METRA CLEAR OVAL GEAR FLOWMETER Series MC

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 100L/min on 30cSt oil and 0.1 to 100L/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.

IDEAL FOR

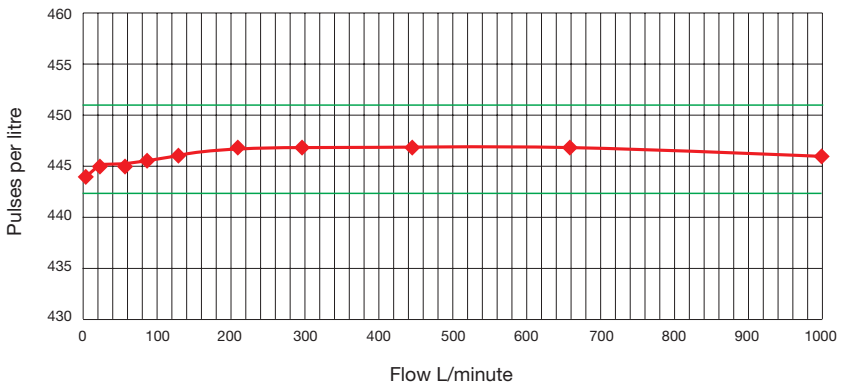
- Engine test
- Critical oil flow
- High viscosity fluids
- OEM equipment

FEATURES

- Rugged construction
- High visibility
- Individual calibration
- High viscosity capability
- Low pressure loss
- No flow conditioning required
- Compact meter assembly
- Hall, reed switch sensor
- Accuracy ±0.5% reading *
- 0.1% repeatability
- IP67/NEMA 4 protection
- Non-metallic option
- 10Bar pressure
- 60°C maximum temperature
- 5 flow ranges

** When used with our Metra-Smart instrument*

MC3 Metra-Clear 30cStk oil 'K' Factor vs Flow rate



Ordering codes

Model
MC1
MC2
MC3
MC4
MC5
Body material
S = 316 St St *Cap - Acrylic
A = Aluminium *Cap - Acrylic
P = PEEK™ *Cap - Acrylic
Temp rating
S = 60°C / 140°F
Pressure rating
1 = 10 Bar 150 PSI
Seal Material
V = Viton®
N = Nitrile
E = EPDM
K = Kalrez®
Detector Type
H = Hall Effect
R = Reed Switch & Resistor
X = Reed Switch (Hazardous area)
Pipe Thread
Q = 1/4" (OG1 & OG2 std)
H = 1/2" (OG3 std)
T = 3/4" (OG4 std)
U = 1" (OG5 std)
Connections
B = BSP F
N = NPT F
F = Flanged (specify)

e.g. **MC3-SS1-VHH-B** is a stainless steel meter rated at 60°C, 10 Bar, Viton® seal, Hall effect detector and a 1/2" BSP thread.

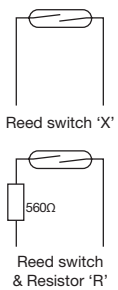
TECHNICAL SPECIFICATIONS

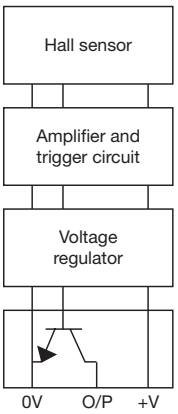
Model	Max flow Litres/Min	'K' factor pulses/litre	Accuracy water	Accuracy oil 30 cSt
MC1	1.0	2050	± 1.0% FSD	± 0.75% FSD
MC2	4.0	1100	± 1.0% FSD	± 0.5% FSD
MC3	10	400	± 0.5% FSD	± 0.5% FSD
MC4	50	100	± 0.5% FSD	± 0.5% FSD
MC5	100	70	± 1.0% Reading	± 0.5% Reading

At the heart of the meter are a pair of highly visible toothed oval gears one of which contains chemically resistant magnets. 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