

# Mechanical Oil Meter

## OM-10

### Congratulations on purchase of this World Class Mechanical Oil Meter!

- Designed specifically to dispense lubricating oil, diesel, biodiesel and other liquids, compatible with the component materials.
- High Pressure, positive displacement-type meter suitable for in-line and end-of-line applications.
- Features a rugged and robust register with 6 digit non-resettable totalizer and 3+1 digit re-settable total.
- Oval gears for optimum accuracy.
- Robust aluminium Die cast construction with protective Rubber Shroud.



### SPECIFICATIONS

<b>Meter Type</b>	Mechanical
<b>Mechanism</b>	Oval Gear
<b>Inlet / Outlet Position</b>	In-Line
<b>Inlet / Outlet</b>	1/2" BSP (F) or 1/2" NPT (F)
<b>Flow Rate</b>	1 to 30 LPM (0.3 to 8 GPM)
<b>Accuracy</b>	+/- 1%
<b>Repeatability</b>	+/- 0.20%
<b>Max. Working Pressure</b>	1000 PSI (70 BAR)
<b>Burst Pressure</b>	3000 PSI (210 BAR)
<b>Pressure Loss</b>	10 PSI (0.7 BAR)
<b>Working Temperature range</b>	-10°C to 60°C (14°F to 140°F)
<b>Max. Resettable Batch Total</b>	999.9 Litres or Quarts
<b>Max. Non Resettable Totalizer</b>	9,99,999 Litres or Quarts
<b>Least Count / Resolution</b>	0.10 Litres or Quarts
<b>Filter/ Screen Included</b>	No
<b>Max. Viscosity of Media</b>	2000 cST
<b>Option to Recalibrate by User</b>	No

<b>Nr. Of positions in which display can be rotated</b>	0
<b>Protective Shroud on Meter</b>	Yes
<b>Weights &amp; Measures Approved</b>	No
<b>Calibration Certificate Included</b>	No
<b>Water Resistance</b>	IP55

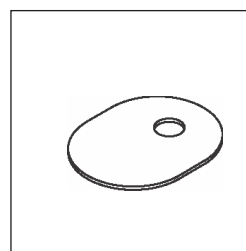
## INSTALLATION & USE

The OM10 can be installed in any position, with flexible and rigid piping as well as directly on pumps and tanks.  
The flow meter has one preset flow direction.

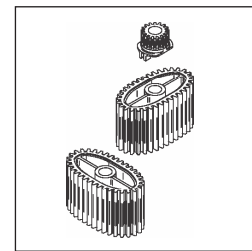
Once installed, OM10 is ready for use. Press the Reset button until the batch total returns to Zero. Totalizer cannot be reset in any way.



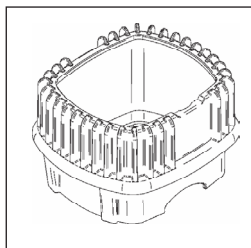
If solid particles get into the measuring chamber, they could prevent the correct operation of the oval gears. Therefore, make provision to filter the fluid by installing a filter before the flow meter (recommended filter: 400  $\mu$ )



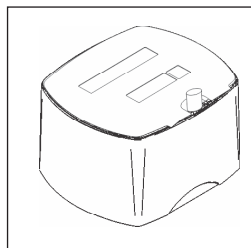
(Fig. 4) Oval Disk



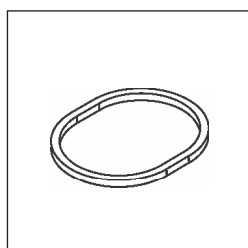
(Fig.5) Oval Gear



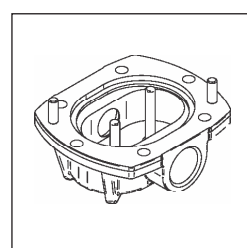
(Fig. 1) Protective Shroud



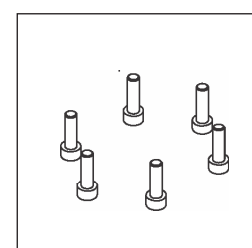
(Fig. 2) Register Assembly



(Fig. 3) Gasket



(Fig. 6) Lid



(Fig.7) Bolts

## PART LIST FOR OM 10

REFERENCE NUMBER	DESCRIPTION	QUANTITY
1	Protective Shroud	1
2	Register Assembly	1
3	Gasket	1
4	Oval Disk	1
5	Oval Gear	2
6	Lid	1
7	Bolts	6

### WETTED COMPONENTS

Aluminium, Stainless Steel, Nitrile Rubber & POM

### DO NOT USE WITH

Water based media, Gasoline etc.

