Product Data Sheet

MPB RANGE OF HUMAN ANAESTHESIA MEDICAL GAS FLOWMETERS

GENERAL INFORMATION

MPB produce an extensive range of anaesthetic flowmeters suitable for anaesthesia systems. These can be supplied from stock in 230mm length tubes in our standard ranges. Alternative lengths are available on request.

In line with current demand we also produce a range of cascading index length linked flowmeters for flows down to typically 100cc/min.

Since MPB was formed in 1986 we have supplied anaesthetic flowmeters throughout the world. MPB design team will be pleased to discuss existing or new products ie, customised designs, scales, tube lengths, logos, colour banding, dimensional requirements, etc.

FEATURES

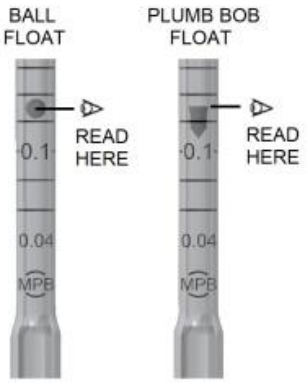
- All MPB flowmeters for anaesthetic gases conform to ISO 5358 being antistatic/electrically conductive and having matching serial numbered tubes and floats.
- Colour banding is available to suit International Standards typically Black, Blue, White, etc.
- Nationally traceable certified master meters are used for all calibration purposes.
- Accuracy of measurement is to class 2.5 VDI/VDE 3513 or better.

STANDARD RANGES

- Nitrous Oxide:
  100 – 1000cc/min 0.1 – 2 L/min
  0.2 – 4 L/min 0.1 – 10 L/min
  1 – 10 L/min 0.2 – 12 L/min
- Oxygen:
  100-1000cc/min 0.1 – 2 L/min
  0.2 – 4 L/min 0.1 – 10 L/min
  1 – 10 L/min 0.1 – 15 L/min
- Air:
  0.1 – 2 L/min 0.1 – 10 L/min
  0.1 – 15 L/min 0.2 – 15 L/min
- Carbon Dioxide:
  0.1 - 2 L/min

PRINCIPLE OF OPERATION

The height attained by the float in its tapered flow tube is directly related to a calibrated scale. The flow rate should be read from the top of the plumb bob float, reducing parallax errors.



GENERAL INSTALLATION

The practical installation of flow tubes is the responsibility of the anaesthetic machine manufacturer and user.

It is, however, imperative that suitable measures are taken to install the flow tubes in a stable and vertical position with minimum flow path disruption, or back pressure.

CALIBRATION

All flow tubes are series calibrated via UKAS traceable master meters at all major figured scale positions to confirm correct readings at 1013 mbar abs 20°C.

Normal standard accuracy is Class 2.5 VDI/VDE 3513, a classification system for variable area flowmeters.

ELECTROSTATIC DISCHARGE

All flowmeters have an anti-static permanent conductive coating applied to both the inside and outside walls of the glass to facilitate earthing. This allows any potential static to be dispersed and subsequently earthed via the anaesthesia trolley.

Whilst MPB is more than happy to assist, final earthing arrangements are considered and dictated by the anaesthesia equipment manufacturer.

SPECIFICATION AND GENERAL NOTES

Tube material:	Borosilicate glass, anti-static coated
Scale:	Permanently fired black ink
Float:	Red anodised ‘fast recovery’ fluted plumb bob float with silver dot and serial number to match flow tube
Float end stops:	Polypropylene
Calibration:	Individually gas flow calibrated for tube and float as a matched pair
Accuracy:	Class 2.5 VDI/VDE 3513

- All instruments are manufactured in accordance with our ISO 9001:2015 accreditation and have calibration fully traceable to UKAS.
- Colour banding can be included at no additional charge.
- We would be pleased to apply your company logo at no extra charge for quantity orders, but in one colour only.

MPB Industries Ltd - Designers and Manufacturers of Scientific and Process Control Instrumentation

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