

# **Product Data Sheet**



### MPB SERIES 1040S DUAL TUBE FLOWMETER

#### **GENERAL INFORMATION**

The MPB Series 1040S Dual Tube Flowmeter is designed for measuring two instantaneous flow rates of virtually any process liquids or gases simultaneously. The principle of operation of the flowmeter is quite simple:-

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

This flowmeter offers very low flows down to 2-20cc/min (Air).

The Series 1040S Dual Tube Flowmeter has rear facing connections as standard and the flowmeters are supplied complete with 2 x M4 mounting studs.

Whilst MPB Industries supply an extensive range of standard flow tubes, MPB can design and manufacture flow tubes for virtually any gas or liquid and calibrate for a wide range of process conditions (please contact our sales office).

For increased flow rates and higher scale resolution, please see our technical literature MPB Series 1240S (technical bulletin MPBTB 100).



### **SERIES 1040S FEATURES**

- DIRECT READING OF INSTANTANEOUS FLOW RATES
- WIDE RANGE OF STANDARD FLOW RANGES
- EASY TO READ SCALES
- FRICTIONLESS, HENCE LOW HEAD LOSS
- 93mm TUBE LENGTH
- STANDARD OR CUSTOMISED FLOW SCALES
- VALVED OR NON-VALVED VERSIONS
- REAR FACING CONNECTIONS
- STAINLESS STEEL CONNECTIONS
- POLYCARBONATE SAFETY COVER
- MINIMAL MAINTENANCE
- LONG SERVICE LIFE
- ALARM VERSIONS AVAILABLE
- EASY TUBE REMOVAL IN-SITU

Typical applications include analytical instrumentation, gas flow control, small dosing systems, purge metering, leak detection and blending systems, or any requirement for a dual tube arrangement.

Typical industries served include brewing, gas analysis, aerospace, pharmaceutical, engine testing, paper, water treatment, oil and gas, etc.

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## MPB SERIES 1040S DUAL TUBE FLOWMETER

Chassis: Anodised aluminium to

BSEN12373/AA25

End Blocks: Stainless Steel

**Process** 

Connections: 1/8" BSPPF, OR 1/8" NPTF

Cover: Polycarbonate

Seals: Viton, Nitrile, or EPDM

Metering Tube: Borosilicate glass

Scale: Permanently fired black ceramic

Ball Floats: Glass, Stainless steel,

Ruby, Tungsten

Plumb Bob Floats: Anodised aluminium

**Stainless Steel** 

Weight: 450 grams

**Maximum Working Pressure:** 

Gas: up to 20 bar g (non-shock) Liquid: up to 20 bar g (non-shock)

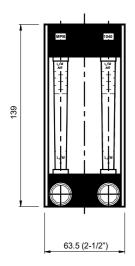
**Maximum Working Temperature:** 

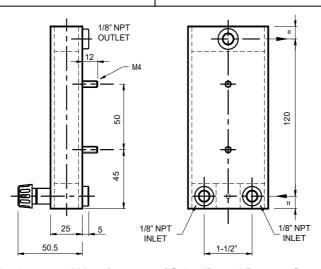
100°C Viton

Accuracy: ± 5% FSD for predicted scales

± 3% FSD for calibrated scales

STANDARD RANGES	
AIR @ 1013 mbar abs 20°C	WATER @ 20°C
2 – 20cc/min 5 – 50cc/min 10 – 100cc/min 25 – 250cc/min 50 – 500cc/min 100 – 1000cc/min 0.25 – 2.5 L/min 0.5 – 5 L/min 1 – 10 L/min 2.5 – 25 L/min 4 – 40 L/min	5 – 50cc/min 10 – 100cc/min 25 – 250cc/min 60 – 600cc/min 100 – 1000cc/min





Customised flow ranges are available. Please consult MPB Industries to select the required flow range for the process fluid used.

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

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