



AF 200 - AIR VELOCITY PITOT TUBE

The Pitot tube method of measurement, employed by the AF200, is suitable over the range 1.5m/s to 58m/s and up to +600°C. The instrument also functions as a stand very accurated alone micro-manometer or temperature meter.

THE KIT

This includes 304 mm Pitot tube (standard, other lengths are available), air temperature probe (Pt1000), protective cover sling, quick fit pressure connectors, rubber tubing, nylon tubing and 9V PP3 battery. All fits into a carry case.

- **Velocity, temperature, pressure** measurement
- Multi-point averaging
- Smoothing
- Correction mode for temperature, pressure and K factor
- Zeroing
- Metric and imperial units
- Last configuration memorised
- **Pitot tubes with different lengths**

USING

- Installation and Check on air conditioner
- Differential Pressure in cleaning chamber
- Leak test
- Ventilation system
- Air balancing system
- Duct and Pipe
- Air extraction



INSTRUMENT ACCURACY

Velocity: $\pm 0.2\text{m/s}$ at 10m/s - 58m/s, 15°C to +25°C
 $\pm 0.3\text{m/s}$ at 4m/s, 15°C to +25°C

Pressure: $\pm 0.2\%$ rdg ± 1 at digit -10°C to +50°C
 $\pm 0.3\%$ rdg ± 1 digit elsewhere

Temperature: $\pm 0.1\%$ rdg $\pm 1^\circ\text{C}$

TECHNICAL FEATURES	
OPERATING TEMPERATURE:	-10°C to +50°C / 14°F to +122°F
BATTERY TYPE:	1 9V PP3S or equivalent
BATTERY LIFE:	300 h approx (using a Alkaline battery)
DISPLAY:	12.7mm/0.5" LCD
LOW BATTERY WARNING:	"BAT" shows on display
AUTO POWER OFF:	5 minutes approx, disabled during correction and averaging modes
CONNECTIONS:	Push-fit plastic tubing 6mm/0.236" O.D., 4mm/0.157" I.D.
DIMENSIONS:	140 x 70 x 26mm/5.5 x 2.8 x 1.0"
WEIGHT:	250 gr / 8.8 oz

RANGES

m/s	1.5 - 58
°C (AF + probe)	-60 +590
mbar	0.00 - 19.99

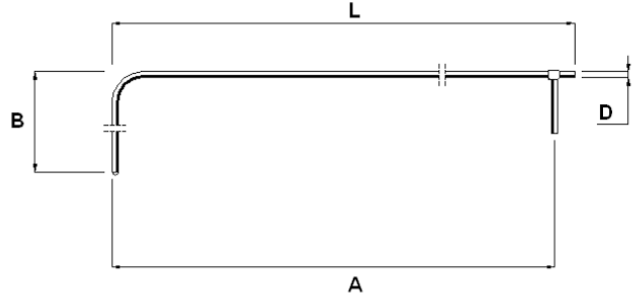
SETTABLE IN RANGE

VALUE	SIMBOLS ON DISPLAY	UNITS	SETTABLE IN RANGE
Air temperature	CORR °C	Celsius	-100 +600
Static Pressure	CORR mbar	mbar (absolute)	500 - 1500
Pitot tube Cal Factor	CORR K	(factor)	0.10 - 3.00



PITOT TUBE

The Pitot tube method looks at the differential pressure between the total pressure entering the tube and the static pressure entering a lateral hole in the tube. The dynamic pressure measurement that results is analysed and indicated as a velocity on the display.



PITOT TUBE	LENGHT (L)	HEIGHT (B)	DIAMETER (D)	TOT. LENGHT (A)
XD030	300 mm	65 mm	4 mm	270 mm
XD035	350 mm	65 mm	7 mm	295 mm
XD005	500 mm	65 mm	7 mm	445 mm
XD010	1000 mm	65 mm	7 mm	945 mm

AF 210 - HOT WIRE THERMO-ANEMOMETER

Digitrons' range of airflow meters uses Pitot tube and hot wire anemometer technology to cover a wide range of airflow measurements. The AF210 uses hot bead technology for accurate measurements in the range 0m/s - 10m/s and can also function as a thermometer using the same probe (interchangeable).

METHOD OF OPERATION

Hot wire anemometers are normally used for accurate measurements in the range 0m/s - 5m/s and up to +70°C (+158°F), after this point Pitot tube methods of measurement is required (cfr. AF200 Digitron).

- Temperature and air velocity measurement with a single probe
- Interchangeable probes
- Smoothing function for use in fluctuating airflows
- Units: metric and imperial
- Easy zero function
- n point averaging to ease airflow calculations

AF210D	Hot wire anemometer (without probe)	0.10 - 10.00m/s
AF210PD	Hot wire probe	0.10 - 10.00m/s
AF210KIT	Hot wire anemometer + Probe	0.10 - 10.00m/s

TECHNICAL FEATURES	
RANGE	0.1 - 10.00m/s 20.0 - 1999fpm -20 to +80°C / -4 to +176°F
ACCURACY	±0.12m/s ±1% rdg (5 to +45°C) ±0.20m/s ±2% rdg (5° & 45 to +70°C) ±24fpm ±1% rdg (20.0 - 199.9fpm) at 41 to +113°C ±40fpm ±2% rdg (200.0 - 1999fpm) at -4 to +41°C & 113 to +158°C ±0.5°C at 0 to +60°C, ±0.8°C elsewhere ±1°F at 32 to +86°F, ±1.6°F elsewhere
OPERATING TEMPERATURE INSTRUMENT	0°C to +50°C/+32°F to +122°F
OPERATING TEMPERATURE PROBE TIP	-20°C to +80°C/-4°F to +176°F
BATTERY LIFE	100 hours
BATTERY TYPE	1 9V PP3S
PROBE LENGHT	300mm/12" handle excluded
PROBE DIAMETER	13mm/0.5"
DISPLAY	12.7mm/0.5" LCD with automated legend display
AUTO SWITCH OFF	5 minuts approx, disable during correction and averaging modes
DIMENSIONS	140 x 79 x 46mm/5.5 x 2.8 x 1.0"
WEIGHT	250 gr / 8.8 oz