

**Dwyer**  
SERIES 490A

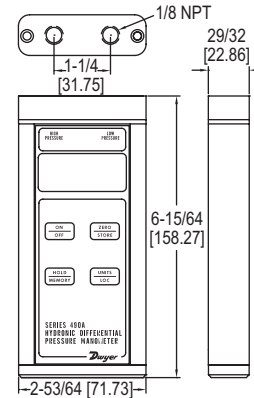


# HYDRONIC DIFFERENTIAL PRESSURE MANOMETER

Liquid and Gas Pressure Measurement,  $\pm 0.5\%$  FS Accuracy



DEALER DESIGN  
AWARDS



The **Series 490A Hydronic Differential Pressure Manometer** is 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 316L SS.

A new feature added to the Series 490A is a field adjustable damping, which allows the user to choose the level of display averaging rate corresponding to the fluctuation level common in many applications.

## FEATURES/BENEFITS

- Seven user-selectable English and metric units
- Stores up to 40 readings for later recall
- Backlight for use in dim areas
- Digital dampening for low pressure - high resolution logging stability
- Automatic resolution adjustment for finer control

## APPLICATIONS

- Chiller to coils for freeze protection
- Hydronic valve balancing
- Measure pressure drop across pumps
- Refrigerant pressure testing

## MODEL CHART

Model	Range psi	Available Pressure Units & Resolution**								Maximum Pressure
		bar	psi	in Hg	kPa	in w.c.	mm Hg	mbar	ft w.c.	
490A-1	0 to 15.00	1.034	15.00	30.54	103.4	415.2	775.7	1034	34.60	30 psig
490A-2	0 to 30.00	2.069	30.00	61.08	206.9	830.4	1551	2069	69.20	60 psig
490A-3	0 to 50.00	3.447	50.00	101.8	344.7	1384	2585	3447	115.3	100 psig
490A-4	0 to 100.0	6.895	100.0	203.6	689.5	2768	5171	6895	230.7	200 psig
490A-5	0 to 500.0	34.47	500.0	1018	3447	9999*	9999*	9999*	1153	1000 psig
490A-6	0 to 200.0	13.79	200.0	407.2	1379	5536	9999*	9999*	461.3	400 psig

\*Digits will display smaller units until all 4 digits are exceeded.

\*\*Readings less than 10% of range will provide one additional decimal place than shown for higher resolution.

## OPTIONS

To order add suffix:	Description
-NIST	Includes NIST Calibration traceable certificate
<b>Example:</b> 490A-1-NIST	
-3V	3-way vent valve with bleed screw rated up to 100 psi
<b>Example:</b> 490A-1-3V	



-3V option  
3-way vent valve

## SPECIFICATIONS

**Service:** Compatible gases and liquids.

**Wetted Materials:** Without valve: 316L SS, -3V option: 316L SS, Buna-N, silicone, grease, PTFE, brass 360, copper, reinforced acetal copolymer.

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

**Pressure Hysteresis:**  $\pm 0.1\%$  FS.

**Pressure Limits:** See chart.

**Electronic Temperature Limits:** 32 to 140°F (0 to 60°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 V alkaline battery, installed non-functional, user replaceable.

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

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

**Agency Approvals:** CE.

## ACCESSORIES

Model	Description
<b>A-47X-BOOT</b>	Rubber boot for manometers (manometer no included)
<b>A-402A</b>	Carrying case, tough gray nylon pouch protects any Series 490A manometer, double zippered for quick and easy access, belt loop that snaps closed
<b>A-HKIT-HOSES</b>	One pair red & blue 60" SAE replacement hoses for the 490A-HKIT, each with integral ball valve
<b>A-HKIT-500</b>	Piercing gage adapter for the 490A-HKIT, 1/8" dia x 1-1/2" length (2 per kit)
<b>A-HKIT-500XL</b>	Piercing gage adapter for the 490A-HKIT, 1/8" dia x 3" length (2 per kit)
<b>A-HKIT-510</b>	Piercing gage adapter for the 490A-HKIT, 1/16" dia x 1-1/2" length (2 per kit)
<b>NIST Calibration</b>	Please contact your regional Dwyer distributor or Dwyer International Sales Office for scheduling your NIST recertification



**A-47X-BOOT**  
(manometer not included)



**A-402A**