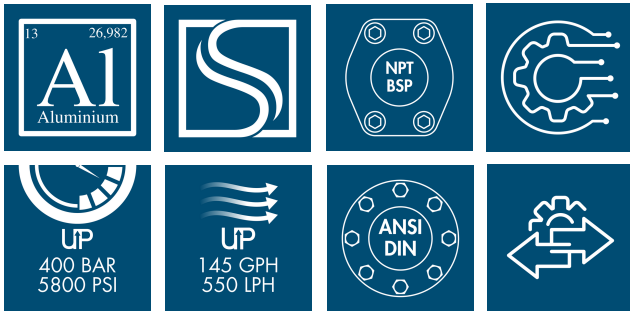


## OVAL GEAR FLOWMETER

Fluidex series MOGF is a precise Positive Displacement Flow Meter for medium capacity. The meters incorporate two rotating gears in oval-shape. The MOGF are used in a wide range of applications where accurate measurement of liquid is required.



### SPECIFICATIONS

MOGF	015	025	040	050
Nominal Size	1/2" (15mm)	1" (25mm)	1 1/2" (40mm)	2" (50mm)
Nominal Flow Range @ 3cP (1)	0.26-10.6 GPM 1-40 LPM	2.6-40 GPM 10-150 LPM	4-66 GPM 15-250 LPM	SS Rotors (2) 8-118 GPM 30-450 LPM
Accuracy @ 3cP (1)	±0.5% of reading (±0.2% of reading with optional RT14 w/ non-linearity correction)			
Repeatability	Typically ± 0.03% of reading			
Temp. Range	-40°C - +150°C (-40°F - +300°F)			
ELECTRICAL	015	025	040	050
Output Pulse Resolution	Pulses / gallon (Pulses / L) - Nominal			
Reed Switch	318 (84)	102 (27)	53 (14)	25 (6.5)
Hall Effect	636 (168)	405 (107)	212 (56)	99 (26)
QP Quadrature Hall	636 (168)	204 (54)	106 (28)	49 (13)
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

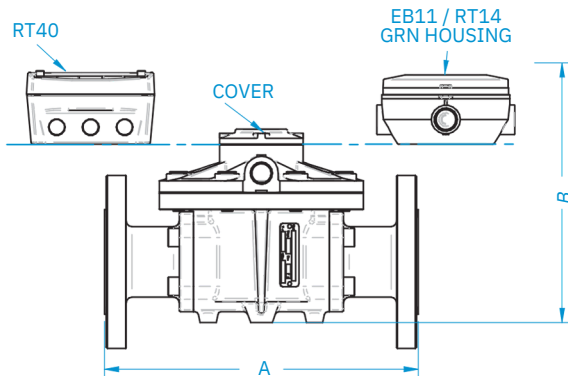
- High accuracy and repeatability for precise flow measurement.
- Can measure both thick and non-conductive liquids.
- Features different pressure ratings: standard, intermediate, and high up to 400 BAR for meters with electronic registers.
- Features various options of end connections including threaded and flanged options to suit various installation requirements.
- Capable of measuring bi-directional flow for added versatility in flow measurement applications.
- No need for flow conditioning, allowing for simplified installation and maintenance.

### PRESSURE RATING (THREADED METERS)

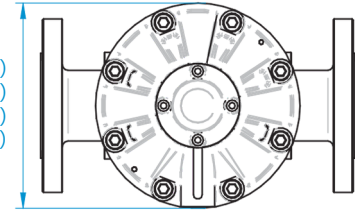
	015	025	040	050
Aluminium	990 psi (68 Bar)	990 psi (68 Bar)	435 psi (30 Bar)	285 psi (20 Bar)
Intermediate Pressure Al		2000 psi (138 Bar)		
Stainless Steel 316	990 psi (68 Bar)	990 psi (68 Bar)	435 psi (30 Bar)	550 psi (38 Bar)
Intermediate Pressure SS	1450 psi (100 Bar)	1450 psi (100 Bar)	725 psi (50 Bar)	725 psi (50 Bar)
High Pressure SS316	5800 psi (400 Bar)	5800 psi (400 Bar)	5800 psi (400 Bar)	4350 psi (300 Bar)
Filtration	100 mesh [150 µm]			

