ISTEC
Flow Measurement & Control

ISTEC OIL METERS

- **Measurement of Oil Consumption**
- **Measurement of Fuel Consumption**

Features

- Complete range of products offering the best solutions for the measurement of oil consumption
- State-of-the-art design with electronic counter, flow indication, analogue and digital output signals and limiting value switch
- Mounting on the pressure or suction side of a pump, with no straight inlets or outlets required
- Independent of viscosity and temperature
- High vibration resistance
- Classical version with mechanical display

Your benefits

- The reliable solution with everything from a single supplier
- Reliable monitoring and flexible control of the system. Simplifies burner settings and optimising consumption
- Highly flexible mounting with very small space requirements
- Accurate measurements
- Maximum safety in the shipbuilding and automobile industries
- Cost-effective metering point

1 9204 (9205) and 9208 (9209)

Specification Sheet 1)

Type designation		9204 USG	9208 USG
Nominal diameter	mm	4	8
	Inch	1/8	3/8
Connection threads of the meter	Inch G-I	1/8"	1/4"
Maximum temperature	**°F**	**140**	**140**
	°C	60	60
Nominal pressure	**PSI**	**355**	**355**
	bar	25	25
Maximum flow rate Qmax 2)	**gph**	**20**	**50**
	l/h	80	200
Nominal flow rate Qcont 2)	**gph**	**14**	**35**
	l/h	50	135
Minimum flow rate Qmin 3)	**gph**	**1/4**	**1**
	l/h	1	4
Approx. starting flow rate	gph	0,1	0,4
	l/h	0.4	1.6
Smallest readable amount	USG	0.001	0.01
Registration capacity	USG	100000	1000000
Registration at Qn before return to zero	approx. h	7140	28570
Safety filter mesh width	Inch	0.0049	0.0059
	mm	0.125	0.150
Max. mesh width for dirt trap/strainer	Inch	0.0031	0.0040
	mm	0.080	0.100
Weight without couplings	approx. lbs	1.44	1.66
	approx. kg	0.65	0.75
Reed Pulsers			
PPG		10	1216
P/N		**9205**	**9209**

1) Manufacturer's figures
2) Meters for burners and engines have to be selected according to the nominal flow rate. On two-stage burners the meter can be run at Qmax at stage 2.
3) Accuracy limits 1/4 ... 1/2 gph (1 ... 2 l/h) = +1/-2 %

Note:
- All flow rates are indicated in gallons per hour (gph = gallons per hour)
- The pulse values are indicated in number of pulses per gallon (ppg = pulses per gallon)
- 1 Gallon equals 3.785 litres

2 9215 ... 9250

Specification Sheet

Classic type meter Pulse output meter			9215 9216	9220 9221	9225 9226	9240 9241	9250 9251
Electronic type meter 1)			9218	9223	9228	9242	9252
Nominal diameter	DN	mm Inch	15 1/2	20 3/4	25 1	40 1 1/2	50 2
Connection threads of the meter		Inch G	3/4	1	1 1/4	2	--
Maximum temperature		°F °C	266 130				
Nominal pressure with threaded ends		PSI bar	225 16				--
Nominal pressure with flanges	2)	PSI bar	150 10				
Maximum flow rate	Qmax 3)	gph l/h	160 600	400 1500	800 3000	2400 9000	8000 30000
Nominal flow rate	**Qcont** 3)	**gph** l/h	**105** 400	**265** 1000	**530** 2000	**1600** 6000	5300 20000
Minimum flow rate	Qmin	gph l/h	4 15	8 30	20 75	60 225	200 750
Approx. starting flow rate		gph	1	3	8	24	80
Smallest readable amount		USG	0.01	0.01	0.01	0.1	0.1
Registration capacity		USG	999999	999999	999999	9999999	9999999
Registration at Qcont before return to zero		≈ h	9520	3770	1880	6250	1880
Safety filter mesh width		Inch mm	0.0157 0.400	0.0157 0.400	0.0157 0.400	0.0315 0.800	0.0315 0.800
Max. mesh width for dirt trap/strainer		Inch mm	0.0098 0.250	0.0157 0.400	0.0157 0.400	0.0236 0.600	0.0236 0.600
Weight	with threaded ends, without couplings	≈ lbs ≈ kg	4.9 2.2	5.5 2.5	9.3 4.2	38.2 17.3	--
Weight	with flanges ANSI 150	≈ lbs ≈ kg	8.4 3.8	9.9 4.5	16.5 7.5	44.7 20.3	90.2 41

