

EGM SERIES OVAL GEAR FLOW METER



SPECIFICATIONS

Technology:		Oval gear
Line Size:		1/8 in., 1/4 in., 3/8 in., 1/2 in.
Accuracy (% of Reading):	EGM004	± 1.0%
	EGM006	± 1.0%
	EGM008	± 1.0%
	EGM015	±0.5%
	EGM020	±0.5%
Repeatability:		Typically ± 0.03%
Flow Range:		0.26-21.1 GPH (1-80 L/min)
Pressure Rating:	Aluminum	500 psi (34 bar)
	Stainless Steel	800 psi (55 bar)
Operating Temperature:		5°F - +176°F (-15°C - +80°C)
Pulse Output Type:		NPN Open Collector (Hall Effect Sensor)
Voltage Pulse:		5 - 24 V (dc)
Current Draw:		20mA max.
Switching Current:		10mA max.
Recommended Filtration:		200 mesh [75 µm]

All FLOMEC® EGM Series Pulse Meters are designed for volumetric flow measurement of clean liquids across a broad range of applications in the automotive, aviation, mining, power, chemical, pharmaceutical, and petroleum industries. The EGM Series will produce accurate and reliable measurements of almost all clean liquids, including but not limited to; alcohols, water based salts and solutions, corrosion inhibitors, brake and transmission fluids, greases, emulsifiers, adhesives, insecticides, and some aggressive chemicals.

FEATURES / BENEFITS

- Oval Gear technology for high accuracy and repeatability
- Direct volumetric measurement of flow
- Accuracy of reading is not affected by temperature and viscosity changes
- Measures high and low viscosity liquids
- Only two moving parts
- "Fuel Consumption" option can tolerate flow pulsations and has a built-in temperature sensor to correct for the fuel density changes (*not available in the US*)

FUEL CONSUMPTION

EGM Series flow meters with the Fuel Consumption option (Integral Option 2) are equipped with an integral PT100 temperature sensor which allows for accurate measurement of fuel consumption on combustion engines by correcting for temperature differences from the inlet to outlet of the engine. It also includes the Pulsating Flow electronics that eliminate the effect of pulsations in the flow.

APPLICATIONS (Typical application but not limited to)

- Petroleum Products
- Alcohols
- Saline Marine Environments

APPROVALS / WARRANTY



The Fuel Consumption System is designed for diesel fuel which is considered a flammable fluid by U.S. standards. **The Fuel Consumption System does not have FM Approval and should not be sold for use inside the U.S.**



EGM SERIES

OVAL GEAR FLOW METER

Housing Material:	EGM004	EGM006	EGM008	EGM015	EGM020
Nominal Size:	⅜" [4 mm]	¼" [6 mm]	⅜" [8 mm]	½" [15 mm]	¾" [20 mm]
Nominal Flow Range* @ 3cP:	0.26-9.5 GPH 1-36 L/hr	0.5-27 GPH 2-100 L/hr	4-145 GPH 15-550 L/hr	.26-10.6 GPM 1-40 L/min	0.8-21 GPM 3-80 L/min
Flow Range @ 1cP	0.25-6.34 GPH 2-24 L/hr	1.32-21.13 GPH 5-80 L/hr	4.76-116.24 GPH 18-440 L/hr	0.39-8.45 GPM 1.5-32 L/min	1.32-16.91 GPM 5-64 L/min
Flow Range @ 7cP	0.13-9.51 GPH 0.5-36 L/hr	0.26-26.42 GPH 1-100 L/hr	3.96-145.29 GPH 15-550 L/hr	0.13-10.57 GPM 0.5-40 L/min	0.53-21.13 GPM 2-80 L/min
Flow Range @ 200cP	0.10-9.51 GPH 0.4-36 L/hr	0.18-26.42 GPH 0.7-100 L/hr	1.58-145.29 GPH 6-550 L/hr	0.10-10.56 GPM 0.4-40 L/min	0.47-21.13 GPM 1.8-80 L/min
Flow Range @ 500cP	0.06-7.13 GPH 0.25-27 L/hr	0.13-19.81 GPH 0.5-75 L/hr	0.25-145.29 GPH 2-550 L/hr	0.08-10.56 GPM 0.3-40 L/min	0.39-26.42 GPM 1.5-80 L/min
Flow Range @ 1000cP	0.03-4.22 GPH 0.12-16 L/hr	0.08-11.89 GPH 0.3-45 L/hr	0.39-95.10 GPH 1.5-360 L/hr	0.05-6.6 GPM 0.2-25 L/min	0.26-13.21 GPM 1-50 L/min
Max. Pressure (AI meters):	500 psi [34 bar]	500 psi [34 bar]	500 psi [34 bar]	290 psi [20 bar]	290 psi [20 bar]
Max. Pressure (SS meters):	800 psi [55 bar]	800 psi [55 bar]	500 psi [34 bar]	290 psi [20 bar]	290 psi [20 bar]
Recommended Filtration:	200 mesh [75 µm]			100 mesh [150 µm]	
Pulse Output Resolution - Standard Pulse/USG [Pulse/L]	10600 [2800]	4012 [1060]	2725 [720]	644 [170]	398 [105]
Pulse Output Resolution - Fuel Cons. Option Pulse/USG [Pulse/L]	10600 [2800]	4012 [1060]	681 [180]	161 [42.5]	99.5 [26.3]
RTD Specification (Integral Option 2)	Platinum Resistance Thermometer 100 Ohms (PT100) Class F0.3				

*Maximum flow reduces as viscosity increases, see flow de-rating guide. Max recommended Pressure drop is 14.5 psi (1 bar).

*When used to meter rate, at very low flow rates, the rate can jump, due to resolution (not accuracy).

DIMENSIONS

Meter Size	Dimension "A"	Dimension "B"	Dimension "C"
EGM004	1.8 in. (4.6 cm)	2 in. (5.1 cm)	1.4 in. (3.6 cm)
EGM006	2.3 in. (5.8 cm)	2.5 in. (6.4 cm)	1.5 in. (3.8 cm)
EGM008	2.3 in. (5.8 cm)	2.5 in. (6.4 cm)	1.9 in. (4.8 cm)
EGM015	2.8 in. (7.2 cm)	3.2 in. (8.2 cm)	2.6 in. (6.6 cm)
EGM020	2.8 in. (7.2 cm)	3.2 in. (8.2 cm)	3 in. (7.6 cm)

