

HM SERIES TANK TRUCK POSITIVE DISPLACEMENT FLOW METERS



Applications :

- Petroleum products
- Gasoline and jet fuels
- Treat water
- Acid PH Liquids
- Crude Oil, viscous liquids
- Liquefied Petroleum Gas(LPG)
- Most of industries (water, oil, solvent, etc)
- Chemical & Pharmaceutical
- Automotive, Agriculture
- Animal feeds, Food & Beverage

HM Tank Truck Positive Displacement Flow Meter provides high accuracy and repeatability in a wide range, and is applicable for LPG, Gasoline, Jet Fuel, Crude Oil, Acid pH Liquid and Petroleum products.

| Model | HM40-1 | HM50-1 | HM50H-1 | HM80-1 | HM80H-1 | HM100-1 | HM100H-1 | HM150-1 | HM150H-1 |
|---------------|---|-----------|---------|-----------|----------|------------|----------|------------|----------|
| Size | 40mm | 50mm (2") | | 80mm (3") | | 100mm (4") | | 150mm (6") | |
| Flow Range | 25~250 | 38~380 | 55~550 | 75~750 | 115~1150 | 130~1300 | 170~1700 | 225~2250 | 300~3000 |
| Volume per | 0.309L | 0.681L | | 1.839L | | 5.102L | | 9.507L | |
| Max. Pressure | 10 bar / 150 psi | | | | | | | | |
| Accuracy | ±0.2% | | | | | | | | |
| Repeatability | ≤0.05% | | | | | | | | |
| Unit | Liter, US Gallon or Imp Gallon | | | | | | | | |
| Body Material | Aluminum, Cast Iron, Steel, Stainless Steel | | | | | | | | |
| Seal & Gasket | Buna N, Vitron, Tefron | | | | | | | | |
| Connection | NPT, BSPT, ANSI Flange, Slip Weld | | | | | | | | |
| Strainer Mesh | Diesel – 80, Gasoline – 40 | | | | | | | | |
| Viscosity | 30SSU ~ 1,500,000 SSU | | | | | | | | |

HH SERIES OVAL GEAR FLOW METERS



Model No. : HH-I
Model Type : Inside Type



Model No. : HH-E
Model Type : Female Type



Model No. : HH-O
Model Type : Outside Type



Model No. : HH-H
Model Type : High Temperature Type



Model No. : HH-J
Model Type : Jacket Type

HH SERIES OVAL GEAR FLOW METERS



Model No. : HH-I/E/O/H/J

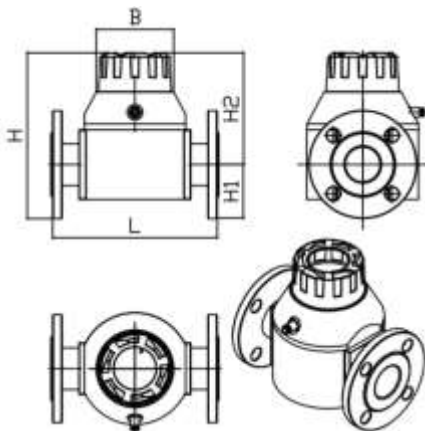
Specifications :

- Meter size: DN 15 ~ 50
- Accuracy: $\pm 0.5\%$
- Body Material: Aluminum, Cast Steel, Stainless Steel 304, 316L
- Rotor: PPS, Stainless Steel 304, 316L, Aluminum
- Display: 2 Total (1 Resettable, 1 Cumulative Flow Rate), Factory Calibration in gallons and liter. 2 User Calibrations.
- Temperature 120°C, 180°C (Option)
- Pressure: 10 bar, 16, 24, 40bar (Option)
- Output: Pulse
- Power : Lithium Battery (4~5 years)
- Automatic On & Off
- Specific Gravity Compensation (0.01~2.00)

The HH positive displacement flow meter, which is a flow meter like an oval gear with high competitiveness, measures the flow rate by engaging gears, and provides accurate measurement values and repeatability, and it is possible to measure the flow rate even at high temperature and high viscosity. It is applicable for a wide range of industries and various fluids such as foods (water, edible oil, syrup, and milk) and chemical fluids (gasoline, kerosene, diesel, heavy oil, etc.)

