

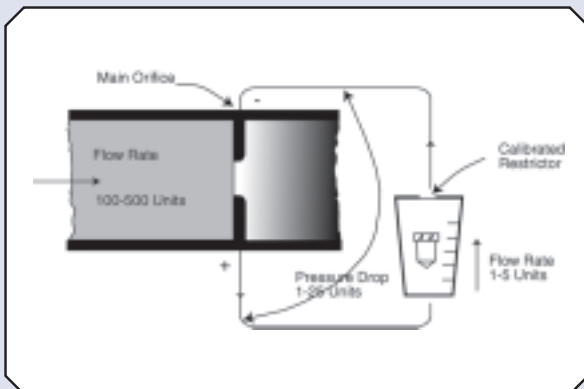
Fire Sprinkler Flowmeters

SHUNT ORIFICE FLOWMETER

The Shunt Gapmeter Model SGUV Mark 1 is a direct reading flowmeter for use in automatic sprinkler installations, water spray or deluge systems. It is approved for regular monitoring and testing of such systems by the LPCB, Loss Prevention Certification Board, under their "Rules for Automatic Sprinkler Installations", in the UK and by many equivalent organisations in other countries.

The flowmeter is a combination of two simple measuring elements. In the main flow line an orifice plate is inserted between two pipe flanges, producing a pressure drop related to flow rate. Across the orifice plate, a shunt or bypass loop uses this pressure drop to create a small flow through a similar orifice restrictor and a Variable Area flowmeter. The flow in the bypass VA meter is proportional to the main line flow, and special scaling on the glass tube allows the main line flow to be measured directly.

The Shunt Gapmeter Mk 1 is a robust, compact direct reading flowmeter, approved for use on lines from 80-150mm.



FEATURES

- Approved and Listed by LPCB
- Easy installation between pipe flanges
- Instantaneous reading
- Simple water flow measurement
- No electrical power needed
- Isolation valves for tube replacement and cleaning



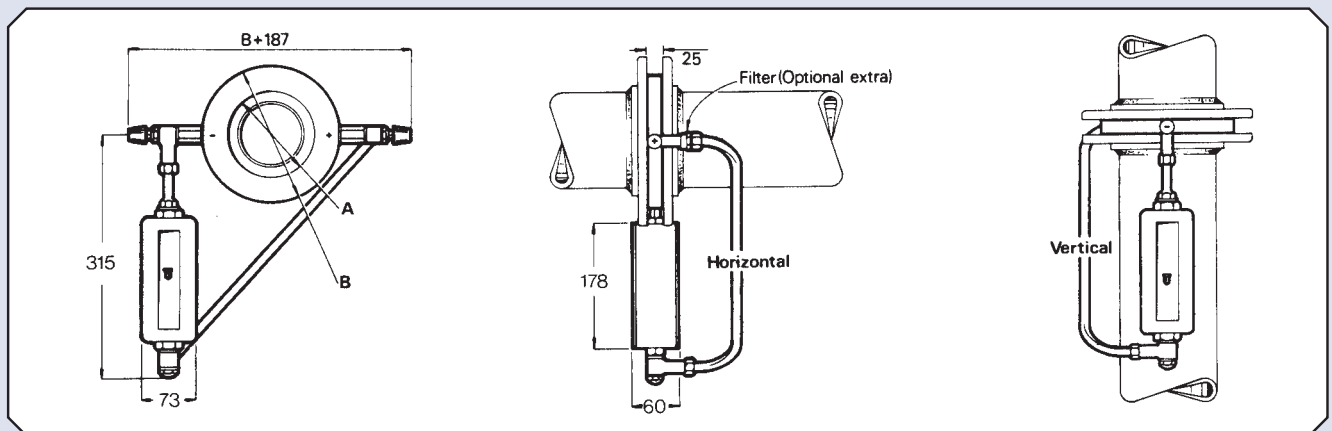
SPECIFICATION

| | |
|--------------------|--|
| Orifice Plate: | Stainless Steel mounted in a 25mm thick, polyester coated carrier ring |
| Indicator Housing: | Die-cast Aluminium with white polyester coating and perspex window |
| Accuracy: | ±2.5% FSD |
| Impulse Pipe: | Copper with plated brass fittings |
| Tube: | 100mm scaled borosilicate glass |
| Float: | Stainless Steel |
| 'O' seals: | Nitrile |
| Pressure Test: | 250 psi |
| Pressure Drop: | At maximum flow rate 65% of the orifice loss of 354" WG is recovered |

FLOW RANGES

| LPCB Reference | Pipe Size (mm) | Flow Range (dm ³ /min) |
|----------------|----------------|-----------------------------------|
| F1/1 | 80 | 300/1500 |
| F1/2 | 100 | 500/2500 |
| F1/3 | 125 | 700/3500 |
| F1/4 | 150 | 1000/5000 |

DIMENSIONS



SPECIFICATION

1. The orifice plate must be installed between BS10 Table D or E flanges in the pipeline, with at least 5 diameters of straight pipe up and downstream.
2. The gauge glass must be in the vertical position. The isolating valves on the pressure tapings must be kept closed when the meter is not being used.
3. A spare gauge glass must be available on site.

ALTERNATIVE UNITS

The Shunt Gapmeter Mark 2 is an improved version of this equipment and is approved by LPCB for use on line sizes from 50-200mm. Industrial versions of the Shunt Gapmeter are available for use between 25 and 3000mm lines.

Every effort has been made during the preparation of this document to ensure the accuracy of statements and specifications. However, we do not accept liability for damage, injury, loss or expense caused by errors or omissions made. We reserve the right to withdraw or amend products or documentation without notice.

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