



# ALMG-PD Oval Gear Micro Flow

PD Flowmeter

**Model ALPD Series** 

### **GENERAL**

SMARTMEASUREMENT's ALMGPD Micro-count oval gear flow meters offer precise measurement with guaranteed accuracy and repeatability. Manufactured from 316 grade stainless steel with optional aluminum models for non-aggressive liquids, these positive displacement low flow meters can measure liquids of varying viscosity and density with little or no effect on accuracy across a linear range.

A feature of the oval gear principle is its extremely low pressure loss and capacity to cope with pulsating flows. A high resolution calibrated pulse output requiring DC power can be supplied or a remote LCD rate counter with optional pulse and 4-20mA re-transmission is available to compliment the Micro-Flow PD meter..



#### **FEATURES**

- · Compact and lightweight, suitable for OEM use
- · No flow conditioning/straight pipe required
- High accuracy and repeatability
- Low pressure drop across meter
- Measures low and high viscosity media
- Stainless steel or aluminum models
- · Custom models for higher pressure







## **SPECIFICATIONS**

• Measuring Principle: Oval Gear Positive Displacement

Materials: Body:- SS# 316 (Std.)

Aluminum (Optional)

Gears:- SS# 316 (Std.)

Aluminum (Optional)

Shafts:- SS# 316L

Seal:- Viton (Std.), PTFE, EPR,

Silicon, Buna

Accuracy: ± 0.5% of reading
 Repeatability: ± 0.5% of reading

Ranges: See ordering guide (Page 2)
 Ambient Temperature: -4~+122 °F (-20~+50 °C)

Operating Pressure: 465 psig (32 barg max)-Std. Up to 14,000/1000 bar

Higher Pressures-consult factory

• Max Δ Pressure:: Varies by model, consult factory

Max viscosity: > 2300 SSU (500 cP) @ 1.0 S.G. recommended

Filtration: 200 mesh minimum

(upstream) Required

• Temperature: -22~180°F, (-30~80°C)

Power Supply:  $4\sim26 \, V_{DC}$ 

Power Consumption: 50 mA maximum

Output Signal: Open collector square wave pulse

Process Connections: 1/8"~1/2" BSP or NPTF

Electrical Connection: Hirschmann DIN

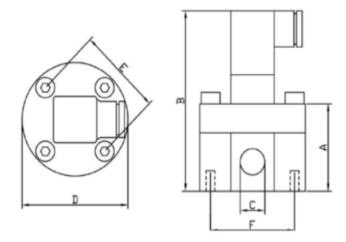
Dimensions: Varies by model, consult factoryWeight: Varies by model, consult factory

REV 1120

SmartMeasurement Tel: +603-4148 1003 | sales@totalmas.com

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#### **DIMENSIONS**



-All dimensions in units of inches (mm)-

Dimensions	MODEL				
	ALMGPD-3, -5	ALMGPD-6	ALMGPD-9	ALMGPD-12	ALMGPD-24
Α	1.38 (35)	1.48 (37.5)	1.57 (40)	1.83 (46.5)	2.20 (56)
В	2.68 (68)	2.72 (69)	2.83 (72)	3.19 (81)	3.58 (91)
С	1/4" NPT or BSP	1/8" NPT or BSP	¼" NPT or BSP	¼" NPT or BSP	½" NPT or BSP
D	1.54 (39)	1.93 (49)	1.93 (49)	2.52 (64)	3.50 (89)
E	M4 x 31 mm	M4 x 42 mm	M4 x 42 mm	M5 x 54 mm	M5 x 80 mm
F	M4 x 31 mm	M4 x 42 mm	M4 x 42 mm	M5 x 54 mm	M5 x 80 mm

TYPE OF FLUID

**LINE SIZE** 

PROCESS TEMPERATURE PROCESS PRESSURE

**NPTF** Female

**ELECTRONIC OPTIONS** 

Please provide the name of your fluid, including operating density and viscosity

Please specify the diameter size in unit of inches or mm

Please indicate the normal and maximum operating temperatures

Please indicate the normal and maximum operating pressure

Please note the desired output signal and available power

#### **ALMGPD EXAMPLE: ALMGPD-5-ST-1 ALMGPD** \*\* \*\* \*\* **DESCRIPTION** 1/8", 0.5~400 mL/minute 3 1/4", 1~800 mL/minute 5 **Nominal Port** %", 5~1000 mL/minute 6 Size & Flow ¼", 0.5~100 L/hour 9 Range 1/4", 6~600 L/hour 12 1/2", 0.3~30 L/minute 24 465 psig (32 barg) ST **Pressure Rating** Up to 14,500 psi (1000 bar)- consult factory HP **BSPP** Female 1 **Options**



#### **TOTALMAS SDN BHD**

E: sales@totalmas.com

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