

# Oval Gear Flow Meter



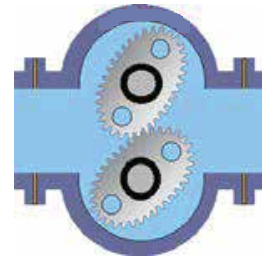
## Description

Oval gear flow meter is a pointer display. It is a kind of light volume flow meter of which the print wheel has cumulative count and zero. This flow meter is widely used in various industrial areas to control the liquid flow.

It is applicable to all types of liquid measuring, such as crude oil, diesel, gasoline and so on, with great range and high precision, convenient use and maintenance. Different materials selected can meet the petroleum, chemical, pharmaceutical, food, metallurgy, electricity, transportation and other fields of liquid flow measurement.

## Operating Principle

Fluid enters inlet port and then passes through the metering chamber. Inside the chamber, fluid forces the internal gears to rotate before exiting through the outlet port. Each rotation of the gears displaces a specific volume of fluid. As the gears rotate, a magnet on each end of the gear passes a reed switch in the top mounted register's circuit board.



## Flow Range

| Diameter (mm) | Flow Range(m <sup>3</sup> /h) |                | Temperature  |
|---------------|-------------------------------|----------------|--|
|               | ±0.5% Accuracy                | ±0.2% Accuracy |  |
| 10            | 0.08~0.4                      | 0.08~0.4       | -20°C~+80°C<br>(High Temp.is available on request) |
| 15            | 0.3~1.5                       | 0.5~1.5        |  |
| 20            | 0.4~3                         | 0.8~3          |  |
| 25            | 0.8~6                         | 1.5~6          |  |
| 40            | 1.5~15                        | 3~15           |  |
| 50            | 3~24                          | 8~24           |  |
| 65            | 6~40                          | 10~40          |  |
| 80            | 8~60                          | 12~60          |  |
| 100           | 13~100                        | 20~100         |  |
| 150           | 19~190                        | 38~190         |  |
| 200           | 34~340                        | 68~340         |  |

## Model Selection

| Model          | Suffix Code |   |   |    |   |    |     | Description                                     |
|----------------|-------------|---|---|----|---|----|-----|---|
| OG-            | ①           | ② | ③ | ④  | ⑤ | ⑥  | ⑦   | Oval Gear Flowmeter                             |
| Diameter       | XXX         |   |   |    |   |    |     | 010: DN10<br>100: DN100<br>200: DN200           |
| Converter Type | M0          |   |   |    |   |    |     | Mechanical Display; No Output                   |
|                | M1          |   |   |    |   |    |     | Mechanical Display; Pulse Output; 24V DC        |
|                | M2          |   |   |    |   |    |     | Mechanical Display; 4-20mA Output; 24V DC       |
|                | B           |   |   |    |   |    |     | LCD Display; No Output; Battery                 |
|                | L1          |   |   |    |   |    |     | LCD Display; Pulse Output; 24V DC               |
|                | L2          |   |   |    |   |    |     | LCD Display; 4-20mA Output; 24V DC              |
| Reset Function |             | Y |   |    |   |    |     | Yes   |
|                |             | N |   |    |   |    |     | None  |
| Accuracy       |             |   |   | 02 |   |    |     | ±0.2% of Rate                                   |
|                |             |   |   | 05 |   |    |     | ±0.5% of Rate                                   |
| Structure      |             |   |   |    | S |    |     | Standard Type                                   |
|                |             |   |   |    | T |    |     | High Temperature Type(280°C)                    |
|                |             |   |   |    | V |    |     | High Viscosity Type(3000 cst)                   |
| Body Material  |             |   |   |    |   | CI |     | Cast Iron                                       |
|                |             |   |   |    |   | CS |     | Cast Steel                                      |
|                |             |   |   |    |   | S4 |     | SS 304  |
|                |             |   |   |    |   | S6 |     | SS 316  |
| Connection     |             |   |   |    |   |    | DXX | D16: DIN PN16 Flange; D25: DIN PN25 Flange...   |
|                |             |   |   |    |   |    | AXX | A15: ANSI 150# Flange; A30: ANSI 300# Flange... |
|                |             |   |   |    |   |    | JXX | J10: JIS 10K Flange; J20: JIS 20K Flange...     |

## For example

OG 100 M0 Y 02 T S4 D16

- ① 100: DN100
- ② M0: Mechanical Display, no output with reset
- ③ Y: Reset function
- ④ 02: Accuracy: 0.2% of rate
- ⑤ T: High temperature type
- ⑥ S4: SS304 body material
- ⑦ D16: Flange DIN PN16

