c.	mm Hg	mbar	FTWC	mm w.c.	Pa	
477A-1	0-20.00 in w.c.	.0498	.7225	1.471	4.982	20.00	37.36	49.82	1.667	508.0	4982	3 psig
477A-2	0-40.00 in w.c.	.0996	1.445	2.942	9.96	40.00	74.73	99.6	3.333	1016	9964	3 psig
477A-3	0-200.0 in w.c.	.4982	7.225	14.71	49.82	200.0	373.6	498.2	16.67	5080		15 psig
477A-4	0-10.00 psi	.6895	10.00	20.36	68.95	276.8	517.1	689.5	23.07	7031		30 psig
477A-5	0-30.00 psi	2.069	30.00	61.08	206.9	830.4	1551	2069	69.20			60 psig
477A-6	0-50.00 psi	3.447	50.00	101.8	344.7	1384	2585	3447	115.3			100 psig
477A-7	0-100.0 psi	6.895	100.0	203.6	689.5	2768	5171	6895	230.7			200 psig