

Furness Controls

AirPro Pressure & Flow Meter



DESCRIPTION

The FCO520 AirPro Pressure and Flow Meter is a portable microprocessor based instrument which measures low differential pressures in a choice of units, and velocity when paired with pitot tubes. Volume flow can be monitored by entering the duct area into the instrument menu, and all readings can be recorded into the memory for subsequent down-loading via an RS232 interface. The FCO520 features a high contrast LCD alpha-numeric display with backlighting and push button selection of engineering units.

Being of compact size, the new hand held AirPro is ideal for instrument and commissioning engineers in the many industries where low pressures and airflows need to be measured with accuracy.

The AirPro can also be used to measure air temperature by a thermistor built into the pitot static tube or by a separate temperature probe. In addition, an optional absolute pressure sensor built into the AirPro measuring instrument can measure and display either absolute or gauge pressure. With both temperature and absolute devices fitted, the AirPro can calculate, measure and display mass flow.

Such features have already been appreciated by customers using the FCO510 laboratory micromanometer introduced 3 years ago and now employed extensively in research applications and in the armed forces.

As with all Furness Controls instruments, traceability to National Standards via the patented FRS4 primary standard gives confidence of accuracy to the highest levels. Calibration checks can be carried out annually by Furness Controls or at more frequent intervals by customers who already have the PPC500 calibration unit.

A versatile compact pressure and airflow instrument, the AirPro will meet the exacting needs of the market in virtually all industries.



OPTIONS

FCO521 Pitot tube with temperature sensor -10 to +100°C

FCO522 Temperature Probe

FCO65 or FCO66 Pitot Static Tubes

Internal absolute pressure sensor which can also be used to measure gauge pressure

External power supply

Carrying case

SPECIFICATION

Model..... FCO520

DP ranges ± 600 Pa, ± 6 KPa, ± 20 KPa

Velocity ranges..... 31 m/s, 100 m/s, 180 m/s

Static working pressure..... 0.5 to 1.5 Bar Abs

Temperature limits -10 to 70°C storage,
0 to 50°C working

Pressure connections Push on tube 4mm ID

Working medium Air

Humidity..... Maximum 90% non condensing

Data logging 2,500 Readings (50 records of 50 points)

Accuracy..... $\pm 0.25\%$ FSD

Zero Semi automatic

Duct area 10 to 30,000cm² (0.010 to 30.000ft²)

Units

Differential pressure..... mm H₂O, "H₂O, Pa, kPa, mb, PSI

Velocity m/sec, ft/sec

Volume flow..... m³/sec, ft³/sec, CFM

Mass flow kg/sec, lb/sec

Absolute pressure mbar, "Hg, PSI

Gauge pressure mbar, "Hg, PSI

Temperature °C, °F

Materials in contact Copper, Brass, Mica, PVC
Stainless Steel

External supply 7.5Vdc

Batteries 4 x AA cell

Battery life..... Minimum 100 hours without use of backlight

Dimensions including fittings 216 x 100 x 40mm

Net weight..... 630g

Supplied with MO521 pitot tube, RS232 conversion cable to 9 pin 'D' socket and 1 metre of silicon rubber twin tubing.

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