

M SERIES OVAL ROTOR FLOWMETER

This range of positive displacement flowmeters offers an economical means of measuring high or varying viscosity liquids.

- Cost effective ✓
- Accurate readings ✓
- Independent of viscosity ✓
- Mechanical or LCD totaliser ✓
- Pulsed output option ✓
- Aluminium, PPS or s/s body ✓
- High pressure capability ✓
- Suitable for intrinsically safe areas ✓



Application

The M Series oval rotor positive displacement flowmeters will measure your high or varying viscosity liquids.

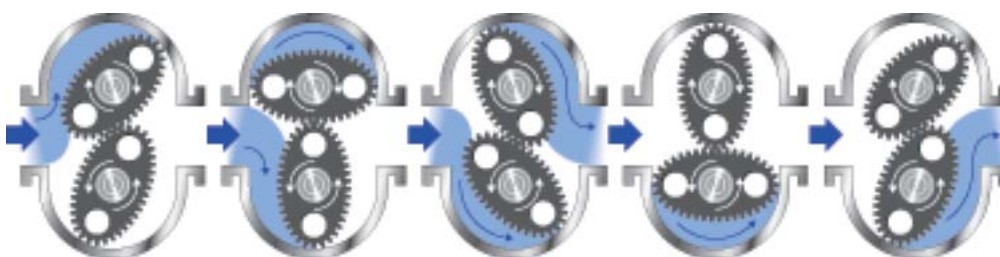
The body takes high pressures and is available in either aluminium PPS or stainless steel. The meter can be supplied with a low cost mechanical totaliser or an LCD display mounted on the top of the flowmeter. There is a pulsed output option that can be used for a remote display or converted for transmission to a separate control system. Apollo have a range of instruments to suit all your requirements.

The rotors are either ryton (PPS) or stainless steel making it suitable for a wide range of fuels, oils and chemicals.

Principle of Operation

The M Series operates on the oval rotor principle. Two oval rotors rotate on stainless steel shafts and sweep the measuring chamber. Each revolution of the rotors measures a precise volume of liquid through the meter. This volume is independent of the viscosity and density of your liquid.

Oval Rotor Principle



Calibration

The flowmeters are individually calibrated on water. 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

You can mount the flowmeter either horizontally or vertically and can use it in either pumped or gravity feed applications. An upstream filter is recommended to prevent particles damaging your flowmeter.

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M Series Oval Rotor Flowmeter

Specifications

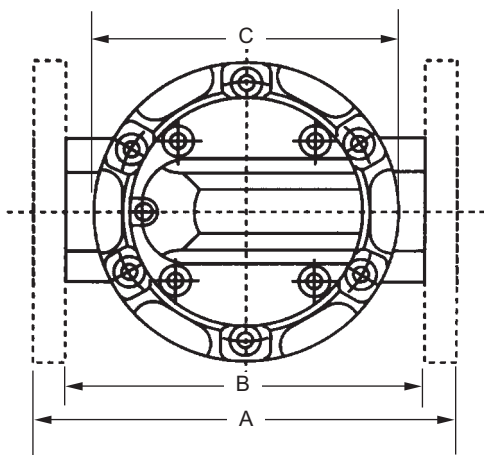
Body: 316 s/s, aluminium or PPS
 Rotor: PPS or 316 s/s
 O Ring: Nitrile, viton or PTFE
 Shaft: Stainless steel
 Accuracy: +/- 0.5%
 +/- 1% for mechanical totaliser
 Max. viscosity: 1000 cP
 Max. pressure: 55 bar or to the flange rating
 Max. temperature: PPS rotor or body 80°C
 S/S rotor and body 120°C
 Recommended strainer size: 60 mesh

	M4	M5	M7	M10	M40	M50
BSP connections	✓	✓	✓	✓	✓	✗
Flanged ANSI 150	✗	✗	✗	✓	✓	✓
Flanged ND 16	✗	✗	✗	✓	✓	✓

