



Unique Flowsense are one of leading Oval gear flow meters manufacturers which are positive displacement flow meters used to measure the flow rate of various liquids. It consist of two rotating oval-shaped gears that measure fluid volume directly. This kind of flow meter offer high accuracy with temperature and pressure optional and can handle various flow rates and different viscous fluids and are used in various industries like chemical, oil and gas, Pharmascitical, Automotive, paint and more. It has low pressure drop and require low maintenance.

Our technocrates has more than 20years of experience to provide customised solutions for various requiement in different industies.

#### Why Unique Flowsense..??

- More than 20 years of experience in the field of flow meter manufacturing and solution provide.
- In-House production facilty like cnc machining, wire cut and other convetional machine enable us for better process control.
- **©** Customer centric approach.
- @ Wide range of product with unmatched quality.

#### **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
- Silicone sealant resin gummies material flow measure
- Paint application.









#### **Product Specification**

Oval Gear Flow Meter Features			
Items	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 ~ 80°C (150°C OPTIONAL)	
Pressure	•	30 bar (Aluminum)	
	•	80 bar (Stainless Steel) (UPTO 500bar optional)	
MOC Selection	Body-Aluminum, Ss304, Ss316, ss316l		
	<ul> <li>Gear- Aluminum, Ss304, Ss316, ss316l</li> </ul>		
	<ul> <li>Shaft- ss304, solid carbide</li> </ul>		
	•	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	Graphical Display		
	Character Display		
Output	Pulse,		
	• 4To20 mA,		
Security	Password Protected		
Power Supply	24 VDC		
Ambient	0°C to 55°C		
Temperature			
Enclosure	Aluminum die cast 110 mm		



Flow Totalizer (R1) Part code: UFD001			
Items	Specification		
Display	Graphical Display		
	Character Display		
Input	Digital Pulse		
	• 4to20mA		
Output	<ul><li>Pulse,</li></ul>		
	<ul> <li>1 Relay/2Relay</li> </ul>		
	• 4To20 mA,		
	Rs485 Modbus		
Security	Password Protected		
Flameproof	No		
Power Supply	250VAC / 24VDC (As per Model Selection)		
Ambient Temperature	0°C to 55°C		
Enclosure	ABS Plastic 96 X 96		



Flow Totalizer (R2) Part no : UFD002			
Items	Specification		
Display	Graphical Display		
	Character Display		
Input Digital Pulse			
Output	<ul> <li>Pulse,</li> </ul>		
	• 1 Relay		
	<ul> <li>4To20 mA,</li> </ul>		
	Rs485 Modbus		
Security	Password Protected		
Flameproof	No		
Power Supply	250VAC		
Ambient Temperature	0°C to 55°C		
Enclosure	ABS Plastic 150 X 75		

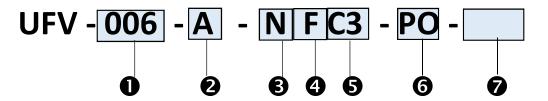


### **OVEL GEAR TYPE**





#### **How to order (Model Selection)**



• Model(size)

\*\* Refer table

1.1 below

Material

Α	Aluminium		
<b>S4</b>	SS 304		
S6	SS 316		

**3** Output type

N	NPN
Р	PNP

4 Connection Type

F	Flange	
Т	Threading	
С	Tri Clamp	

**<sup>6</sup>** Cable length

Nil	1meter		
C3	3 meter		
C5	5 meter		

**6** Display/output

РО	Pulse Output		
R1	Remote Display (part UFD001)		
ΙΤ	ntegreted Totaliser (part UFD003)		
R2 Remote Display (par UFD002)			

Note: refer specification for more detail.

#### Make to order

	Standard product		
Z*	Customised product		

#### **Technical Datasheet:**

Table 1.1

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

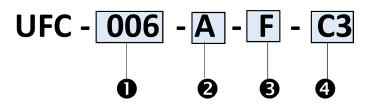
Note 1: Flow rate data reference for the oil having Viscosity 28 mm<sup>2</sup>/s at 40°C

For more detail of flage please refer table 1.2

# **Fuel consumption Calculator**



#### **How to order (Model Selection)**



Size

\*\* Refer table 2.1 at page 3 2 Material

A Aluminium S4 SS 304

**3** Connection Type **4** Cable length

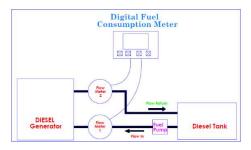
F	Flange	
Т	Threading	
С	Tri Clamp	

Nil	1meter		
С3	3 meter		
C5	5 meter		

#### **Technical Datasheet:**

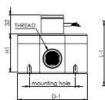
Table 2.1:

SIZE	Thread	DIESEL			
	size	GENERATOR			
		CAPACITY			
006	1/4" BSP	200 KW/KVA/HP			
800	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			

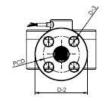


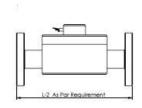
Item	Specification				
Diamlary	Graphical Display				
Display	Character Display				
Input	Digital Pulse				
Output	o Rs485 Modbus				
Output	<ul> <li>USB DATA Logging</li> </ul>				
Security	Password Protected				
Power Supply	12 VDC				
Ambient	202. 5522				
Temperature	0°C to 55°C				
Enclosure	ABS 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	30 bar (Aluminum)				
	80 bar (Stainless Steel)				
MOC Selection	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				

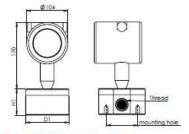
# **DIMENSIONS**











Pulse output Thread

Pulse Output Flange

Intigretad Flameproof Display

Part no.	H-1	D-1	Ы	Thread	CLASS150 FLANGE	D2	D3	PCD	MOUNTING HOLE
006	40	62	58	1/4" BSP	1/2"	88.9	15.74X4	60.45	M5 X 46
008	42.5	67	61	3/8" 8SP	1/2"	88.9	15.74X4	60.45	M6 X 51
012	49	87	82	1/2" BSP	1/2"	88.9	15.74X4	60.45	Má X67
020	56	97	91	3/4" BSP	3/4*	98.55	15.74X4	69.85	M6 X 80
025	66	111	103	1" BSP	Je.	107.95	15.74X4	79.24	M6 X 90
025 B	76	117	109	1" BSP	1*	107.95	15.7X4	79.24	M6 X 96
040	96	136	124	1-1/2° BSP	1-1/2"	127.0	15.74X4	98.55	M8 X 116
050	116	175	160	2" BSP	T	152.4	19.05X4	120.65	M10 X 152
080	126	228	220	3" BSP	3"	190.5	T9.05X4	152.4	MI0 X 204

## **UNIQUE FLOWSENSE**

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