



UNIQUE FLOWSENSE

INTELLIGENCE BEHIND EVERY FLOW





Unique Flowsense is one of the leading manufacturers of Oval Gear Flow Meters. These positive displacement flow meters are designed to measure the flow rate of a wide range of liquids with exceptional accuracy.

The principle of operation is based on two precisely engineered oval-shaped gears that rotate as the liquid passes through, directly measuring fluid volume. Our meters offer

- High accuracy across varying pressure and temperature conditions.
- Capability to handle different viscosities and flow rates.
- Low pressure drop and minimal maintenance.

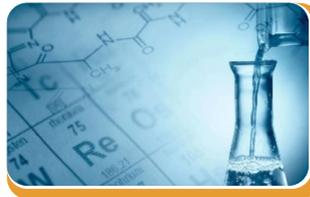
With more than 20 years of experience, our technocrats deliver customized solutions to meet diverse industrial requirements.

WHY UNIQUE FLOWSENSE...?

- Over two decades of expertise in flow measurement technology.
- Complete in-house manufacturing facility (CNC machining, wire-cutting, and conventional machines) ensuring process control and reliability.
- Customer-centric approach with tailor-made solutions.
- Wide product range with unmatched quality standards.

INDUSTRIES AND APPLICATION WE SERVE

- Oil and lubricant flow and total Measurement
- Liquid filling and packing machine
- Chemical Flow and total Monitoring
- Pharmaceutical and Food Industries
- Marine Applications
- Hydraulic Systems
- Automotive Industry
- Acid flow Measurement
- Fuel Consumption Monitoring
- Paint application.
- Silicone sealant resin gummies material flow measure
- Positive Displacement (PD) Flow Meter



OVAL GEAR FLOW METER SPECIFICATION

Items	Specification
Output	Digital Pulse Output (NPN or PNP Type)
Output Power	12VDC to 24VDC pulse
Accuracy	+/-0.2% of FS
Line Size	¼" TO Up to 6"
Max Temp	-20° C to 80° C (150° C OPTIONAL)
Pressure	<ul style="list-style-type: none"> • 30 bar (Aluminum) • 80 bar (Stainless Steel) (UPTO 500bar optional)
MOC Selection	<ul style="list-style-type: none"> • Body-Aluminum, SS304, SS316, SS316L • Gear- Aluminum, SS304, SS316, SS316L • Shaft- SS304, solid carbide • Seal - viton
Connection Type	Flange Type, Threaded Type, Tri clover Clamp
cable Type	3 core , length 1 meter to 10 meter
certificate	calibration test certificate



PRODUCT SPECIFICATION

Flow Meter Features – Flameproof Part code : UFD003	
Items	Specification
Display	<ul style="list-style-type: none"> Graphical Display Character Display
Output	<ul style="list-style-type: none"> Pulse, 4To20 mA,
Security	Password Protected
Power Supply	24 Vdc Or Battey Operated (optional)
Ambient Temp	0° C to 55° C
Enclosure With Size	Aluminum die cast 110 mm



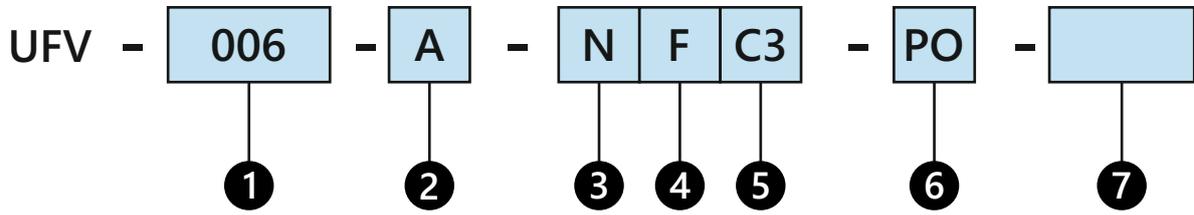
Flow Totalizer (R1) Part code : UFD001	
Items	Specification
Display	<ul style="list-style-type: none"> Graphical Display Character Display
Input	<ul style="list-style-type: none"> Digital Pulse 4to20mA Pulse,
Output	<ul style="list-style-type: none"> 1 Relay/2Relay 4To20 mA, Rs485 Modbus USB data logger (Optional)
Security	Password Protected
Flameproof	No
Power Supply	250VAC / 24VDC (As per Model Selection)
Ambient Temp.	0° C to 55° C
Enclosure with size	ABS Plastic 96 X 96 mm