1. Maximum flow is to be reduced as viscosity increases. Max recommended pressure drop is 14.5 psi (1 bar).  
2. With PPS rotor, the capacity is 8-130 GPM (30-500 LPM)

## DIMENSIONS



MOGF040: Ø6.3 in. (160 mm)  
 MOGF050: Ø7.1 in. (180 mm)  
 MOGF015: Ø4.3 in. (110 mm)  
 MOGF025: Ø4.7 in. (120 mm)



A / S / N	A						
MOGF	015A	015S/N	025A	025S/N	040A	040S/N	050
ANSI150 / DIN16	7.4" (189mm)	7.4" (189mm)	7.8" (198mm)	9.3" (237mm)	9.9" (252mm)	9.9" (252mm)	10.9" (277mm)
BSP / NPT	4.3" (110mm)	4.3" (110mm)	5.4" (137mm)	6.9" (176mm)	7.4" (188mm)	7.4" (188mm)	8.3" (212mm)
A / S / N	B						
EB11/RT14 GRN	6" (154mm)	5.8" (148mm)	6.6" (168mm)	6.5" (165mm)	7.9" (203mm)	7.6" (194mm)	8.6" (218mm)
RT40	6.2" (157mm)	5.9" (151mm)	6.7" (171mm)	6.6" (168mm)	8.1" (206mm)	7.8" (197mm)	8.7" (221mm)
Cover	4.2" (106mm)	4.2" (106mm)	4.7" (123mm)	4.6" (117mm)	6.1" (155mm)	5.7" (146mm)	6.7" (170mm)

1. All dimensions are  $\pm 0.079"$  ( $\pm 2\text{mm}$ )
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
- Demineralised / RO water dosing or dispensing
- Monitoring of oil or grease lubricants
- Molasses
- Clean Fluids
- Oil-Based Paints
- Chemical Additive Injection
- Biofuels
- Kerosene
- Diesel Exhaust Fluid (DEF / AdBlue)
- Edible Oils
- Resin and adhesives
- Fertilizers, herbicides, inscticides.



## CONFIGURATION AND ORDER CODE

1		Series
	MOGF	Medium Oval Gear Flowmeter
	OM	Explosion Proof Meters
2	SIZE	
	015	1/2 inch (15mm) - 0.26-10.6 GPM (1-40 LPM)
	025	1 inch (25mm) - 2.6-40 GPM (10-150 LPM)
	040	1 1/4" (40mm) - 4-66 GPM (15-250 LPM)
	050	2" (50mm) - 8-118 GPM (30-450 LPM) w/ SS Rotor
	050	2" (50mm) - 8-130 GPM (30-500 LPM) w/ PPS Rotor
3		Body Material
	A	Aluminium
	M	Intermediate Pressure Al (MOGF025)
	S	Stainless steel 316L
	N	Intermediate Pressure SS316L
	H	High Pressure SS316
4		Rotor Material / Bearing Type
	00	PPS (not for +150°C (+300°F) / No Bearing
	10	Keishi cut PPS (not for +150°C (+300°F) / No Bearing
	51	Stainless Steel / Carbon Ceramic
	71	Keishi Cut Stainless Steel (For high viscosity) / Carbon Ceramic
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
7		Process connections
	0	No fittings (Not available in 015)
	1	BSPP (G) female threaded (ISO 228)
	2	NPT female threaded
	3	Sanitary Fittings (1/2" larger than meter size)
	4	ANSI 150 RF Flanged
	5	ANSI 300 RF Flanged
	6	PN16 DIN Flanged

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	Explosion Proof Exd IIB T3...T6 (Aluminium & Stainless Steel meters)
	E2	Explosion Proof Exd I/IIB T3...T6 (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
MOGF	025	A	51	1	-	8	2	1	R7	

For more information about FLUIDEX  
flowmeters, visit [www.fluidex.com.au](http://www.fluidex.com.au)  
or contact [sales@fluidex.com.au](mailto:sales@fluidex.com.au)

FLUIDEX PTY LTD  
PO BOX 4131, LUGARNO  
NSW 2210 | AUSTRALIA  
T +61 2 8519 6335

MOGF-DS-07-ENG-01/24  
Specifications are subject to change without notice