Reed Pulser RV for VZO					
RV 10 ppg	X	X			
1 ppg			X		
0.1 ppg				X	X

1) The electronic type VZF can be set to indicate volume in US Gallons, litres or cubic metres.
Outputs can be set to volume pulses (10 …0.01ppg), analog flow rate (4…20mA, 0…100Hz) or min./max. limit switch.
2) The nominal pressure of the meter is 355 PSI / 25 bar. The limitation to 150 PSI is caused by the flange drillings.
Flange drillings for higher pressure on request.
3) Meters for burners and engines have to be selected according to the nominal flow rate.
On two-stage burners the meter can be run at Qmax at stage 2.

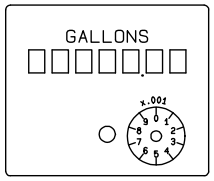
The meters with threaded ends include two cap nuts which may be combined to a coupling by using locally purchased tail pieces.

Note:

- All flow rates are indicated in gallons per hour (gph = gallons per hour)
- The pulse values are indicated in number of pulses per gallon (ppg = pulses per gallon)
- 1 Gallon equals 3.785 litres

3 Dials

9204, 9208



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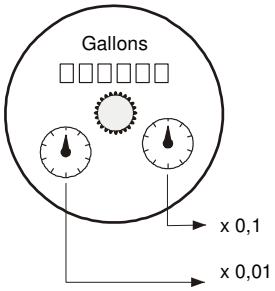
9218 … 9252

LCD

9215, 9220, 9225



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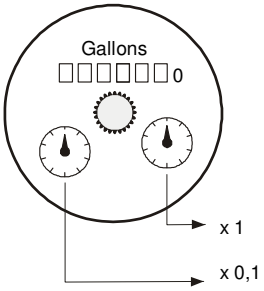
9240 9250



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4 Ordering information

PRODUCT NUMBER	DESCRIPTION
OIL METERS WITH MECHANICAL COUNTER	
9204	1/8" Oil Meter - NPT
9208	1/4" Oil Meter - NPT
9215	1/2" Oil Meter - NPT
9220	3/4" Oil Meter - NPT
9225	1" Oil Meter - NPT
9240	1-½" Oil Meter - NPT
9250	2" Oil Meter - Flanged

OIL METERS WITH LCD DISPLAY & OUTPUTS	
9205	1/8" - NPT, Mechanical Counter, Dry Contact Pulse (10PPG)
9209	1/4" - NPT, Mechanical Counter, Dry Contact Pulse (1216PPG)
9216	1/2" - NPT, Mechanical Counter, Dry Contact Pulse (10PPG)
9218	1/2" - NPT, LCD, Analog & Digital Output
9221	3/4" - NPT, Mechanical Counter, Dry Contact Pulse (10PPG)
9223	3/4" - NPT,LCD, Analog & Digital Output
9226	1" - NPT, Mechanical Counter, Dry Contact Pulse (1PPG)
9228	1" - NPT, LCD, Analog & Digital Output
9241	1-½" - NPT, Mechanical Counter, Dry Contact Pulse (0.1PPG)
9242	1-1/2" - NPT, LCD, Analog & Digital Output
9251	2" - Flanged, Mechanical Counter, Dry Contact Pulse (0.1PPG)
9252	2" - Flanged, LCD, Analog & Digital Output

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