

Positive Displacement Flow Meter

GF100 Series - Industrial

Introduction

The GF100 positive displacement flow meter operates on the volumetric principle, utilizing precisely geared wheels that rotate in direct proportion to the flow rate, with speed monitored by a high-precision sensor.

Featuring a robust design rated up to 10,000 psi, diverse end fittings, and stainless steel ball bearings, it is ideal for demanding industrial applications.

It offers a measurement range of 0.02 to 120 GPM (0.075 to 450 LPM), with optional pickups for pulse, analog, or combined analog and alarm outputs.



Features

Range: 0.02 to 120 GPM (0.075 to 450 LPM)

Analog / Pulse output

Bi-directional flow measurement

High accuracy and repeatability

Higher trundown ratio

Ideal for non-lubricating fluids

Applications

Chemical processing

Oil & Gas

Hydraulic & Lubrication

Painting and Coating

Automotive

Aviation ...

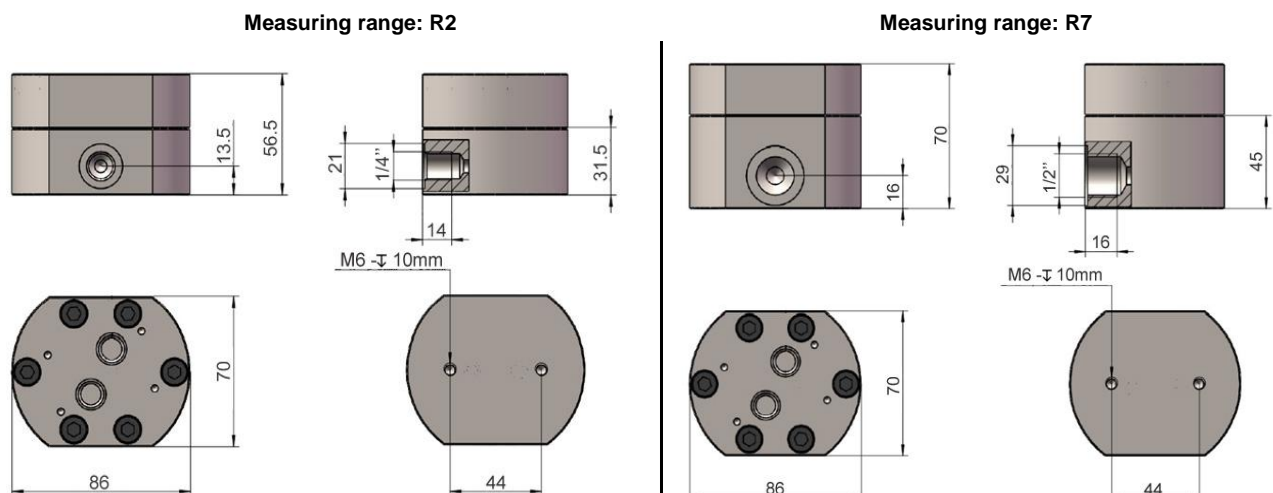
Specifications

Applicable Medium	Liquids
Accuracy	±0.5% of reading (turndown ratio 10:1) ±1% of reading (measuring range)
Repeatability	±0.1% of reading
Pressure Rating	See measuring range below for details
Ambient Temperature	-40...185°F / -40...85°C
Medium Temperature	-40...200°F / -40...100°C (See order code for higher options)
Materials	Body: 316 stainless steel Gear: 316 stainless steel Sealing: FPM (optional NBR, PTFE) Bearing: stainless steel ball bearing

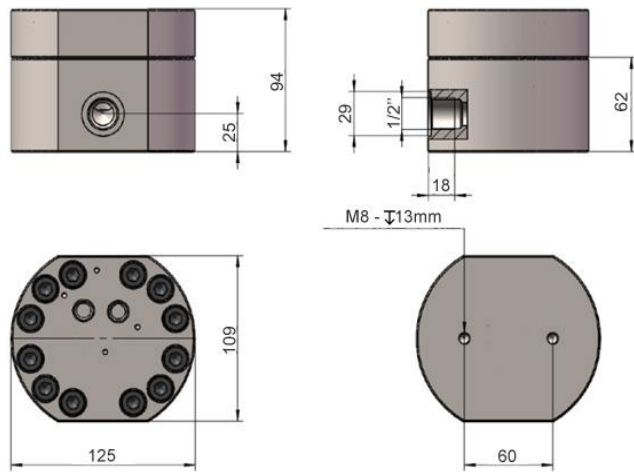
Measuring range

Part Code	End Fitting (Female Thread)	Measuring Range (GPM)	Measuring Range (LPM)	K Coefficient (PULSE/L)	Max. Filter Diameter (Micron)	Max. Pressure	
						psi	bar
R2	1/4" (NPT / G)	0.02...2	0.075...7.5	4200	30	10000	690
R7	1/2" (NPT / G)	0.07...7	0.25...25	1400	30		
R10	1/2" (NPT / G)	0.1...10	0.40...40	840	30		
R20	3/4" (NPT / G)	0.2...20	0.75...75	450	200		
R40	1" (NPT / G)	0.4...40	1.50...150	190	200	6000	420
R60	1-1/4" (SAE Flange)	0.6...60	2.25...225	110	200		
R120	1-1/4" (SAE flange)	1.2...120	4.50...450	55	200		

