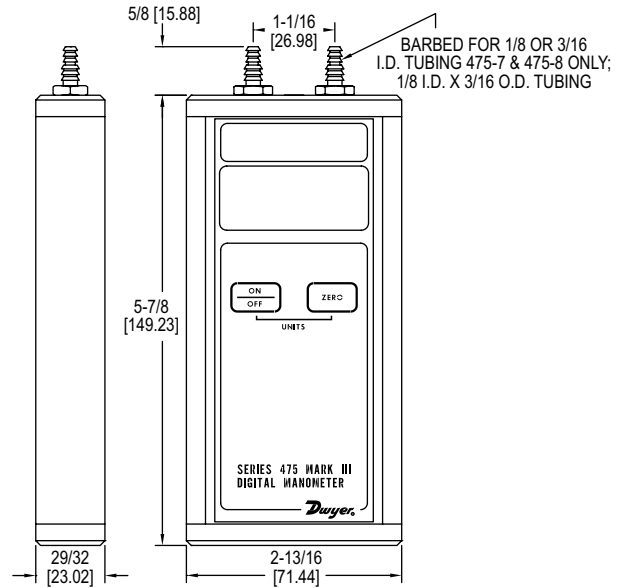


INTRINSICALLY SAFE HANDHELD DIGITAL MANOMETER

Ranges from 1 in w.c. to 150 psid, $\pm 0.5\%$ Accuracy



The **Series 475 Intrinsically Safe Handheld Digital Manometer** measures positive, negative, or differential pressures of air and natural gases in ranges from 1 in w.c. (0.249 kPa) to 150 psid (10.34 bar). The dual push pads on the front panel control the on/off, auto zero, and pressure unit selection, allowing for simple operation with no set up needed. When used with a Dwyer® Pitot tube (●), the Series 475 can also be used as an air velocity gage.

FEATURES/BENEFITS

- Rugged aluminum case protects instrument from damage during transport/use
- Large, easy to read LCD and simple operation
- FM approved to be intrinsically safe in hazardous locations, Class 1, Div 2, Groups A, B, C, D, T4 Ta = 70°C

APPLICATIONS

- Monitoring natural gas pressures on boilers and other combustion equipment
- Air velocity monitoring, when used with a Dwyer® Pitot tube (●) and AV calculator
- Field calibration of other instruments
- Monitoring or troubleshooting HVAC systems

SPECIFICATIONS

Service: Air and compatible combustible gases.
Wetted Materials: Consult factory.
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.
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.
Power Requirements: 9 V alkaline battery, installed non-functional, user replaceable.
Weight: 10.8 oz (306 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 475-7 & 475-8 only.
Agency Approvals: CE, FM approved to Class I, Div 2, Groups A, B, C, D, T4 Ta = 70°C.

MODEL CHART

Model	English Range	Metric Range	Maximum Pressure
475-000-FM	0 to 1.000 in w.c.	.2491 kPa	5 psig
475-00-FM	0 to 4.000 in w.c.	0.996 kPa	5 psig
475-0-FM	0 to 10.00 in w.c.	2.491 kPa	5 psig
475-1-FM	0 to 20.00 in w.c.	4.982 kPa	10 psig
475-2-FM	0 to 40.00 in w.c.	9.96 kPa	10 psig
475-3-FM	0 to 200.0 in w.c.	49.82 kPa	30 psig
475-4-FM	0 to 10.00 psi	.6895 bar	30 psig
475-5-FM	0 to 20.00 psi	1.379 bar	60 psig
475-6-FM	0 to 30.00 psi	2.069 bar	60 psig
475-7-FM	0 to 100.0 psi	6.895 bar	150 psig
475-8-FM	0 to 150.0 psi	10.34 bar	200 psig

OPTIONS

To order add suffix:	Description
-AV	Air velocity kit, includes the Series 475 manometer, two A-303 static pressure tips two 9' lengths 3/16" ID rubber tubing, no. 166-6-CF pitot tube, A-397 step drill, A-532 air velocity slide chart and instruction bulletin H-11, all packed in a tough, molded plastic carrying case with die cut foam liner.
Examples:	475-1-AV; 475-000-AV
-NIST	NIST traceable calibration certificate
Example:	475-1-NIST

