Industrial Oil Meters

Models Elster 40 & Elster 50

Sizes: 1 1/2” & 2”

<table>
<thead>
<tr>
<th>Model Sizes</th>
<th>Elster 40 1 1/2”</th>
<th>Elster 50 2”</th>
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</thead>
<tbody>
<tr>
<td>Minimum Flow GPH (l/h)</td>
<td>60 (225)</td>
<td>200 (750)</td>
</tr>
<tr>
<td>Max Rec Cont flow GPH (l/h)</td>
<td>*1600 (6000)</td>
<td>5300 (20000)</td>
</tr>
<tr>
<td>Peak flow GPH (l/h)</td>
<td>2400 (9000)</td>
<td>8000 (30000)</td>
</tr>
<tr>
<td>Accuracy</td>
<td>±1%</td>
<td>±1%</td>
</tr>
<tr>
<td>Max Oper Pressure psi (bar)</td>
<td>150 (10)</td>
<td>150 (10)</td>
</tr>
<tr>
<td>Max Operating Temp °F (°C)</td>
<td>266 (130)</td>
<td>266 (130)</td>
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</tbody>
</table>

Register Reading:
- Smallest Quantity USG (l) 0.1 (0.1) 0.1 (0.1)
- Capacity in Millions USG (l) 10 (35) 10 (35)

Physical Description:
- Weight in lbs. (kg) 45.2 (20.5) 88.2 (40)
- Flanged Connection Type **ANSI 150# ANSI 150#
- Safety Filter Mesh (incl.) 20 20
- Recommended Strainer Mesh 30-40 30-40

Optional Pulse Units:
- Reed Pulses/USG (pulses/l) 0.1 (0.1) 0.1 (0.1)
- Inductive Pulses/USG (pulses/l) 10 (10) 10 (10)

Materials:
- Meter Body Cast Bronze
- Working Chamber Brass (Elster 40) Brass (Elster 50)
- Thimble (bushing) Brass
- Shutter Brass
- O-rings Viton
- Piston Anodized Aluminum
- Safety Filter 316 Stainless Steel

This Elster AMCO Water line of high precision oscillating piston oil flow meters covers a range of flows from 60 to 8000 GPH. These meters are capable of handling a wide viscosity range including light and medium heating oil, diesel, and even heavy heating oil. Accuracy is ±1% throughout the operating flow range for each meter. Each meter is tested with #2 oil at 70°F to verify the accuracy.

Typical applications of the Elster AMCO Water oil meters include:
- Measuring heating oil consumption in burners for heating units and industrial furnaces;
- Measuring fuel consumption in land-based and sea-based diesel engines including emergency power generators;
- Industrial batching applications.

The user has the option of mounting these meters horizontally, vertically or on any plane in between. To assist reading at whatever angle the meter is mounted, the register dial may be rotated through a full 360° (except on reed pulser units). Elster AMCO Water oil meters include a bottom plate that is easily removed to allow for cleaning or inspection of the measuring chamber without removing the meter from the line. Also, the register face features a 1:1 piston ratio low-flow indicator to detect plumbing leaks.

Pulse units are available in both high and low speed pulse outputs, allowing multi-dimensional electronic interfacing for batch operations, rate of flow indications, or remote readouts and control. Typically, reed pulsers are used for remote totalization. The high resolution of the inductive pulser makes it ideal for rate of flow or batching. Compatible electronic equipment is available from Elster AMCO Water.

*Meter selection should be based on the maximum recommended continuous flow rating.

**ANSI 355# flanges optional.
Reed Pulser:
2-wire system
Max Voltage: 48 VAC/VDC
Max Current: 50mA
Max Switch Power: 2W
Max Resistor (47 Ohm) Power: 0.5 W
On Time: 50 ± 10%
9 ft. (3m) of 2-wire cable is provided

Note: This pulser is not polarity (+/-) sensitive. This pulser adds approximately 0.2 lbs. to the weight of the meter.

Inductive Pulser:
2-wire system
Polarity sensitive (+/-)
Voltage: 5-15 VDC
Switching element-slot initiator
DIN 19234 (NAMUR)
Ideal Switching Current: 1mA (open), 4mA (closed) @ 8 VDC
On Time: 50 ± 10%
Use a voltage comparator with open collector output i.e. Pepperel & Fuches p/n SJ3.5-E2
Nema 4 X
No cable supplied

Note: This pulser is polarity (+/-) sensitive. This pulser adds approximately 1.3 lbs. to the weight of the meter.

Dimensions

<table>
<thead>
<tr>
<th>Meter Size</th>
<th>Dimensions in Inches (mm)</th>
<th>E</th>
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Note: All dimensions are ± 1/8"