Flow Totalizer (R2) Part code : (UFD002)	
Items	Specification
Display	<ul style="list-style-type: none"> Graphical Display Character Display
Input	Digital Pulse 4 to 20mA
Output	<ul style="list-style-type: none"> Pulse, 1 Relay 4To20 mA, Rs485 Modbus
Security	Password Protected
Flameproof	No
Power Supply	250VAC
Ambient Temp.	0° C to 55° C
Enclosure with size	ABS Plastic 150 X 75 mm



HOW TO ORDER (MODEL SELECTION)



1 Model(size)

** Refer table 1

2 Material

A	Aluminium
S4	SS 304
S6	SS 316

3 Output type

N	NPN
P	PNP

4 Connection Type

F	Flange #
T	Threading
C	Tri Clamp

For more detail of flange please refer table 3

5 Cable length

Nil	1 meter
C3	3 meter
C5	5 meter

6 Display/output

PO	Pulse Output ##
R1	Remote Display (part UFD001) ^^^
IT	Integreted Totaliser (part UFD003) ^^^
R2	Remote Display (par UFD002) ^^^

For more detail of "PO" please refer specification on page 3

^^^ For more detail of "R1, IT and R2" please refer specification on page 4

7 Make to order

Nil	Standard product
Z*	Customised product

TECHNICAL DATASHEET

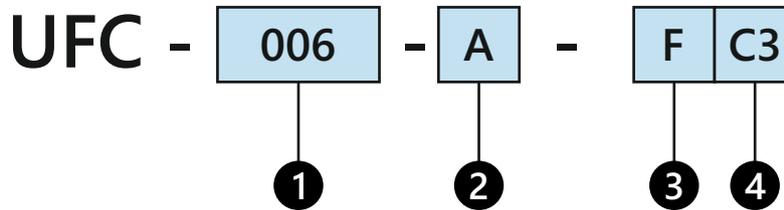
**Table 1

Model	Line size	Thread size	Flow range LPH ^{Note1}	Flow range LPM
006	6 mm	1/4" BSP	1 – 120 LPH	0.015 – 2 LPM
008	8 mm	3/8" BSP	15 – 500 LPH	0.25 – 8 LPM
012	12 mm	1/2" BSP	100 – 1500 LPH	1.50 – 25 LPM
020	20 mm	3/4" BSP	200 – 2200 LPH	3 – 35 LPM
025	25 mm	1" BSP	500 – 4000 LPH	8 – 65 LPM
025 B	25 mm	1" BSP	500 - 6000 LPH	8- 100 LPM
040	40 mm	1½" BSP	1000 – 10000 LPH	16 – 165 LPM
050	50 mm	2" BSP	5000 - 20000 LPH	83 – 335 LPM
080	80 mm	3" BSP	10000 – 50000LPH	165 – 835 LPM
100	100mm	4" BSP	20000-75000 LPH	335 – 1250 LPM

Note 1 : Flow rate data reference for the oil having Viscosity 28 mm²/s at 40°C

FUEL CONSUMPTION CALCULATOR

HOW TO ORDER (MODEL SELECTION)



1 Size

2 Material

3 Connection Type

4 Cable Length

** Refer table 2

A	Aluminium
S4	SS 304

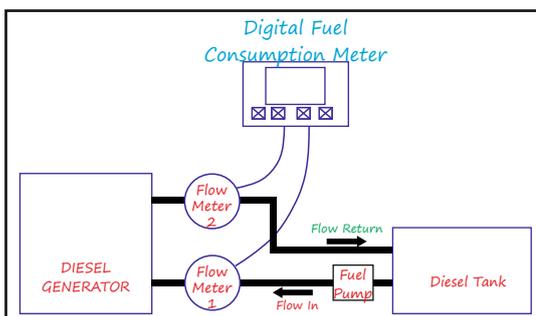
F	Flange
T	Threading
C	Tri Clamp

Nil	1 meter
C3	3 meter
C5	5 meter

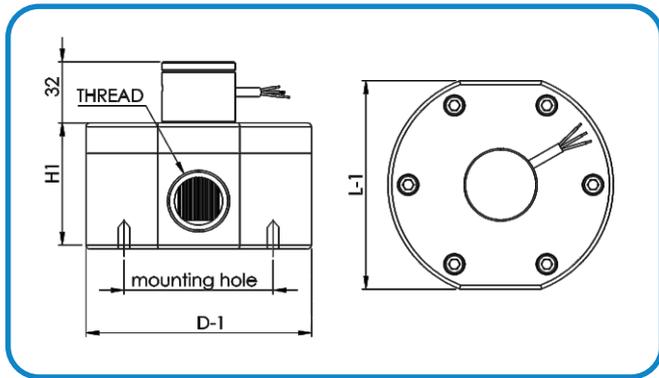
**Table 2

Size	Thread size	Diesel Generator Capacity
006	1/4" BSP	200 KW/KVA/HP
008	3/8" BSP	400 KW/KVA/HP
012	1/2" BSP	1000 KW/KVA/HP
020	3/4" BSP	1500 KW/KVA/HP
025	1" BSP	2000 KW/KVA/HP

