## CONTROLS WAREHOUSE FUEL OIL METERS

Industrial Fuel Oil Meters · Sizes 1/8" and 1/4"

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

Controls Warehouse (CW) 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**

The CW line of compact high precision oscillating piston oil meters covers a range of flows from 0.25 to 50 GPH. These meters are capable of measuring light heating oil, diesel, and even gasoline. Accuracy is  $\pm$  1% throughout the operating flow range for each meter. Each meter is tested with #2 fuel oil at 70°F to verify the accuracy.

Typical applications of the CW 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 and gasoline engines including emergency power generators and industrial batching applications.

The meters should be sized according to anticipated flow rates for the system. Users may install piping reducers to fit a properly sized meter into existing piping. The user has the option of mounting these meters horizontally, vertically, or on any plane in between. CW oil meters include a register face that features a 1:1 piston ratio low-flow indicator to detect plumbing leaks and a high resolution sweep hand on the register.

Pulse unit versions of the CW4 (1/8") and CW8 (1/4") are available to allow interfacing for batch operations, rate of flow indication, or remote readouts and control. Registration is retained even with the addition of a pulse output to either the CW4 or CW8. Compatible electronic equipment is available from Controls Warehouse.



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#### FEATURES AND BENEFITS

POSITIVE DISPLACEMENT MEASURING PRINCIPLE

Immune to turbulent flow effects.

RUGGED OSCILLATING PISTON DESIGN

Measures a wide range of fluid viscosities.

**OPTIONAL PULSE OUTPUT** 

Simple integration into building management systems

#### **MATERIALS**

Meter Body: Brass

Cover: Oil proof polymer

Working Chamber: Brass

Shutter: Brass

O-Rings: Buna N (CW4),

Viton CW8)

Piston: Anodized aluminum

Safety Filter: 316 stainless

steel

### REED SWITCH PULSER

**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:  $50 \pm 20\%$ 

• No cable supplied

Note: This pulser is not polarity (+/-) sensitive.

	CW4	CW8
PERFORMANCE	1/8"	1/4"
Minimum Flow GPH (I/h)	0.25 (1)	1 (4)
Max Rec Cont. Flow GPH (I/h)1	14 (50)	35 (135)
Peak Flow GPH (I/h)	20 (80)	50 (200)
Accuracy	±1%	±1%
Max Operating Pressure psi (bar)	355 (25)	355 (25)
Max Operating Temp °F (°C)	140 (60)	140 (60)

REGISTER READING	1/8"	1/4"
Smallest Quantity USG (I)	0.001 (0.001)	0.01 (0.01)
Capacity in Millions USG (I)	0.1 (0.1)	0.1 (0.1)

PHYSICAL DESCRIPTION	1/8"	1/4"
Threaded Connection Type2	1/8" FNPT	1/4" FNPT
Safety Filter Mesh (included)	120	100
Recommended Strainer Mesh	200	200

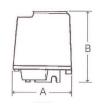
OPTIONAL PULSE UNITS	1/8"	1/4"	
Reed Pulser - Pulses/USG(/I)	10 (10, 100, or 800)	1216 (1 or 321.5)	

- 1. Meter selection should be based on the maximum recommended continuous flow rating.
- 2. Using the provided adapters.

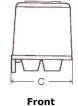
#### **DIMENSIONS AND NET WEIGHT**

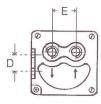
METER SIZE	A	В	С	D	E	Weight
	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	lbs. (kg)
1/8"	2.50 (65)	3.125 (79)	2.50 (65)	0.725 (18)	0.875 (23)	1.5 (0.7)
1/4"	2.50 (65)	3.125 (79)	2.50 (65)	0.725 (18)	0.875 (23)	1.8 (0.8)

Note: All dimensions are  $\pm 1/16$ ".



Side





**Bottom** 

**CONTROLS WAREHOUSE**