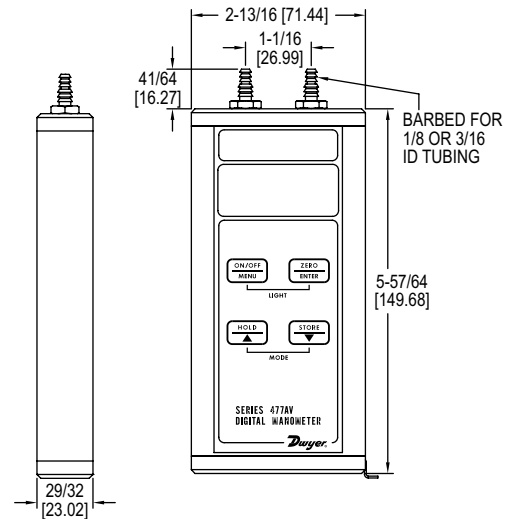


HANDHELD DIGITAL MANOMETER

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
- Duct static pressure

SPECIFICATIONS

Service: Air and compatible 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 40.0°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.

Units of Pressure: in w.c., ft w.c., in Hg, psi, oz/in², 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, m³/h, m³/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 and 477AV-8 only.

Agency Approvals: CE.

MODEL CHART																
Model	Pressure Range	Velocity Range		Available Pressure Units												
		fpm	m/s	psi	in Hg	kPa	in w.c.	mm Hg	mbar	mm w.c.	Pa	ft w.c.	oz/in ²	hPa	cm w.c.	Maximum Pressure
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	2.491	2.540	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	9.964	10.16	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	24.91	25.40	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	49.82	50.80	10 psig
477AV-2	0 to 40.00 in w.c.	25.33k	128.7	1.445	2.942	9.96	40.00	74.73	99.6	1016	9964	3.333	23.12	99.64	101.6	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	498.2	508.0	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	689.5	703.1	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	1379	1406	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	2068	2109	60 psig
477AV-7	0 to 100.0 psi	210.7k	1070	100.0	203.6	689.5	2768	5171	6895	-	-	230.7	1600	6895	7031	150 psig
477AV-8	0 to 150.0 psi	258.0k	1311	150.0	305.4	1034	4152	7757	-	-	-	346.0	2400	-	-	200 psig

OPTIONS	
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)

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 ($\pm 0.5\%$ 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 ($\pm 0.5\%$ 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 ($\pm 0.5\%$ 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