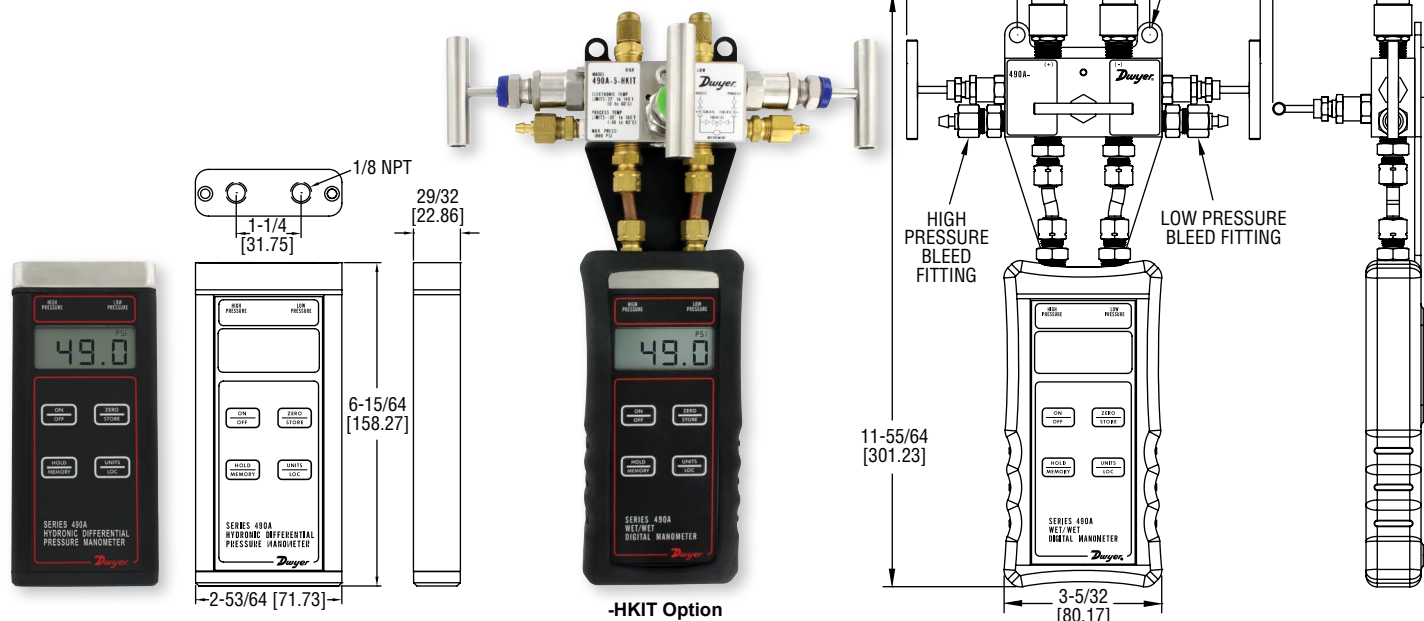


# HYDRONIC DIFFERENTIAL PRESSURE MANOMETER

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



-HKIT Option

The **SERIES 490A** Hydronic Differential Pressure Manometers are versatile, handheld, battery operated manometers available in several basic ranges for positive or positive differential pressure measurement and can tolerate most liquid media compatible with 316LSS.

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

- Up to 0.5% accuracy
- 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
- Valves to determine valve position

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.

OPTION	
To order add suffix:	Description
-NIST	Includes NIST Calibration traceable certificate
Example: 490A-1-NIST	
-3V	3-way vent valve with bleed screw rated up to 100 psi
Example: 490A-1-3V	
-HKIT	Hydronic meter kit includes two 6 ft high pressure rated tubing with shut off valves, high pressure 3-way valve, 8 ft Poly tubing for purges, hard travel case, handheld carrying strap, 1/16" x 1 1/2", 1/8" x 3" and 1/8" x 1-1/2" pairs of pressure probes, 90° Flare to 1/4" NPT fittings, Adjustable 8" wrench, PTFE Tape, and magnetic protective rubber boot. NIST Calibration Certificate Standard
Example: 490A-4-HKIT	

## SPECIFICATIONS

**Service:** Compatible gases & liquids.  
**Wetted Materials:** Without valve: 316L SS, -3V option: 316LSS, Buna-N, silicone, grease, PTFE, brass 360, copper, reinforced acetal copolymer.  
**-HKIT Option:** 316LSS, PTFE, Brass, Copper.  
**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).

**Process Temperature Limits with -HKIT:** -20 to 180°F.  
**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); -HKIT Option: 3.6 lb.  
**Process Connections:** Two 1/8" (3.18 mm) female NPT; -HKIT Option: Two male 45 Flare 1/4".  
**Agency Approvals:** CE.

## 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, 7-1/2" H x 3" W x 2-1/4" D (191 x 76 x 57 mm)
A-47X-BOOT	Protective magnetic rubber boot



A-402A



A-47X-BOOT  
(Manometer not included)



-3V Option  
3-Way Vent Valve

-HKIT Option  
Hydronic Kit Option