ACCESSORIES

Model	Description
A-402A	Carrying case, tough gray nylon pouch protects any Series 475 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)
UHH-C1	Soft carrying case
A-47X-BOOT	Protective magnetic rubber boot



A-402A



UHH-C1



-AV option
475-AV air velocity kit



A-47X-BOOT
(manometer not included)

● Pitot tube: See pages 205-234 (Air Quality section)
 Process Tubing Options: See page 455 (Gage Tubing Accessories)

AIR VELOCITY KITS

Digital Manometer and Pitot Tube for Balancing System Air Flows



475-XX-FM-AV



475-XXT-FM-AV



477-XXXT-AV

Convenient all-in-one **Series 475-AV & 477-AV Air Velocity Kits** are small, light and easy to use. No set-up or leveling needed. An indispensable test kit for the plant engineer, and HVAC technician that must balance system air flows at start-up.

FEATURES/BENEFITS

- Comprehensive kit for HVAC and industrial applications
- Rugged construction for longevity
- Conversion from pressure to air velocity made easy
- Proudly assembled in the USA

APPLICATIONS

- Building commissioning
- Building HVAC test and balance
- Critical environment testing
- Industrial process verification
- Instrumentation validation

MODEL CHART - 475-XX-FM-AV

Model	Range
475-00-FM-AV	0-4.000 in w.c.
475-0-FM-AV	0-10.00 in w.c.
475-1-FM-AV	0-20.00 in w.c.
475-2-FM-AV	0-40.00 in w.c.

THE SERIES 475-XX-FM-AV KIT INCLUDES:

- Series 475 digital manometer (±0.5% FS accuracy and minor divisions to 0.01, large 1/2" LCD readout is easy to see in poorly lighted areas and has "low battery" warning)
- Model 166-6-CF, 6" SS pitot tube with integral compression fitting to hold it securely when taking readings
- Two no. A-303 static pressure tips with magnetic mounting
- Two 9' lengths 3/16" ID rubber tubing
- No. A-397 step drill for 3/16"-1/2" holes in 1/16" increments
- No. A-532 AV slide chart
- 9 V battery
- Fitted polyethylene case

MODEL CHART - 475-XXT-FM-AV

Model	Range
475-00T-FM-AV	0-4.000 in w.c.
475-0T-FM-AV	0-10.00 in w.c.
475-1T-FM-AV	0-20.00 in w.c.

THE SERIES 475-XXT-FM-AV KIT INCLUDES:

- Series 475 digital manometer (±0.5% FS accuracy and minor divisions to 0.01, large 1/2" LCD readout is easy to see in poorly lighted areas and has "low battery" warning)
- Model 166T, 36" telescoping SS pitot tube, fully adjustable from 11.5" to 36" (29.2 to 91.4 cm)
- Two no. A-303 static pressure tips with magnetic mounting
- Two 4-1/2' L 3/16" ID rubber tubing
- No. A-397 step drill for 3/16"-1/2" holes in 1/16" increments
- No. A-532 AV slide chart
- 9 V alkaline battery
- Fitted polyethylene case

MODEL CHART - 477AV-XXXT-AV

Model	Range
477-000T-AV	0-1.000 in w.c.
477-00T-AV	0-4.000 in w.c.
477-0T-AV	0-10.00 in w.c.
477-1T-AV	0-20.00 in w.c.

THE SERIES 477-XXXT-AV KIT INCLUDES:

- Series 477AV digital manometer (±0.5% FS accuracy, calculates air velocity or volumetric air flow, stores up to 40 readings in memory, instantly selecting up to nine English/Metric pressure units, large, backlit 0.4" LCD readout, both audible and visual overpressure alarms and a "low battery" warning are standard features)
- Model 166T, 36" telescoping SS pitot tube, fully adjustable from 11.5" to 36" (29.2 to 91.4 cm)
- Two no. A-303 static pressure tips with magnetic mounting
- Two 4-1/2' L 3/16" ID rubber tubing
- No. A-397 step drill for 3/16"-1/2" holes in 1/16" increments
- No. A-532 AV slide chart
- 9 V alkaline battery
- Fitted polyethylene case