



**MIAL**®  
**INSTRUMENTS PVT. LTD.**  
*Measuring & Beyond*

# MOF 200

OVAL GEAR FLOW METER



| Measuring & Beyond

CE

[www.mialinstruments.com](http://www.mialinstruments.com)

# MOF 200



## Mial Oval Gear Flow meter

### DESCRIPTION

#### Flow Meter:

The MOF 200 Oval Gear Flow-meter is a top-tier positive displacement flow meter designed for precise measurement and control of liquids in pipelines. With its wide metering range, high accuracy, and ability to handle high Temperature & high viscosity fluids, it excels across various industries including crude oil, chemicals, food, and pharmaceuticals, making it an essential tool for efficient liquid management.

### APPLICATIONS

#### Calibration and Metering of Crude oil :

Mial MOF 200 Oval gear flow meters are crucial in the oil industry for accurately measuring the flow of crude oil during extraction, transportation, and refining processes. Their high accuracy ensures precise billing and inventory management. They are particularly effective in handling the high viscosity of crude oil, ensuring accurate readings even under challenging conditions.

#### Chemical Industry:

In the production of chemicals, precise measurement is essential for maintaining product quality and safety. MOF 200 Oval gear flow meters provide the accuracy needed for dosing and blending operations. Additionally, many chemicals are corrosive, and these MOF 200 meters can be constructed with materials that withstand harsh chemical environments.

#### Chemical Fibre Industry :

Accurate flow measurement is vital in the production of synthetic fibers to ensure consistency and quality in the final product. Oval gear flow meters help in controlling the flow of polymers and other chemicals used in fiber production, ensuring precise and efficient manufacturing processes.

#### Traffic and Transportation:

The MOF 200 Oval gear flow meters are used in the transportation industry for measuring fuel consumption in vehicles, ships, and airplanes, aiding in fuel management and efficiency. Accurate flow measurement also helps in managing the loading and unloading of fuel and other liquids, ensuring precise and efficient operations.

#### Pharmaceutical Production and Sterile Conditions :

In the pharmaceutical industry, accurate liquid measurement is crucial for the production of medicines, where precise dosages are critical. MOF 200 Oval gear flow meters can be designed to meet stringent sanitary requirements needed in medical and healthcare applications, ensuring both accuracy and hygiene.



MOF 200 Oval Gear Flow Meter

## FEATURES

### **Wide Metering Range:**

The MOF 200 Flow-meter offers a broad metering range, allowing it to accurately measure the flow of Fluid with viscosity: 2~10000mPa.s across varying flow rates, from low to high volumes.

### **Exceptional Accuracy:**

With precision-engineered components and advanced technology, the MOF 200 ensures high levels of accuracy and calibration, providing reliable data for optimization and revenue generation.

### **Adaptability to High Viscosity:**

Fluid such as Crude oil often exhibits high viscosity, but the MOF 200 Flow-meter is designed to handle such fluids effectively, maintaining accurate measurement even in challenging operating conditions.

### **Robust Construction:**

Built to withstand harsh operating environments, the MOF 200 Flow-meter features a robust construction that ensures long-term reliability and durability.

### **Integrated Calibration Capabilities:**

The MOF 200 flow-meter may incorporate integrated calibration features, enabling easy programmable adjustments to maintain measurement accuracy over time and comply with industry standards and regulations.

## BENEFITS OF FLOW METER

- Precise measurement and regulation of fluid flow, such as those of crude oil
- Increased operational efficiency and optimization of production processes
- Long-term reliability and durability in harsh operating environments
- Compliance with industry standards and regulations through integrated calibration capabilities
- Enhanced control and monitoring with optional remote access features

## MOF 200 specifications\*

### Operation and performance

#### Flow measurement

Gear Technology ( positive displacement flow meter)

#### Fluid types

Fuel oil, Petroleum, Petroleum Products, Vegetable Oil, Food, Chemicals

#### Fluid properties

Fluid with viscosity: 2~200mPa.s

#### Pipe sizes

DN 8mm - DN 200mm

#### Flow accuracy

±0.5%;

#### Measurement parameters

Instantaneous flow, Totalized Flow

#### Certification

Calibration certification

### Electronics

#### Transmitter Type

Integral

#### Enclosure IP rating

IP65

#### Power supply

24 VDC

*Use SMPS when employing AC power*

#### Ambient temperature

32°F to 131°F ( 0°C to 55°C)

