

SERIES 477AV | HANDHELD DIGITAL MANOMETER

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
- Convenient all-in-one air velocity kit option available

APPLICATIONS

- Air flow monitoring, when used with a Dwyer® pitot tube
- Duct static pressure
- Commercial air balancing
- Building-zone pressure

DESCRIPTION

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.

Air velocity kits include: Series 477AV handheld digital manometer, Model 166T 36" telescoping pitot tube, (2) A-303 static pressure tips, (2) 4-1/2' lengths 3/16" ID rubber tubing, A-397 step drill for 3/16" to 1/2" holes, A-532 AV slide chart, and fitted polyethylene case.



SPECIFICATIONS

Service	Air and compatible gases.
Wetted Materials	Consult factory.
Accuracy	±0.5% FS from 60 to 78 °F (15.6 to 25.6 °C); ±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	±0.1% FS.
Pressure Limits	See chart on page 2.
Temperature Limits	0 to 140 °F (-17.8 to 60 °C).
Compensated 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 on page 2.
Units of Pressure	in w.c., ft w.c., in Hg, psi, oz/in ² , mm w.c., cm w.c., mm Hg, mbar, Pa, kPa, hPa.
Units of Velocity	fpm, fps, mph, m/h, m/s, k/h, knot.
Units of Flow	cfm, m ³ /h, m ³ /s.
Power Requirements	9 V alkaline battery, installed non-functional, user replaceable.
Weight	10.2 oz (289 g).
Process Connections	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, -8 only.
Agency Approvals	CE.



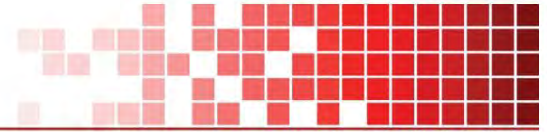
DWYER INSTRUMENTS, INC.

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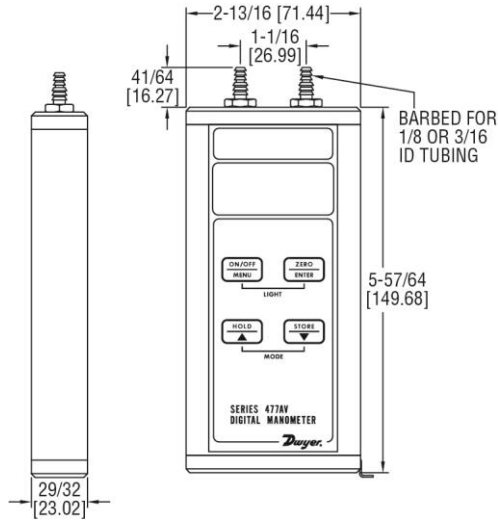
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DIMENSIONS



MAXIMUM PRESSURE / RESOLUTION

Pressure Range	Max Pressure	Resolution
0 to 1 in w.c.	5 psig	0.001
0 to 4 in w.c.	5 psig	0.001
0 to 10 in w.c.	5 psig	0.01
0 to 20 in w.c.	10 psig	0.01
0 to 40 in w.c.	10 psig	0.01
0 to 200 in w.c.	30 psig	0.1
0 to 10 psi	30 psig	0.01
0 to 20 psi	60 psig	0.01
0 to 30 psi	60 psig	0.01
0 to 100 psi	150 psig	0.1
0 to 150 psi	200 psig	0.1

HOW TO ORDER

Use the **bold** characters from the chart below to construct a product code

MANOMETER

477AV **-4** **-NIST**

SERIES

477AV - Handheld digital manometer

RANGE

- 000 - 1 in w.c. / 0.25 kPa **-4** - 10 psi / 70 kPa
- 00 - 4 in w.c. / 1 kPa **-5** - 20 psi / 140 kPa
- 0 - 10 in w.c. / 2.5 kPa **-6** - 30 psi / 200 kPa
- 1 - 20 in w.c. / 5 kPa **-7** - 100 psi / 700 kPa
- 2 - 40 in w.c. / 10 kPa **-8** - 150 psi / 1000 kPa
- 3 - 200 in w.c. / 50 kPa

OPTIONS

- COC** - Certificate of calibration
- FC** - Factory calibration
- NIST** - NIST traceable calibration certificate

AIR VELOCITY KIT

477 **-0T** **-AV**

SERIES

477 - Handheld digital manometer

RANGE

- 000T - 1 in w.c. / 0.25 kPa
- 00T - 4 in w.c. / 1 kPa
- 0T - 10 in w.c. / 2.5 kPa
- 1T - 20 in w.c. / 5 kPa

OPTIONS

- AV** - Air velocity kit

ACCESSORIES

Model	Description	Model	Description
A-402A	Tough gray nylon carrying case	160F	Straight stainless steel pitot tube, 18" (45.7 cm)
A-47X-B00T	Protective magnetic rubber boot	160G	Averaging air flow grid
160-12	Stainless steel pitot tube, 12" (30.5 cm)	UHH-C1	Soft carrying case

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