# Elster 40, Elster 50 Industrial oil meters



## Sizes: 1 1/2" & 2"

	Elster 40	Elster 50
Size	1 ½ <b>″</b>	2″
Minimum flow GPH (I/h)	60 (225)	200 (750)
Max rec cont flow GPH (I/h)*	1600 (6000)	5300 (20000)
Peak flow GPH (/h)	2400 (9000)	8000 (30000)
Accuracy	±1%	±1%
Max operating pressure psi (bar)	150 (10)	150 (10)
Max operating temp °F (°C)	266 (130)	266 (130)

Register reading	1 1⁄2″	2"			
Smallest quantity USG (I)	0.1 (0.1)	0.1 (0.1)			
Capacity in millions USG (I)	10 (1)	10 (1)			

Physical description	11/2″	2″		
Weight in Ibs (kg)	45.2 (20.5)	88.2 (40)		
Flanged connection type	ANSI 150#	ANSI 150#		
Safety filter mesh (included)	20	20		
Recommended strainer mesh	30-40	30-40		

Optional pulse units	1 1/2″	2″
Reed pulses/USG (pulses/I)	0.1 (1)	0.1 (1)
Inductive pulses/USG (pulses/I)	10 (10)	10 (1)

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

### **Materials**

Meter body	Cast bronze
Working chamber	Brass
Thimble (bushing)	Brass
Shutter	Brass
O-rings	Viton
Piston	Anodized alum
Safety filter	316 stainless st





#### Operation

This Elster AMCO Water line of compact 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 these Elster AMCO Water oil meters include: Measuring heating oil consumption in burners for heating units and industrial furnaces; fuel consumption in land-based and measurina 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 maybe 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 interfacing for batch operations, rate of flow indication or remote read and control. Typically, reed pulsers are used for remote totalization. The high speed pulser makes it ideal for rate of flow indication or batching. Compatible electronic equipment is available from Elster AMCO Water.

#### Reed switch pulser

- 2-wire system
- Max voltage: 48 VAC/VDC
- Max current: 50 mA
- Max switch power: 3W
- Max resistor (47 Ohm) power: 0.5W
- On Time: 50 ± 10%
- No cable supplied

Note: This pulser is not polarity (+/-) sensitive. This pulser adds approximately 0.2lbs 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) @ 8VDC
- On time: 50 ± 10%
- Use a voltage comparator with open collector output, i.e Pepperel & Fuches p/n SJ3.5-E2
- Nema 4x
- No cable supplied

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

### Dimensions and net weight

Meter			D						E									
size				2			D		U		U		No pul.		Read pul.		Ind pul.	
	in	(mm)	in	(mm)	in	(mm)	in	(mm)	in	(mm)	in	(mm)	in	(mm)				
1 1⁄2″	11.875	(300)	5.875	(150)	4.500	(116)	8.250	(210)	9.055	(231)	10.040	(254)	10.500	(270)				
2″	13.750	(350)	6.500	(165)	6.500	(165)	11.000	(280)	11.260	(286)	12.205	(310)	12.795	(325)				

Note: All dimensions are  $\pm \frac{1}{8}$ 



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The company's policy is one of continuous product improvement and the right is reserved to modify the specifications contained herein without notice. These products have been manufactured with current technology and in accordance with applicable AWWA Standards.

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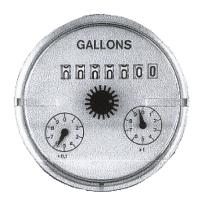
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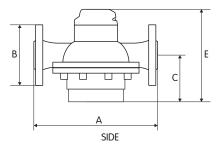
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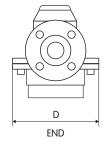
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