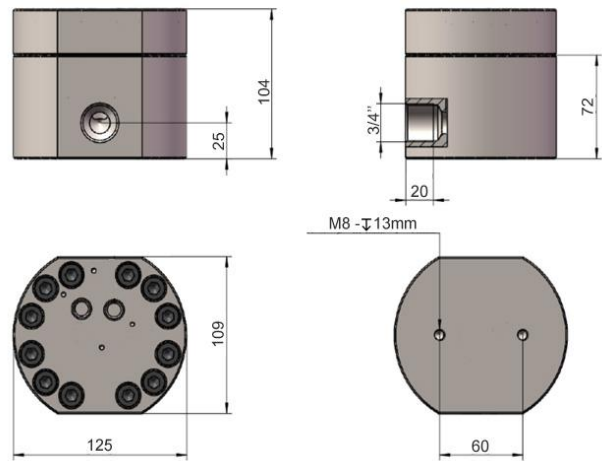
Dimension in mm



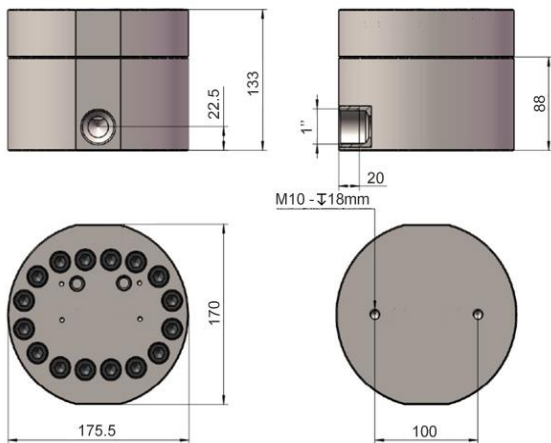
Measuring range: R10



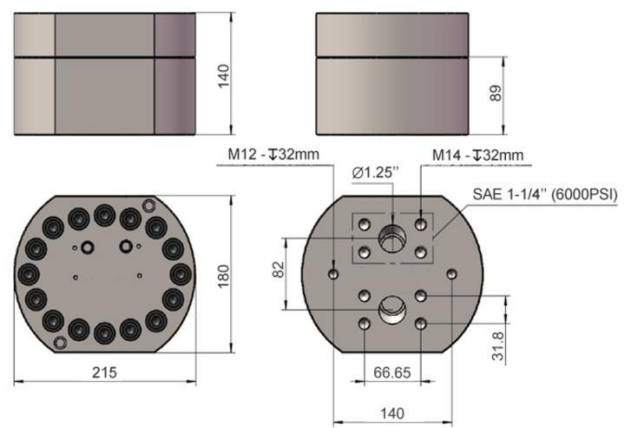
Measuring range: R20



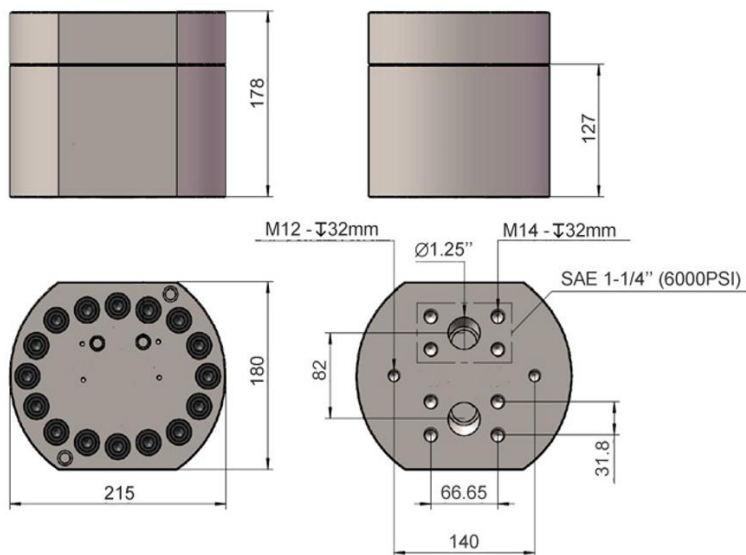
Measuring range: R40



Measuring range: R60



Measuring range: R120



Order Code

Example: GF100-R7GFFS

1. Model

GF100- Positive Displacement Flow Meter

2. Measuring range

R2	0.02...2 GPM
R7	0.07...7 GPM
R10	0.1...10 GPM
R20	0.2...20 GPM
R40	0.4...40 GPM
R60	0.6...60 GPM
R120	1.2...120 GPM

3. End Fitting

GF	G female thread
NF	NPT female thread
S	Other connections on request

4. Sealing Material

F	FPM (standard)
B	NBR
P	PTFE

Electronics

1. Model

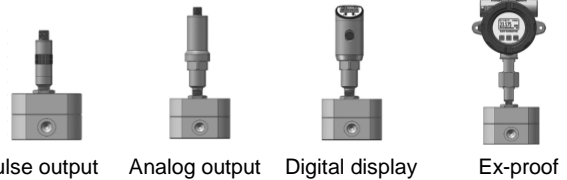
S2000- Electronics for positive displacement flow meter

2. Output

P1	Pulse output
P2	Linearized pulse output
A	Analog output (4...20mA)
D	Digital transmitter
E	Ex-proof transmitter

3. Temperature

T1	-40...200°F (-40...100°C)
T2	-40...300°F (-40...150°C)
T3	-40...450°F (-40...230°C)



Electronics

1. Model

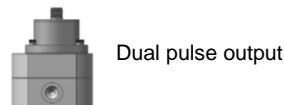
S2000D- Dual-sensor for positive displacement flow meter

2. Output

P1	Single pulse output with 4 x pulse resolution
P2	Dual-pulse Output (Quadrature signal with 90° phase shift)
A	4...20mA + flow direction detection
V	-10...10V + flow direction detection

3. Temperature

T1	-40...200°F (-40...100°C)
T2	-40...300°F (-40...150°C)
T3	-40...450°F (-40...230°C)



See electronics' datasheet for details