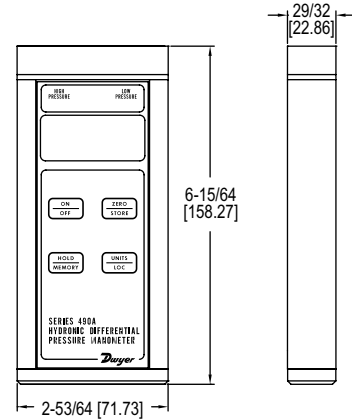
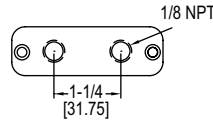


# HYDRONIC DIFFERENTIAL PRESSURE MANOMETER

Liquid and Gas Pressure Measurement,  $\pm 0.5\%$  Full-Scale Accuracy

CALIBRATION SERVICES AVAILABLE



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 stainless steel. 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.

### BENEFITS/FEATURES

- 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

### 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.  
**Compliance:** CE.

Model	Range psi	Available Pressure Units and 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
-3V	3-way vent valve with bleed screw rated up to 100 psi
-NIST	Includes NIST Calibration traceable certificate
Example: 490A-1-NIST	

ACCESSORIES	
Model	Description
A-402A	Carrying case, tough gray nylon pouch protects any Series 490A manometer, double zippered for quick and easy access, belt loop that snaps closed
A-47X-BOOT	Rubber boot for manometers (manometer not included)
A-HKIT-500	Piercing gage adaptor for the 490A-HKIT, 1/8" dia x 1-1/2" length (2 per kit)
A-HKIT-500XL	Piercing gage adaptor for the 490A-HKIT, 1/8" dia x 3" length (2 per kit)
A-HKIT-510	Piercing gage adaptor for the 490A-HKIT, 1/16" dia x 1-1/2" length (2 per kit)
A-HKIT-HOSES	One pair red and blue 60" SAE replacement hoses for the 490A-HKIT, each with integral ball valve
NIST Calibration	Please contact your regional Dwyer distributor or Dwyer International Sales Office for scheduling your NIST recertification



-3V option  
3-way vent valve



A-47X-BOOT  
(manometer not included)



A-402A

USA: California Proposition 65  
**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).