# 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



Individual calibration certificates 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 I.S ATEX approved sensor. 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 pelton wheel has ferrites fitted to 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 are very hard wearing.

**APOLLO** 

# **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)

+/-0.2 % of indicated flow Repeatability:

Pressure rating: Operating Operating pressure

PVC PVDF S/S (In bar) Temp

> -30°C 69 12 -10°C 8 12 69 20<sup>0</sup>C 8 12 69  $60^{\circ}C$ 3 9 69 100°C 6 69

> 110°C 5 69 130°C 69

Frequency output: 150 Hz (approx at max. flow) Weight: PVC **PVDF** S/S

0.6ka 0.7kg 1.3kg

-10 to +60°C Temperature range: PVC

 $-30 \text{ to } +110^{\circ}\text{C}$ **PVDF** 

 $-30 \text{ to } +130^{\circ}\text{C}$ S/S

Above 110°C the high temperature

pickoff coil is required

1/2" BSP female **Process** 

connections:

#### Materials of Construction

Head cap: 316 stainless steel

PVC, PVDF or stainless steel Body: Seals: Viton (standard) or PTFE Bearing: Sapphire cup in s/s housing

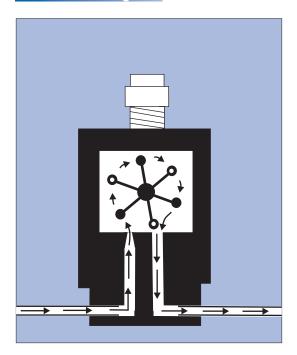
Pelton wheel: **PFA** 

Tungsten carbide or sapphire balls

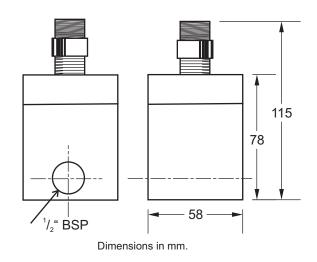
mounted in the rotor

Ferrites tips

#### Peltflo Flow Diagram



#### Outline Dimensions



Contact our flow measurement specialists for advice on your application

01922 645647 Tel:

e:mail sales@apolloflow.co.uk

01922 640326 Fax:

website www.apolloflow.co.uk

**Manufactured** in the UK

Apollo Flowmeters, Charles Street, Walsall WS2 9LZ