Outputs

Pulsed output: Reed switch or
 Hall effect, 3 wire, 4-24V supply
 Built in LCD: Reset and non reset total
 8 digit 10mm LCD
 9V lithium battery
 Intrinsically Safe LCD: Total and batching function
 7 digit 12.7mm LCD
 3V lithium battery
 Mechanical total: Non reset and reset total with
 push button to reset

Dimensions



Output Options

Output Option	Model Availability
Pulse output	All
Std LCD display	All
IS LCD display	All
Mechanical totaliser	M10, 40 & 50

Performance Characteristics

Model	Size	Flow Range litre/min		Pulses / litre
		below 5 cP	above 5cP	
M4	1/2"	5-30	1-30	95 or 190
M5	1/2"	5-25	1-25	81 or 162
M7	1"	8-70	3-80	52 or 104
M10	1"	10-100	6-120	36 or 72
M40	1 1/2"	15-235	10-250	14.5 or 29
M50	2"	30-300	15-350	6.68 or 13.36

Overall Dimensions

Model	Flanged	Screwed	Body dia.
	A	B	C
M4	N/A	125	112
M5	N/A	125	112
M7	N/A	108	108
M10	170	133	112
M40	212	150	144
M50	240	N/A	178

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

M1 & M2 OVAL ROTOR FLOWMETER

These positive displacement flowmeters offers an economical means of measuring low flow rates of high or varying viscosity liquids.

- Cost effective ✓
- Accurate readings ✓
- Independent of viscosity ✓
- Pulsed output ✓
- PPS or s/s body ✓
- Suitable for intrinsically safe areas ✓



Application

These oval rotor positive displacement flowmeters will measure the low flow rates of your high or varying viscosity liquids.

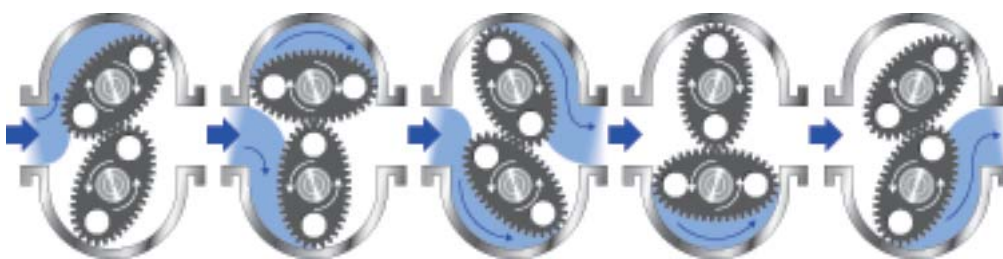
The body is PPS or stainless steel. The meter has a pulsed output that can be used for a remote display or converted for transmission to a separate control system. Apollo have a range of instruments to suit all your requirements.

The rotors are either ryton (PPS) or stainless steel making it suitable for a wide range of fuels, oils and chemicals.

Principle of Operation

The M Series operates on the oval rotor principle. Two oval rotors rotate on stainless steel shafts and sweep the measuring chamber. Each revolution of the rotors measures a precise volume of liquid through the meter. This volume is independent of the viscosity and density of your liquid.

Oval Rotor Principle



Calibration

The flowmeters are individually calibrated on water. 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

You can mount the flowmeter either horizontally or vertically and can use it in either pumped or gravity feed applications. An upstream filter is recommended to prevent particles damaging your flowmeter.

