

PELTFLO FLOWMETER

These well proven pelton wheel flowmeters measure low flow rates between 1 and 50 litres per minute.

Low cost PVC or rugged stainless steel ✓

Accurate and repeatable ✓

Improve your process
Well proven
Reduce waste and costs

Easily maintained ✓

Long life bearings
Access to the internals without removing the body from the pipeline

High quality manufacture ✓

BASEEFA intrinsic safety approved
Individual calibration certificate
ISO 9001 certified company



Application

The Peltflo is suitable for a wide range of liquids such as acids, solvents, water, agrochemicals and light oils. You can use it for container filling, dispensing, flow rate indication, controlling and spraying.

The flowmeter is designed for use with clean liquids although particles less than 0.25mm will be harmlessly washed through.

Instrumentation

The output frequency is fed into an instrument. Apollo can provide you with a comprehensive range of displays and control instruments. In hazardous areas you can use the flowmeters with the Apollo IS sensor approved by BASEEFA to EEx ia IIC T5. The signal can be used in the IS area or transmitted to a safe area using the intrinsically safe P5 preamplifier and suitable barriers.

Principle of Operation

The PFA or PVDF pelton wheel has ferrites sealed within the tips of the vanes. Tungsten carbide balls are mounted directly into the rotor and spin in sapphire cups which are mounted in a bearing housing.

The liquid flow causes the rotor to turn and the ferrites induce pulses in the sensor. The frequency of this signal is directly proportional to the flow rate.

Calibration

All Peltflo flowmeters are individually calibrated with water and are traceable to national standards.

We provide you with a test certificate for each meter showing the number of pulses per litre, which is used to set the instrumentation.

Installation

To get the best results from your flowmeter it should be mounted in horizontal pipework with the sensor horizontal. An upstream filter with a 60 mesh basket is recommended to reduce bearing contamination. For installations where the read-out instrument is more than 4 metres from the flowmeter, or in electrically noisy environments a preamplifier should be fitted.

Construction

The flowmeters have either PVC, PVDF or stainless steel bodies. There are options for the materials of the internal parts providing you with the ability to measure almost any liquid. The tungsten ball and sapphire cup bearings have a high chemical resistance.

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Peltflo Flowmeter

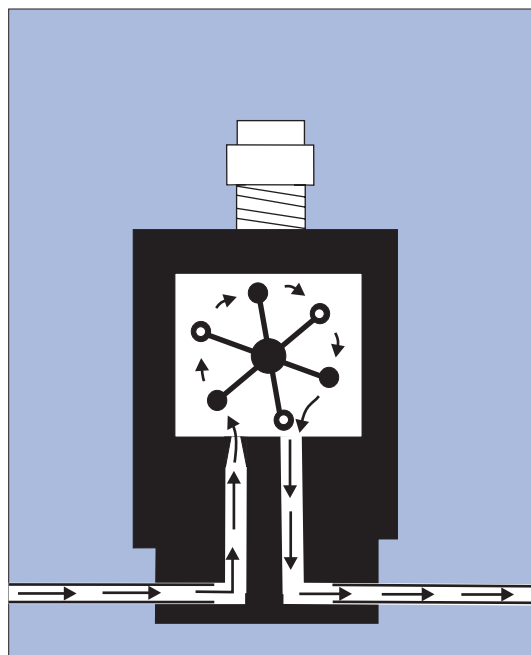
Flowmeter Specification

| | | | | |
|----------------------|---|--------------------|-------|-----|
| Flow ranges: | No orifice | 1-10 litre/min | | |
| | 6mm orifice | 2.5-25 litre/min | | |
| | 9mm orifice | 5.5-50 litre/min | | |
| Linearity: | +/-1% of reading (No orifice) | | | |
| | +/-2% of reading (6mm or 9mm orifice) | | | |
| Repeatability: | +/-0.1 % of indicated flow | | | |
| Pressure rating: | Operating | Operating pressure | | |
| (In bar) | Temp | PVC | PVDF | S/S |
| | -30°C | - | 12 | 69 |
| | -10°C | 8 | 12 | 69 |
| | 20°C | 8 | 12 | 69 |
| | 60°C | 3 | 9 | 69 |
| | 100°C | - | 6 | 69 |
| | 110°C | - | 5 | 69 |
| | 130°C | - | 3 | 69 |
| Frequency output: | 150 Hz (approx at max. flow) | | | |
| Weight: | PVC | PVDF | S/S | |
| | 0.6kg | 0.7kg | 1.3kg | |
| Temperature range: | PVC | -10 to +60°C | | |
| | PVDF | -30 to +110°C | | |
| | S/S | -30 to +130°C | | |
| | Above 110°C the high temperature pickoff coil is required | | | |
| Process connections: | ½" BSP female | | | |

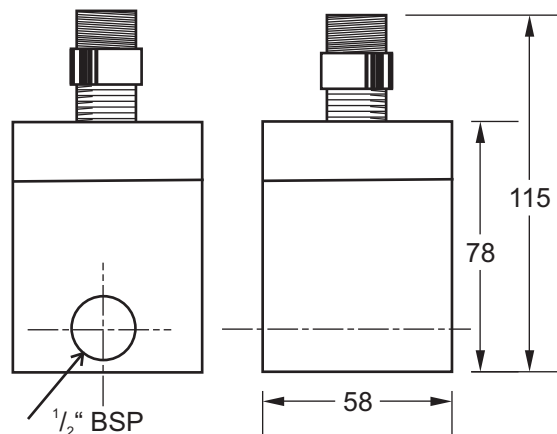
Materials of Construction

| | |
|---------------|---|
| Head cap: | 316 stainless steel |
| Body: | PVC, PVDF or stainless steel |
| Seals: | Viton (standard) or PTFE |
| Bearing: | Sapphire cup in s/s housing |
| Pelton wheel: | PVDF or PFA |
| | Tungsten carbide or sapphire balls mounted in the rotor |
| | Ferrites sealed in the tips |

Peltflo Flow Diagram



Outline Dimensions



Dimensions in mm.

Contact our flow measurement specialists for **FREE** advice on your application

Freefone 0800 328 6674

Freefax 0800 328 6673

e:mail sales@apolloflow.co.uk

website www.apolloflow.co.uk

The expert advice and the calls are **FREE**
So call now!

Apollo Flow Measurement Ltd, Charles Street, Walsall WS2 9LZ
Tel: 01922 645 647 Fax: 01922 640 326

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ISO 9001 Cert. FM 31709