#### Standard output

Analog output : 4-20mA

Pulse output

#### Network Connection

Modbus RTU RS 485

#### Operating Temperature range

Standard : -4°F to 140 °F (-20 °C to 60 °C)

Optional : -4°F to 302 °F (-20 °C to 150 °C)

#### Nominal Pressure

Standard 1.6 Mpa

Optional : 2.5 Mpa, 4.0 Mpa, 6.4 Mpa

#### Process connections

ANSI class 150 Flanges

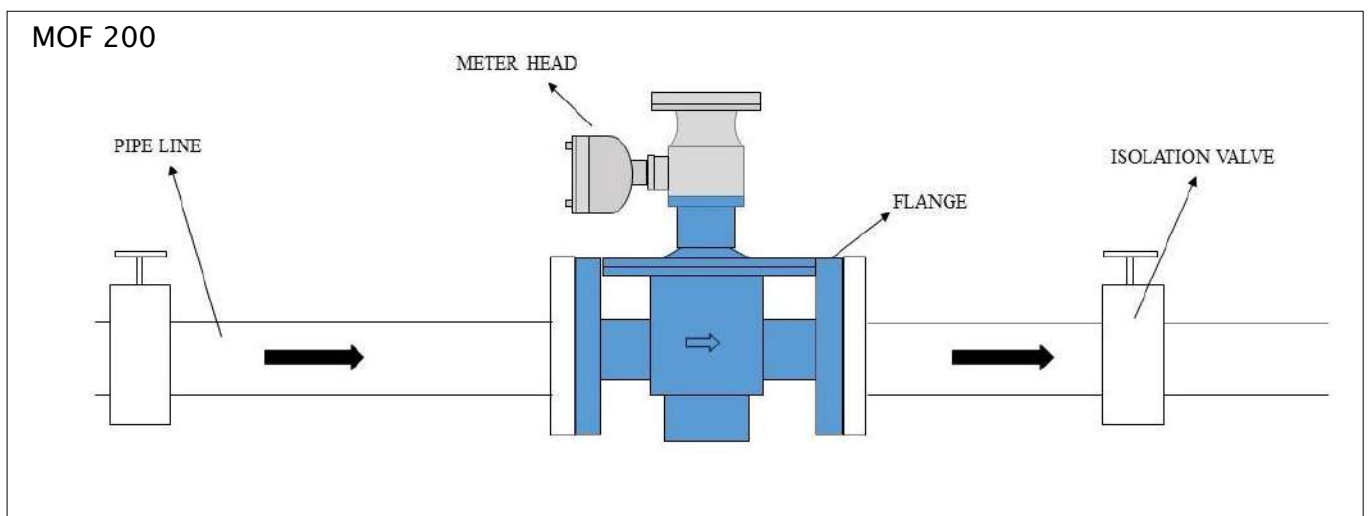
#### Flow Sensor Materials

Standard: Cast Steel

Optional: Stainless Steel

*\*Specifications are subject to change without prior notice.*

### INSTALLATION DIAGRAM



## ORDERING CODE

### Meter Model Number Coding = MOF 200-DN B-CDE-FGH-IJ

#### Model

Flow meter = MOF 200

#### BB = Pipe Size

01 = 1/4"	06 = 1/2"
02 = 3/8"	07 = 2"
03 = 1/2"	08 = 3"
04 = 3/4"	09 = 4"
05 = 1"	10 = 6"
24 = 1.25"	11 = 8"

#### C = Media Viscosity

- 1 = 200~1000 mPa·s
- 2 = 2~200 mPa·s
- 3 = 1000~2000 mPa·s
- 4 = 3000~10000 mPa·s

#### D = Body Material

- 1 = Cast Steel
- 2 = S.S 304

#### E = Process Connection

- 1 = ANSI 150 Flanges

#### F = Nominal Pressure

- 1 = 1.6 Mpa
- 2 = 2.5 Mpa
- 3 = 4.0 Mpa
- 4 = 6.4 Mpa

#### G = Input Power

- 1 = 24 VDC

#### H = Signal Output

- 1 = 4-20 mA & Pulse

#### I = Communication

- 1 = Modbus RTU RS485

#### J = Electronics Enclosure Mounting Configuration

- 1 = Integral IP65 enclosure



**MIAL**<sup>®</sup>  
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