

FUNDAMENTAL PRINCIPLES

Precision Manometer Test Sets

Employing the same fundamental principles as the industrial manometers, Airflow's range of precision portable manometers are complete test sets. They incorporate one or two adjustable-range single limb manometers providing a wide choice of ranges from 0-125 Pa to 0-5000 Pa. Each manometer has a reservoir tank with a built-in metal bellows system which allows fine settings of the fluid level without changing the calibration. Once set up the instrument panel is accurately levelled with a three point rapid levelling system using a precision compound built-in spirit level. The close fitting of the scale to the glass tube minimises parallax and the choice of manometer fluid ensures a crisp meniscus for accurate reading. Each portable instrument is individually calibrated and comes complete with pitot static tube, connecting flexible tube, spare fluid and a manometer balancing valve which isolates the pressure signal to allow zero checking without disconnecting the pressure lines. Other accessories are also included as appropriate to each kit. Laboratory models of the Type 4 and Type 5 are for standard bench mounting and supplied without cases, pitot and accessories.

- Measure positive, negative or differential (velocity) pressure
- Adjustable manometer limbs give good resolution, sensitivity and wide range
- No mechanical, electrical or electronic mechanisms to go wrong
- Accurately manufactured by precision engineering
- Free flowing fluid with positive meniscus
- Low relative density fluid gives expanded scale
- Not susceptible to parallax error
- Barometer included with Type 4
- Portable versions include pitot, tubing and accessories



Type 4 portable



Type 4 laboratory



Type 5 portable



Type 5 laboratory

SPECIFICATION

Type 4 Specification

Pressure Ranges	Short Limb	0-125/250/500/2500 Pascals (N/m ²) 0-12.5/25/50/250 mm H ₂ O 0-0.5/1/2/10 in wg.
	Long Limb	0-500/1000/5000 Pascals (N/m ²) 0-50/100/500 mm H ₂ O 0-2/4/20 in wg
Velocity Ranges	Short Limb	0-14.2, 0-28 m/sec 0-2800, 0-5600 ft/min Direct reading from scales.
	Long Limb	Up to 90 m/sec (18,000 ft/min) at STP
Accuracy	Short Limb	± 1 % of reading. Line pressure nominally atmospheric, 20°C ambient
	Long Limb	± 1 % of reading. Line pressure nominally atmospheric, 20°C ambient
Dimensions	Pitot Static Tube	794 mm long x 8 mm dia
	Case	830 x 225 x 195 mm (box closed)
Weight		11 kg including accessories

Type 5 Specification

Pressure Ranges		0-125/250/500/2500 Pascals (N/m ²) 0-12.5/25/50/250 mm H ₂ O 0-0.5/1/2/10 in wg
Velocity Ranges		0-14.2, 0-28 m/sec. 0-2800, 0-5600 ft/min Direct reading from scales
Accuracy		± 1 % of reading. Line pressure nominally atmospheric, 20°C ambient
Dimensions	Pitot Static Tube	483 mm long x 8 mm dia
	Case	505x 195x 192 mm. (box closed)
Weight		6.0 kg.

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