Metra-clear Oval Gear Meter Technical Product data sheet





Features

- Rugged construction
- High visibility
- Individual calibration
- High viscosity capability
- Low pressure loss
- No flow conditioning required
- Compact meter assembly
- Hall or reed switch sensor
- Accuracy ±0.5% reading *
- 0.1% repeatability
- IP67/NEMA 4 protection
- Non-metallic option
- 10 Bar pressure
- 80°C maximum temperature
- 5 flow ranges
- * When used with our metra-smart instrument

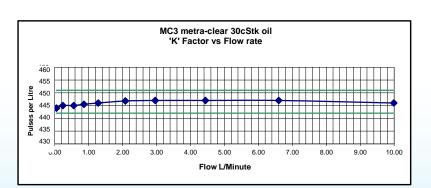
Ideal for

- ◆ Engine test
- Critical oil flow
- ♦ High viscosity fluids
- ◆ OEM equipment

Metra-clear Oval Gear Meter

The compact rugged acrylic topped oval gear flowmeter is designed to give high performance with a low cost of ownership. The meters cover flow ranges from 0.01 to 100 L/Min on 30 Cstk oil and 0.1 to 100 L/min on water like liquids. For OEM use alternatives, including manifold mountings, are available. The standard models have 316 St St aluminium or PEEK™ bodies with Viton™ 'O' ring seals. For general meter specification see the appropriate OG data sheet.









Metra-clear Oval Gear Meter

Order Codes					
Model MC1					
MC2					
<u>MC3</u>					
MC4					
MC5					
)				
Body material : S	- 316 St St				
	- Aluminium				
	P - PEEK TM				
Į	- FEEN				
Temp rating	S - 80°C 158°F				
	П				
Pressure	1 - 10 Bar 150 PSI				
rating	<u>1</u> - 10 Bai 130 F31				
	I II				
Seal material	<u>V</u> - Viton [™]				
	– N – Nitrile				
	E - EPDM				
	K - Kalrez				
	1				
	. I ↓ U				
Detector type	<u>H</u> - Hall Effect				
	R - Reed switch				
Pipe thread	Q - 1/4" (OG1&2 standard)				
	<u>H</u> - ½" (OG3 standard)				
	T - 3/4" (OG4 standard)				
	U - 1" (OG5 standard)				
	(CCC standard)				
Connections	<u>B</u> - BSP F				
Someotions	N - NPT F				
	F - Flanged (specify)				

e.g. A stainless steel meter rated at 80°C,
10 Bar, with Viton™ seal, Hall effect detector
and a 1/2" BSP thread would have the order code
-MC3-SS1-VHH-R

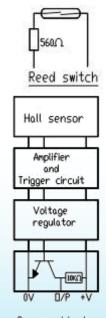
Model	Max flow Litres/Min	'K' factor pulses/litre	Accuracy water	Accuracy oil 30 Cstk
MC1	1.0	2050	± 1.0% FSD	± 0.75% FSD
MC2	4.0	1100	± 1.0% FSD	± 0.5% FSD
MC3	10	400	± 0.5% FSD	± 0.5% FSD
MC4	50	100	± 0.5% FSD	± 0.5% FSD
MC5	100	70	± 1.0% Reading	± 0.5% Reading

Metra-clear Oval Gear Meter

At the heart of the meter are a pair of highly visible toothed oval gears one of which contains chemically resistant magnets, the gears rotate freely on robust bearings. Rotation is detected through the chamber wall by a Hall Effect detector or a reed switch giving an accurate number of pulses per litre passed. The output is an NPN pulse or a voltage free contact closure either of which is readily interfaced with most electronic display or recording devices. This combination of materials and technology ensures a long life product with reliable, accurate operation throughout.



For general details of a specific size of meter refer to the OG data sheet for that model.



Sensor block diagram