

# HONEYWELL FUEL OIL METERS

Industrial Fuel Oil Meters · Sizes 1½" and 2"

Building managers have more tools to control their facility's systems. They need accurate reliable meters to provide input data.

Honeywell oil meters provide fuel consumption measurements to users in flexible formats. Whether directly displaying totalization, showing consumption in an accessible location, or providing high resolution information to user's systems, the oil meters fulfill user's needs for accurate, reliable information.

## OPERATION

This Honeywell 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  $\pm 1\%$  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 Honeywell 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). Honeywell 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 Honeywell.

## MATERIALS

**Meter Body:** Cast Bronze

**Working Chamber:** Brass

**Thimble (Bushing):** Brass

**Shutter:** Brass

**O-Rings:** Viton

**Piston:** Anodized aluminum

**Safety Filter:** 316 stainless steel



*Honeywell 40 (1 ½") and 50 (2") industrial oil meters are capable of handling a wide viscosity range including light and medium heating oil, diesel, and even heavy heating oil.*

**Honeywell**

## OUTPUT OPTIONS

### REED SWITCH PULSER

- 2-wire system
- Max voltage: 48 VAC/VDC
- Max current: 50 mA
- Max switch power: 3W
- Max resistor (47 Ω) power: 0.5 W
- 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
- 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.

### ELECTRONIC REGISTER

#### LCD display of totalization and flow rate

- Power Supply / Analog output
- Voltage: 6 - 30 VDC
- Analog output: 4 - 20mA passive
- Update interval: <1s
- Max load: 0 to 1116 Ω

#### Digital output

- Max voltage: 48 VDC
- Max current: 50mA
- Max output freq: 200 Hz
- On /off resistance: <50 Ω - > 10 MΩ

	HONEYWELL 40	HONEYWELL 50
<b>PERFORMANCE</b>	<b>1½"</b>	<b>2"</b>
Minimum Flow GPH (l/h)	60 (225)	200 (750)
Max Rec Cont Flow GPH (l/h) <sup>1</sup>	1600 (6000)	5300 (20000)
Peak Flow GPH (l/h)	2400 (9000)	800 (30000)
Accuracy	±1%	±1%
Max Operating Pressure psi (bar)	150 (10)	150 (10)
Max Operating Temp °F (°C)	266 (130)	266 (130)

REGISTER READING	1½"	3/4"
Smallest Quantity USG (l)	0.1 (0.1)	0.1 (0.1)
Capacity in Millions USG (l)	10 (1)	10 (1)

PHYSICAL DESCRIPTION	1½"	3/4"
Weight in lbs (kg)	45.2 (20.5)	88.2 (40)
Flange Connection Type	ANSI 150#	ANSI 150#
Safety Filter Mesh (included)	20	20
Recommended Strainer Mesh	30-40	30-40

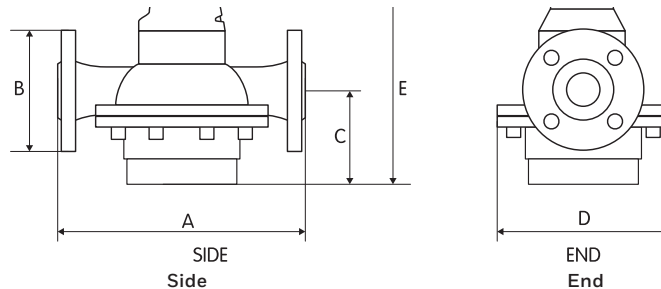
OPTIONAL PULSE UNITS	1½"	3/4"
Reed Pulses per USG (l)	0.1 (1)	0.1 (1)
Inductive Pulses per USG (l)	10 (100)	10 (10)

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

## DIMENSIONS AND NET WEIGHT

Meter Size	A	B	C	D	E			Weight
					No pulses	Reed pulses	Inductive pulses	
	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	lbs. (kg)
1½" (40)	11.875 (300)	5.875 (150)	4.5 (116)	8.25 (105)	9.055 (231)	10.040 (254)	10.5 (270)	45 (20.5)
2" (50)	13.750 (350)	6.5 (165)	6.5 (165)	11 (280)	11.26 (286)	12.205 (310)	12.795 (325)	88 (40)

Note: All dimensions are ±1/8".



### Find Out More

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