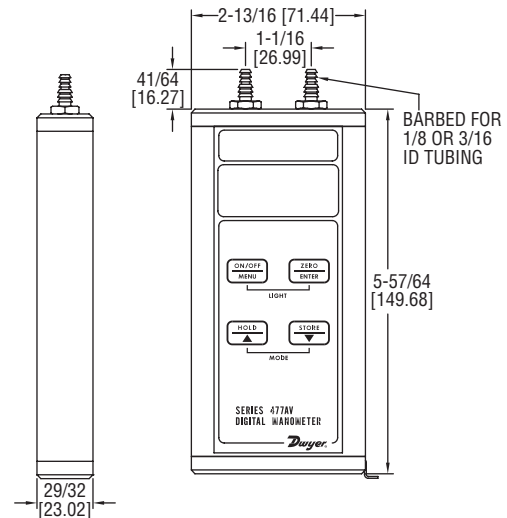


# HANDHELD DIGITAL MANOMETER

Measures Pressure, Flow and Velocity;  $\pm 0.5\%$  Accuracy



The **SERIES 477AV** Handheld Digital Manometer is now available with pressure, flow, and velocity measurements along with a number of other convenient features. The built-in air velocity and flow calculations provide accuracy and conserve time and error associated with manual calculations. Also featured on this unit are adjustable zero and span values for calibrating in the field, as well as a damping feature to compensate for the fluctuating of readings.

## FEATURES/BENEFITS

- Calculates and displays air velocity and volumetric air flow
- Rugged aluminum case protects instrument from damage during transport/use
- 9 selectable English and metric engineering units
- Large, easy to read display with backlight for use in dark areas
- Stores up to 40 readings with minimum, maximum and average statistics

## APPLICATIONS

- Air flow monitoring, when used with a Dwyer® Pitot tube (●)
- Duct static pressure

## SPECIFICATIONS

<b>Service:</b> Air and compatible gases.	<b>Units of Pressure:</b> in w.c., ft w.c., in Hg, psi, oz/in <sup>2</sup> , mm w.c., cm w.c., mm Hg, mbar, Pa, kPa, hPa.
<b>Wetted Materials:</b> Consult factory.	<b>Units of Velocity:</b> fpm, fps, mph, m/h, m/s, k/h, knot.
<b>Accuracy:</b> $\pm 0.5\%$ 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 40.0°C).	<b>Units of Flow:</b> cfm, m <sup>3</sup> /h, m <sup>3</sup> /s.
<b>Pressure Hysteresis:</b> $\pm 0.1\%$ FS.	<b>Power Requirements:</b> 9 V alkaline battery, installed non-functional, user replaceable.
<b>Pressure Limits:</b> See chart.	<b>Weight:</b> 10.2 oz (289 g).
<b>Temperature Limits:</b> 0 to 140°F (-17.8 to 60°C).	<b>Process Connections:</b> 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 477AV-7 and 477AV-8 only.
<b>Compensated Temperature Limits:</b> 32 to 104°F (0 to 40°C).	<b>Agency Approvals:</b> CE.
<b>Storage Temperature Limits:</b> -4 to 176°F (-20 to 80°C).	
<b>Display:</b> 0.42" (10.6 mm) 4 digit LCD.	
<b>Resolution:</b> See chart.	

## MODEL CHART

Model	Pressure Range	Velocity Range		Available Pressure Units										Maximum Pressure
		fpm	m/s	psi	in Hg	kPa	in w.c.	mm Hg	mbar	mm w.c.	Pa	ft w.c.	oz/in <sup>2</sup>	
477AV-000	0 to 1.000 in w.c.	4004	20.34	-	0.0736	0.2491	1.000	1.868	2.491	25.40	249.1	0.0833	0.5780	5 psig
477AV-00	0 to 4.000 in w.c.	8009	40.69	0.1445	0.2942	0.996	4.000	7.473	9.96	101.6	996	0.3333	2.312	5 psig
477AV-0	0 to 10.00 in w.c.	1.266k	64.33	0.3613	0.7355	2.491	10.00	18.68	24.91	254.0	2491	0.8333	5.780	5 psig
477AV-1	0 to 20.00 in w.c.	1.791k	90.97	0.7225	1.471	4.982	20.00	37.36	49.82	508.0	4982	1.667	11.56	10 psig
477AV-2	0 to 40.00 in w.c.	1.791k	128.7	1.445	2.942	9.96	40.00	74.73	99.6	1016	9964	3.333	23.12	10 psig
477AV-3	0 to 200.0 in w.c.	56.63k	287.7	7.225	14.71	49.82	200.0	373.6	498.2	5080	-	16.67	115.6	30 psig
477AV-4	0 to 10.00 psi	66.62k	338.4	10.00	20.36	68.95	276.8	517.1	689.5	7031	-	13.07	160.0	30 psig
477AV-5	0 to 20.00 psi	94.22k	478.6	20.00	40.72	137.9	553.6	1034	1379	-	-	46.13	320.0	60 psig
477AV-6	0 to 30.00 psi	115.4k	586.2	30.00	61.08	206.9	830.4	1551	2069	-	-	69.20	480.0	60 psig
477AV-7	0 to 100.0 psi	210.7k	1070	100.0	203.6	689.5	2768	5171	6895	-	-	230.7	1600	150 psig
477AV-8	0 to 150.0 psi	258.0k	1311	150.0	305.4	1034	4152	7757	-	-	-	346.0	2400	200 psig

## OPTION

To order add suffix:	Description
-NIST	NIST traceable calibration certificate
Example: 477AV-1-NIST	

## ACCESSORIES

Model	Description
A-402A	Carrying case; tough gray nylon pouch protects any Series 477AV Manometer; double zippered for quick and easy access, with a 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
A-47X-BOOT	Protective magnetic rubber boot



A-402A



UHH-C1



A-47X-BOOT  
(Manometer not included)

● Pitot tube: See pages 213-242 (Air Quality section)