SOGF

FLUIDEX®

SMALL OVAL GEAR FLOWMETER

Fluidex series SOGF is a precise Positive Displacement Flow Meter for small capacity. The meters incorporate two rotating gears in oval-shape. The SOGF is available as a blind pulse meter with a non-factored pulse output capable of interfacing to most monitoring and control instrumentation or it can be fitted with different options of registers (totalizers, rate totalizers or batch controllers). Such registers have monitoring and control output options.



SPECIFICATIONS

SOGF	004	006	008		
Nominal Size	1/8" (4mm)	1/4" (6mm)	3/8" (8mm)		
Nominal Flow Range @ 3cP (1)	0.26-9.5 GPH 1.0-36 LPH				
Accuracy @ 3cP	±1.0% of reading (±0.2% of reading with optional RT14 w/ non- linearity correction)				
Repeatability	Typically ± 0.03% of reading				
Temperature Range	-40°C - +150°C (-40°F - +300°F)				
ELECTRICAL	004	006	008		
Output Pulse Resolution	Pulses / gallon (Pulses / L) - Nominal				
Reed Switch	10600 (2800)	7950 (2100)	1345 (355)		
Hall Effect	21200 (5600)	7950 (2100)	2690 (710)		
QP Quadrature Hall	10600 (2800)	3975 (1050)	2690 (710)		
HR - High Resolution Hall	42400 (11200)	15900 (4200)	N/A		
Reed Switch Output	30Vdc x 200mA max. (Max. thermal shock 18°F [10°C] / min.)				
Hall Effect Output (NPN)	3 wire open collector. 5-24V (dc) max., 20mA max.				
Optional Outputs	4-20mA, Scaled pulse, quadrature pulse, flow alarms or 2-stage batch control				



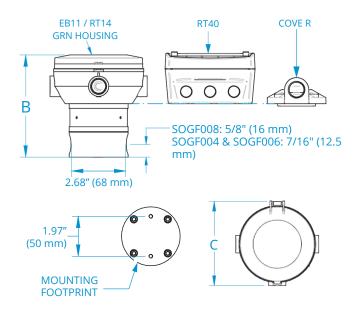
FEATURES

- High accuracy & repeatability
- No need for flow conditioning
- Measure low & high viscosity liquids
- Available with wide range of electronic registers
- Quadrature pulse output option & bidirectional flow.
- Available in screwed ends (NPT and BSP)
- Available in Aluminium and Stainless Steel
- Available in explosion proof and Intrinsically Safe enclosures.

PRESSURE RATING (THREADED METERS)					
Aluminium	200 psi (15 Bar)				
Stainless Steel 316	495 psi (34 Bar)				
Intermediate Pressure SS	1450 psi (100 Bar)				
High Pressure SS	5800 psi (400 Bar)				
Recommended Filtration	200 mesh [75 μm]				

1. Maximum flow is to be reduced as viscosity increases. Max recommended pressure drop is 14.5 psi (1 bar).

DIMENSONS



		C			
SOGF	004	006	008		
EB11/RT14 GRN	4.8"	4.8"	5.0"	4.9"	
	(122mm)	(122mm)	(129mm)	(124mm)	
RT40	4.9"	4.9"	5.2"	3.8"	
	(125mm)	(125mm)	(132mm)	(96mm)	
Cover	3.6"	3.6"	3.9"	2.8"	
	(92mm)	(92mm)	(99mm)	(72mm)	

1. All dimensions are ± 0.079" (2mm}

2. Dimensions of High pressure meters are not shown in the table.

TYPICAL APPLICATIONS

- Fuel additive injection
- Fuel consumption measurements
- Diesel injector/pump test equipment
- Water treatment chemical dosing (flocculants, surfactants, biocides, etc.)
- Corrosion inhibitor dosing
- Demineralized/RO water dosing or dispensing
- Monitoring of oil or grease lubricants
- Chemical batching and dispensing in industrial processes
- Adhesive and sealant dispensing
- Paint and coating dispensing
- Printing ink dispensing
- Inks and dyes dispensing
- Industrial gas metering
- Non-corrosive chemical metering







