

FODF

Oval Gear Flow Sensor



OVERVIEW

Operation

Bass Instruments FODF series compact oval gear flow meters are used for flow measurement and batching in engine test applications. FODF series compact oval gear flow meter uses two fine-toothed meshed gears that are oval in shape and engage each other in a precision machined body. This fluid is transferred sequentially from the inlet to the outlet and one or two pulses are transmitted for each revolution of the gear. Embedded within the gear, a pair of chemically resistant magnets provide the external signals. Detection of the rotation uses either a reed switch or a hall effect sensor on the outside of the fluid housing.

Features

- Compact design
- Solid state hall effect sensor/reed combination
- Flexibility of installation options
- Low pressure drop allows for economical pump selection or gravity flow applications

Application

- Hydraulic fluids, engine
- Fuel, diesel, lubrication oil
- Oil



OPERATING DATA

Working Pressure

32 Bar maximum

Temperature Limit

-30...80°C maximum
160°C optional

Accuracy

±0.5% of reading

Enclosure

IP65

MATERIALS

Body

Aluminum / AISI 316

Gear And Shaft

Aluminum / AISI 316

ELECTRICAL DATA

Signal Output

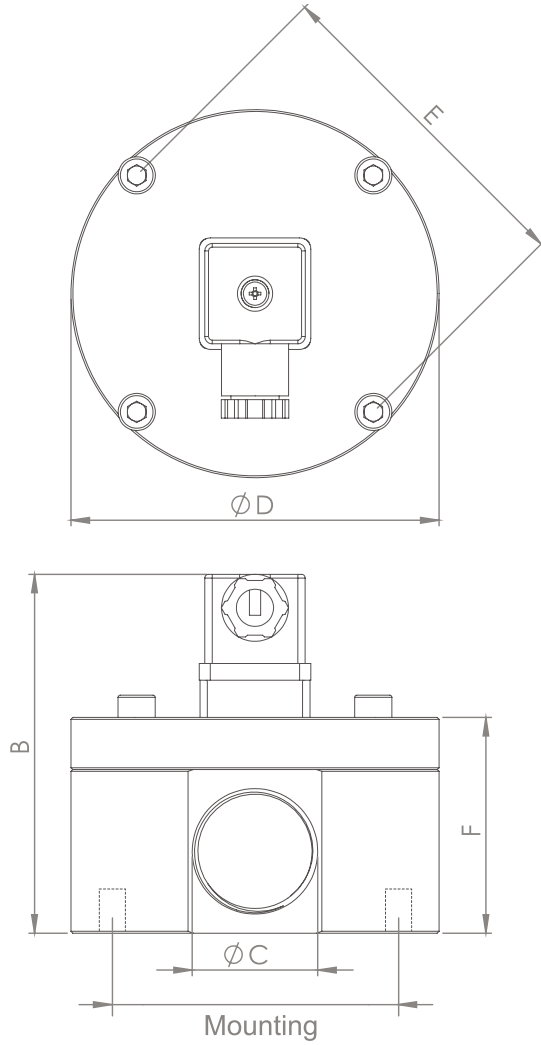
Pulse (push-pull)
4...20mA or NPN on request

Power Supply

5-24 VDC



TECHNICAL DRAWINGS AND DIMENSIONS



Type	A	B	C	D	E
02.1-AL	30	62	G1/8"	39	31(M4)
03/05-AL	30	62	G1/8"	39	31(M4)
05.1/06-AL	30	62	G1/8"	49	42(M4)
09-AL	40	75	G1/4"	64	54(M5)
012-AL	44	79	G1/2"	84	70(M5)
025-AL	58	93	G1"	99	72(M5)
02.1-SS	38	70	G1/8"	39	31(M4)
03/05-SS	35	68	G1/8"	39	31(M4)
05.1-SS	37,5	69	G1/8"	49	42(M4)
06-SS	40	72	G1/4"	49	42(M4)
09-SS	46,5	81	G1/4"	64	54(M5)
012-SS	56	91	G1/2"	89	80(M5)
025-SS	72	107	G1"	113,5	103(M6)



ORDERING

Model	
FODF	Oval Gear Flowmeter

Type	
XX	Please look at the measuring range table for code

Material	
AL	Aluminum
SS	Stainless steel

Output	
P	Pulse
420	4-20 mA
N	NPN

Enclosure	
N	IP65
E	Ex d II B T6 flameproof