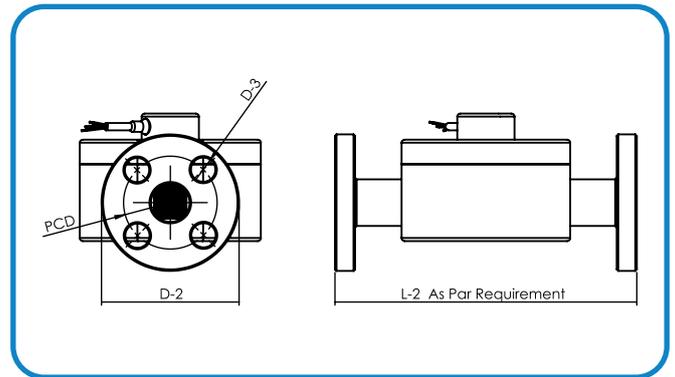
Items	Specification
Display	Graphical Display Character Display
Input	Digital Pulse
Output	<ul style="list-style-type: none"> Rs485 Modbus USB DATA Logging
Security	Password Protected
Power Supply	12 VDC
Ambient Temperature	0° C to 55° C
Enclosure	ABS Plastic 96 X 96
Accuracy	+ -0.2% of FS
Line Size	1/4 " , 3/8" , 1/2" , 3/4" , 1"
Max Temp	-20° C ~ 80° C (150° C OPTIONAL)
Pressure	<ul style="list-style-type: none"> 30 bar (Aluminum) 80 bar (Stainless Steel)
MOC Selection	<ul style="list-style-type: none"> Body- Aluminum, Ss304, Ss316, ss316l Gear- Aluminum, Ss304, Ss316, ss316l Shaft- ss304, solid carbide Seal - viton
Connection Type	Flange Type, Threaded Type, Tri clover Clamp
cable Type	3 core , length 1 meter to 10 meter



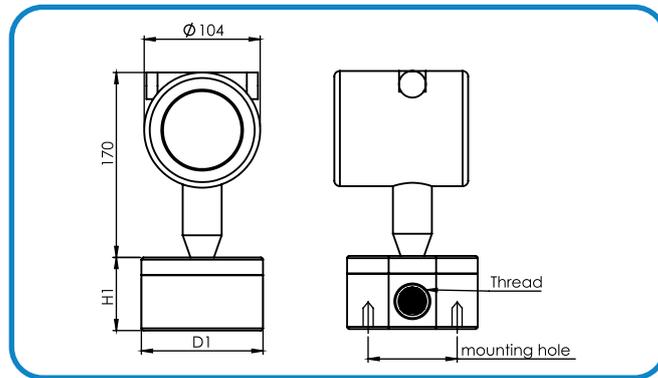
DIMENSIONS



Pulse output Thread



Pulse Output Flange



Integrated Flameproof Display

Part No.	H-1	D-1	L-1	Thread	Class150 Flange	D2	D3	PCD	Mounting Hole
006	40	62	58	1/4"BSP	1/2"	88.9	15.74X4	60.45	M5X46
008	42.5	67	61	3/8"BSP	1/2"	88.9	15.74X4	60.45	M6X51
012	49	87	82	1/2"BSP	1/2"	88.9	15.74X4	60.45	M6X67
020	56	97	91	3/4"BSP	3/4"	98.55	15.74X4	69.85	M6X80
025	66	111	100	1"BSP	1"	107.95	15.74X4	79.24	M6X90
025 B	7	117	109	1"BSP	1"	107.95	15.74X4	79.24	M6X96
040	96	136	124	1-1/2"BSP	1-1/2"	127.0	15.74X4	98.55	M6X116
050	116	175	160	2"BSP	2"	152.4	19.05X4	120.65	M10X152
080	126	228	220	3"BSP	3"	190.5	19.05X4	152.4	M10X204

All Dimension are in mm



LINKEDIN



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WEBSITE

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