Platon Anaesthetic VA Flowmeter

**PLATON GAPMETER TYPE AGTF**

Platon glass tube anaesthetic gas flowmeters are manufactured for medical equipment suppliers worldwide, with actual scales and markings tailored to individual equipment requirements.

Tubes and floats are supplied as a calibrated set, normally without a frame. These are then incorporated into the manufacture of an anaesthetics trolley or other equipment.

**FEATURES**

- Instantaneous in response
- Reliable in operation
- High visibility scale fused into flow tube surface
- Float rotation gives operator confidence of correct performance
- Borosilicate glass tube, anti-static coated
- Flow ranges from 10:1 to 150:1 available
- Individual flow calibration
- Bold scale markings
- Standard gases – air, oxygen, nitrous oxide

**CUSTOMED ENGINEERED**

- Gas colour coding for easy identification
- Keyed lengths to ensure correct installation
- Customer logo or flow limit marks

www.mess-regeltechnik.at  www.platon-direct.eu
**SPECIFICATION**

**Tube material:** Borosilicate glass anti-static coated

**Tube length:** Keyed lengths typically 230/240/250/260mm (±0.5mm) Ends square cut and flame polished for sealing.

**Tube diameter:** OD 12mm or 15mm nominal

**Scale:** Fused ceramic black ink

**Float:** Precision machined Duralumin, red anodised with coloured dot. Float body is fluted to cause rotation in gas flow

**Float end stops:** Polypropylene

**Calibration:** Individually gas flow calibrated for tube & float as a matched pair

**Accuracy**

As required:
- Typically: a) ±2% FSD
- b) Class 2.5 VDI/VDE 3513
- c) ±2.5mm of true scale position
- d) ±10% reading

**Turndown:** Typical 10:1

Maximum 150:1 (dual taper)

**Standard Gases:** Oxygen, Nitrous oxide, Air

**Typical Ranges:**
- (at ATP, 1.013 bar abs) 0.1 – 1.0 L/min
- 1.0 – 10 L/min
- 0.1 – 15 L/min

**OPTIONS**

- Other gases eg Carbon dioxide, Helium, Cyclohexane, or other flow ranges or calibration conditions
- Alternative scale units
- Short tubes (150mm) or Imperial lengths
- Special flow ranges eg for Premature Baby units
- Calibration check and certification from our own UKAS accredited flow test laboratory

**PRINCIPLE OF OPERATION**

Flow up the tapered tube lifts the float to an equilibrium position. Flow rate is then measured against the flat top edge of the float, reducing parallax errors.

Platon glass Variable Area (VA) flowmeters are ideal for measurement of anaesthetic gases. The free float is instantaneous in response, and the visible float rotation immediately confirms correct flowmeter operation to the operator.

VA flowmeters are highly repeatable in operation, giving reliability and confidence. The ceramic ink scale is fused into the glass tube outer surface, and cannot be removed or displaced.

Calibration accuracy can be specified to suit the application, with each tube and float individually gas flow calibrated.

RM&C has a flow test laboratory, which is UKAS accredited for gas flow calibrations up to 35 dm³/min (35 L/min). This is one of the few UK laboratories capable of providing such an independently checked and audited facility. The flow calibration uncertainty at the 95% confidence level is ±0.5% of reading. All calibration equipment used for anaesthetic flowmeter production scaling is regularly checked in this laboratory, giving confidence in the traceability of all production units.

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