### RECOMMENDED USE

Oils with viscosity upto 2000 cST, Diesel, Biodiesel

## MAINTENANCE

The OM 10 When used correctly, does not require any special maintenance. Inadequate filtration before the meter can lead to wear and clogging of the measurement chamber which should be cleaned as mentioned in the section below

### CLEANING OF THE MEASURING CHAMBER

#### **WARNING**

Before disassembling, make sure that all the liquid has been removed from the flow meter and the pipes connected to it.

Do not attempt to adjust the totals. The disassembly is only for cleaning the chamber and inspection of parts.

#### **NOTE**

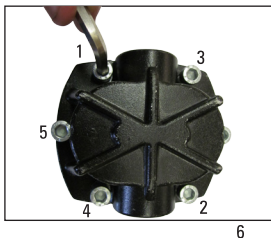
The measuring chamber can be accessed without having to remove the meter from the piping.

Use a soft brush for cleaning

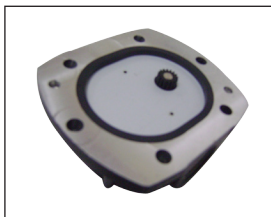
1. Remove the protective Shroud (Fig. 1)



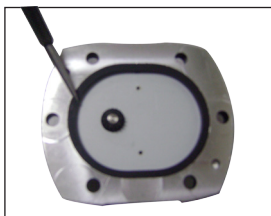
2. Remove the 6 X socket head bolts (Fig. 7) from the underside of the meter. Loosen the bolts in a diagonal sequence as shown, using an allen key (size 5).



3. Remove the underside lid (Fig. 6) from the body.



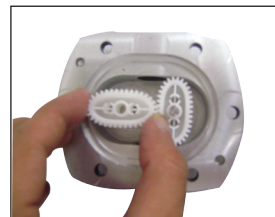
4. Remove the gasket (Fig. 3)



5. Use the pointed tip of a tool to remove the oval disk (Fig. 4)



6. Remove the oval gears (Fig. 5) from the inside of the lid.



7. Clean the inside of the lid and the measuring chamber using a soft brush. Take care not to damage the Aluminium surface.

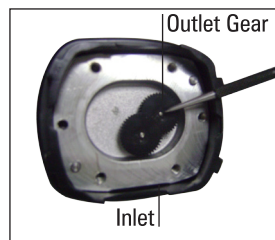


8. Reassemble the parts by following steps 1-5 in the reverse order, taking particular care to

- Install the gasket correctly after having checked and lubricated them.
- Tighten the bolts in a diagonal pattern correctly.
- Ensure that, the oval gears are aligned at 90° to each other and turning smoothly.
- Check that the gears on the lid correspond with that in the chamber outlet.
- Ensure that the outlet gear is on right side when the inlet of the meter is facing down.



Lid




Measuring Chamber



**Groz Engineering Tools (P) Ltd.**  
**Groz Net Industries**

Village Kherki Daula, National Highway-8  
Gurgaon-122001, Haryana, INDIA  
TEL +91.124.282.7700 / 221.4050  
FAX +91.124.2827986 / 221.4224  
FAX (USA) +1.509.271.7848  
FAX (UK) +44.870.121.1854

E-MAIL [info@groz-tools.com](mailto:info@groz-tools.com)  
URL [www.groz-tools.com](http://www.groz-tools.com)

The Groz name, Groz logo and the  mark are  
trademarks of Groz Engineering Tools (P) Ltd. India