DIMENSIONS

| Model | Thread Type (mm) | | | | | Flange Type (mm) | | | | | Analog Type (mm) | | | | | Digital Type (mm) | | | | |
|-------|------------------|-----|-----|----|-----|------------------|-----|-------|------|-----|------------------|-----|-------|------|-----|-------------------|-------|------|------|-----|
| | L | B | H | H1 | H2 | L | B | H | H1 | H2 | L | B | H | H1 | H2 | L | B | H | H1 | H2 |
| HH15 | 106 | 100 | 130 | 20 | 110 | 160 | 100 | 157.5 | 47.6 | 110 | 160 | 100 | 247.5 | 47.5 | 200 | 160 | 237.5 | 47.5 | 47.5 | 180 |
| HH20 | 106 | 100 | 130 | 20 | 110 | 160 | 100 | 160 | 50 | 110 | 160 | 100 | 250 | 50 | 200 | 160 | 230 | 50 | 50 | 180 |
| HH25 | 106 | 100 | 130 | 20 | 110 | 170 | 100 | 172.5 | 62.5 | 110 | 170 | 100 | 262.5 | 62.5 | 200 | 170 | 242.5 | 62.5 | 62.5 | 180 |
| HH40 | 106 | 100 | 140 | 25 | 115 | 200 | 100 | 185 | 70 | 115 | 200 | 100 | 270 | 70 | 200 | 200 | 250 | 70 | 70 | 180 |
| HH50 | 240 | 100 | 260 | 75 | 185 | 240 | 100 | 260 | 75 | 185 | 240 | 100 | 260 | 75 | 185 | 240 | 260 | 75 | 75 | 185 |



| Model | Size | FLOW RANGE |
|-------|----------------|----------------|
| HH15 | DN 15 (1/2") | 10~700 LPH |
| HH20 | DN 20 (3/4") | 20~1300 LPH |
| HH25 | DN 25 (1") | 50~3500 LPH |
| HH32 | DN 32 (1-1/4") | 180~4800 LPH |
| HH40 | DN 40 (1-1/2") | 600~1500 LPH |
| HH50 | DN 50 (2") | 1000~35000 LPH |

HH SERIES – Sensor Type OVAL GEAR FLOW METERS



Model No. : HH-S

Model Type : Sensor Type

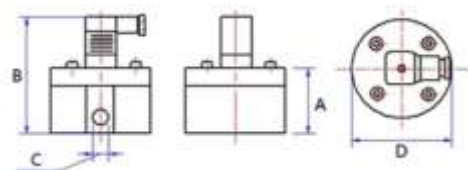
The HH positive displacement flow meter, which is a flow meter like an oval gear with high competitiveness, measures the flow rate by engaging gears, and provides accurate measurement values and repeatability, and it is possible to measure the flow rate even at high temperature and high viscosity. It is applicable for a wide range of industries and various fluids such as foods (water, edible oil, syrup, and milk) and chemical fluids (gasoline, kerosene, diesel, heavy oil, etc.)

GENERAL SPECIFICATIONS

| | | | |
|--------------|--|----------|---|
| Accuracy | Standard type : $\pm 0.5\%$ Some special medium : $\pm 0.2\%$ | | |
| Pressure | 30 bar (Max. pressure 1000 bar) | | |
| Temperature | -30 °C ~ +80 °C (Max. temperature 150 °C) | | |
| Power Supply | 4 ~ 26 VDC | | |
| Output | Pulse output | | |
| Model | -SS Series | Material | Chamber (SS316), Gear (SS316L), Shaft (SS316L) |
| | | Medium | Suitable for various chemical liquid |
| | -Al Series | Material | Chamber (Aluminum), Gear (Aluminum), Shaft (SS316L) |
| | | Medium | Suitable for non-various chemical liquid |

| Model | Flow Range | Connection |
|-----------------------|----------------|-------------------------|
| HH-M2-SS/AL | 0.5~150 ml/min | H/NPT 1/8 Female thread |
| HH-M3-SS/AL | 3~300 ml/min | G/NPT 1/8 Female thread |
| HH-M5-SS/AL | 5~1,000 ml/min | G/NPT 1/8 Female thread |
| HH-M6-SS/AL | 0.5~100 L/H | G/NPT 1/4 Female thread |
| HH-M9-SS/AL | 6~600 L/H | G/NPT 1/4 Female thread |
| HH-M12-SS/AL | 0.3~30 L/min | G/NPT 1/2 Female thread |
| HH-M25-SS/AL | 0.5~100 L/min | G/NPT 1/2 Female thread |
| Test Bench Flow Meter | 1~800 ml/min | G/NPT 1/8 Female thread |

| Model/ Size | M2, M3, M5 | M2, M3, M5 (High pre) | M6 | M9 | M12 | M25 |
|----------------|---------------|-----------------------------|-------|-------|-------|-------|
| A | 30 | 30 | 40 | 47 | 44 | 56 |
| B | 62 | 62 | 72 | 79 | 79 | 91 |
| C | G1/8" | G1/8" | G1/4" | G1/4" | G1/2" | G1" |
| D | 40 | 40 | 50 | 60 | 85 | 100 |
| E | M5*31 | M5*31 | M5*42 | M5*72 | M5*72 | M6*61 |