CONFIGURATION AND ORDER CODE

1		Series
	SOGF	Small Oval Gear Flowmeter
	OM	Explosion Proof Meters
2	SIZE	
	004	1/8 inch (4mm) - 0.26-9.50 GPH (1-36 LPH)
	006	1/4 inch (6mm) - 0.5-27 GPH (2-100 LPH)
	008	3/8 inch (8mm) - 4-145 GPH (15-550 LPH)
3		Body Material
	A	Alumnium
	S	Stainless steel 316
	N	Intermediate Pressure SS316L
	Н	High Pressure SS316
4		Rotor Material / Bearing Type
	00	PPS (not for +150°C (+300°F) / No Bearing (Only for 008)
	51	Stainless Steel / Carbon Ceramic Standard for SOGF004/006, Optional for SOGE008
	71	Keishi Cut Stainless Steel (For high viscosity) / Carbon Ceramic (for SOGF008 only)
5		O-ring Material
	1	FKM (Viton™) 5° F minimum (-15° C)
	3	PTFE encapsulated FKM (Viton™) 5° F minimum (-15° C)
	4	Buna-N (Nitrile), -40° F minimum (-40° C)
6	-	Temperature Limit
	2	250° F (120° C) max.
	3	300° F (150° C) max. Hall Effect, Includes SS Terminal Cover
	5	250° F (120° C) max. Includes Integral Cooling Fin
	8	176° F (80° C) max. Meters with integral instruments, SOGF008 w/ PPS rotor
7		Process connections
	1	BSPP (G) female threaded (ISO 228)
	2	NPT female threaded
8		Cable Entries
	1	M20 x 1.5mm (M16 x 1.5mm for R4 Option)
	2	1/2 inch NPT
	6	3x 16mm drilled holes (for F instruments only)

9		Integral options
		Combination Reed Switch and Hall Effect Sensor
	SS	Stainless Steel terminal cover
	RS	Reed switch only - To suit IS Installations
	E1	Explossion Proof Exd IIB T3T6 (Aluminium & Stainless Steel meters)
	E2	Explossion Proof Exd I/IIB T3T6 (Stainless Steel meters only)
	QP	Quadrature pulse (2 NPN phased outputs)
	Q1	Combination of E1 + QP
	HR	High Resolution Hall Effect (SOGF004 and 006 Only)
	H1	Combination of E1 + HR
	R4	RT40 rate totalizer with backlit large digit LCD [scalable pulse Output, backlight]
	R5	RT14 backlit rate totalizer with all outputs (GRN Housing)
	R7	RT40 backlit rate totaliser in GRN housing
	B11	EB11 dual stage batch controller in GRN housing
	E18A	E018 Backlit rate / totalizer, pulse, 4-20mA, 10 point linearization, HART, Aluminium body
	E18S	E018 Backlit rate / totalizer, pulse, 4-20mA, 10 point linearization, HART, Stainless Steel body
	F115	F115 bi-directional flowrate / totalizer, 4-20mA and pulse outputs in a GRN Housing
	F18	F018 backlit flowrate / totalizer, pulse, 4-20mA, 10 point linearization, HART
	F18IS	F018 backlit flowrate / totalizer, pulse, 4-20mA, 10 point linearization, HART. IS
	F130	IS F130, 2-stage batch controller
10		Display
		Litres (Default)
	G	US Gallons

EXAMPLE

1	2	3	4	5	-	6	7	8	9	10
SOGF	008	A	51	1	-	8	2	2	R7	

For more information about FLUIDEX flowmeters, visit www.fluidex.com.au or contact sales@fluidex.com.au

FLUIDEX PTY LTD PO BOX 4131, LUGARNO NSW 2210 | AUSTRALIA T +61 2 8519 6335 SOGF-DS-07-ENG-01/24 Specifications are subject to change without notice