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M1 & M2 Oval Rotor Flowmeter

Specifications

Body:	316 s/s or PPS	
Rotor:	316 s/s or PPS	
O Ring:	Viton (std), PTFE or EPDM	
Shaft:	Stainless steel	
Accuracy:	+/- 1 %	
Repeatability:	0.1 %	
Max. viscosity:	1000 cP	
Max. pressure:	PPS body	5 bar
	S/S body	10 bar
	HP version	551 bar
Max. temperature:	PPS rotor or body	80°C
	S/S rotor and body	120°C
Recommended strainer size:	200 mesh	
Connections:	M1	1/4" BSP
	M2	1/4" BSP

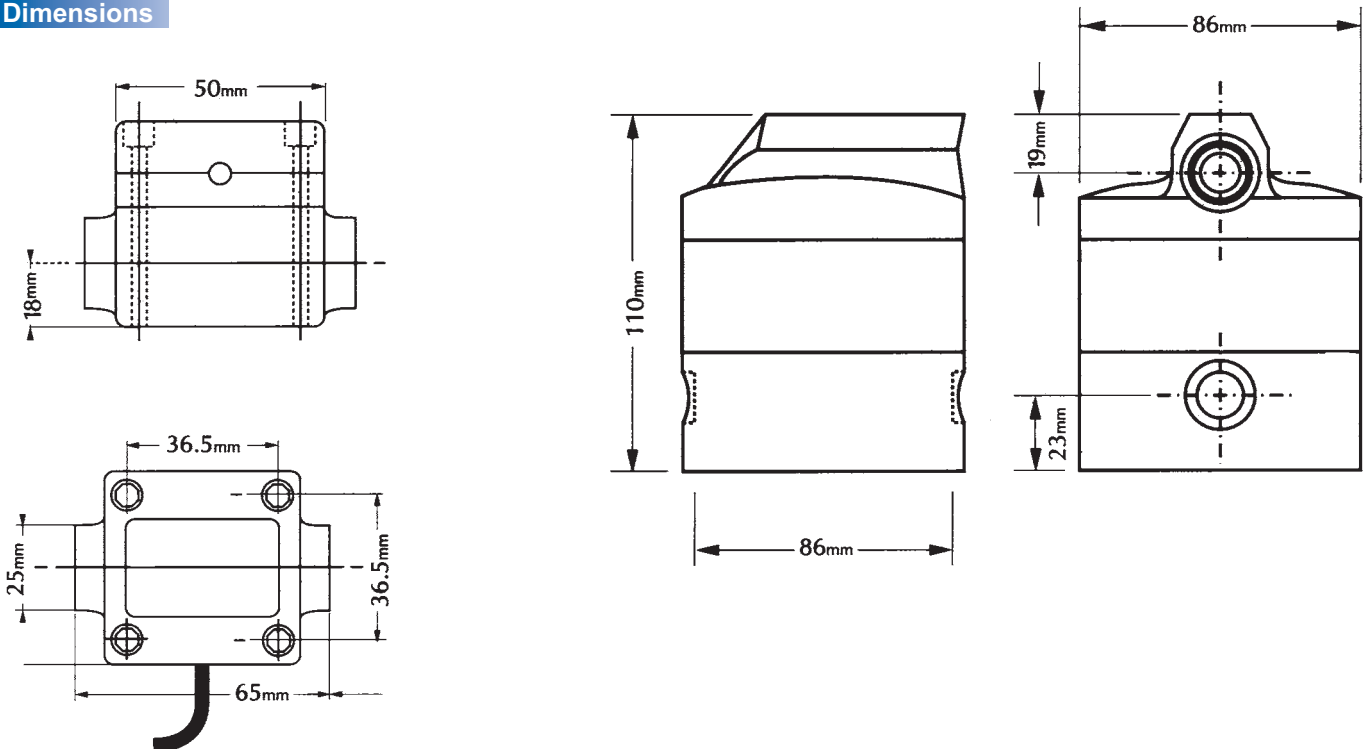
Outputs

Pulsed output:	Reed switch or Hall effect, 3 wire, 4-24V supply
Connection:	1m flying lead

Performance Characteristics

Model	Size	Flow Range litre/hour		Pulses / litre
		below 5 cP	above 5cP	
M1	1/4"	2-100	1-100	1000
M2	1/4"	25-500	15-500	400

Dimensions



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

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e:mail sales@apolloflow.co.uk

website www.apolloflow.co.uk

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