E : Bottom thread x Pore distance

HR SERIES ROOTS FLOW METERS



Model No. : HR Series
Model Type : Series Type
Applications :

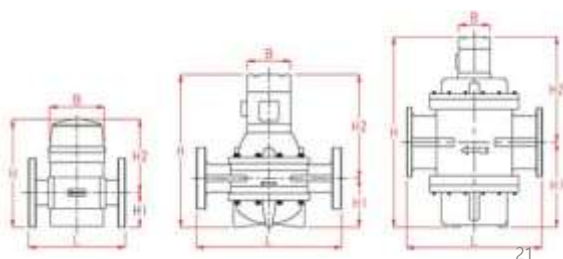
FR Roots Flow Meter are suitable for Chemical solution such as Soda, Acid, Alcohol, Salt Solution, Solvent, Petroleum, LPG, Fat, Oil, Cold water, Hot water in variety industries.

GENERAL SPECIFICATIONS

| | |
|-------------------------------|--|
| Meter Size | DN 25 - 200 |
| Accuracy | ±0.5% |
| Body Material | FC, Stainless Steel |
| Rotor | Aluminum, Stainless Steel 304, 316L |
| Display | 2 Total Rate), Factory Calibration in gallons and liter. 2-user Calibrations |
| Temperature | 120 °C, 180 °C (Option) |
| Pressure | 10 bar, 16, 24, 40 bar (Option) |
| Output | Pulse |
| Power | Lithium Battery (4-5 years) |
| Power on/off | Automatic |
| Specific Gravity compensation | 0.01~2.00 |

| Model | Size | Flow Range |
|---------|----------------|----------------------------|
| HR-25 | DN 25 (1") | 0.5 ~ 8 m ³ /h |
| HR-32 | DN 32 (1-1/4") | |
| HR-40 | DN 40 (1-1/2") | 0.8 ~ 13 m ³ /h |
| HR-50 | DN 50 (2") | 1 ~ 30 m ³ /h |
| HR-80 | DN 80 (3") | 2 ~ 55 m ³ /h |
| HR-100 | DN 100 (4") | 2 ~ 120 m ³ /h |
| HR-100L | DN 100 (4") | 4 ~ 130 m ³ /h |
| HR-125 | DN 125 (5") | 5 ~ 160 m ³ /h |
| HR-150 | DN 150 (6") | 5 ~ 200 m ³ /h |
| HY-200 | DN 200 (8") | 10 ~ 300 m ³ /h |

| Model | | Size | | Flow Range | |
|---------|-----|------|-----|------------|-----|
| HR-25 | 200 | 114 | 202 | 62.5 | 110 |
| HR-40 | 200 | 114 | 225 | 70 | 110 |
| HR-50 | 370 | 115 | 386 | 124 | 262 |
| HR-80 | 300 | 115 | 470 | 155 | 315 |
| HR-100 | 370 | 115 | 550 | 168 | 332 |
| HR-100L | 430 | 115 | 624 | 275 | 349 |
| HR-125 | 500 | 115 | 688 | 307 | 381 |
| HR-150 | 500 | 115 | 754 | 340 | 414 |
| HR-200 | 600 | 115 | 928 | 427 | 501 |



LYO – DP Flange Type OVAL GEAR FLOW METER



Model No. : LYO-DP
Model Type : Flange Type
Features :

The digital nozzle positive displacement meter, LYO-DP integrates with the nozzle to provide oil supply and management. It is widely used in fuel guns and consists of a metric body made of aluminum that can withstand high pressure, and is compatible with both the flange type and the screw type.

GENERAL SPECIFICATIONS

| | |
|-------------------|-----------------------|
| Power | Standaard AAA battery |
| Bursting Pressure | 200 bar |
| Working Pressure | 70 bar |
| Flow Rate | 30 L/min |
| Accuracy | ±0.5% |
| Repeatability | 0.2% |
| Viscosity | 2~2000 |