

# ZHM – POSITIVE DISPLACEMENT SPUR GEAR FLOW METER

*Ideal for measuring the flow rates of multi-viscosity fluids, as well as abrasive fluids and fluids under high pressure, such as paints, coatings, waxes, epoxies, sealants and oils.*



## APPLICATIONS

Talk about tough – these positive displacement flow meters from AW-Lake can handle it. They feature rugged stainless steel gears and bodies, and even tougher tungsten carbide bearings. So not only will they meter abrasive fluids and fluids under high pressure – they will do it for a very long time.

While these in-line flow meters have super strong construction characteristics, they are also finely engineered, which prevents fluid slippage and allows the devices to measure even the lowest flow accurately.

## FEATURES

- Six flow ranges from 0.001 to 40.0 GPM
- Accuracy up to 0.5% of reading
- Pressure rating up to 6,000 PSI
- Non-intrusive sensors, panel mount displays, and electronic modules available

## TECHNICAL SPECIFICATIONS

### Measuring Accuracy

± 0.5% over full range with 30cP fluid

### Repeatability

± 0.1%

### Maximum Operating Pressure

up to 6,000 psi

### Maximum Fluid Temperature

350°F (180°C)

### Flow Measuring Range

Six flow ranges:

0.001 to 0.53 gpm

0.005 to 0.8 gpm

0.025 to 1.85 gpm

0.13 to 6.6 gpm

0.13 to 18.5 gpm

1.3 to 40 gpm

## BENEFITS

### Simple to install & Use

These meters are easy to use and install, since there is no need for straight run piping upstream or downstream of the flow meter. Non-intrusive sensors, panel mount displays, and electronic modules available.

### Accurate and Reliable

These meters have the ability to maintain consistent accuracy despite changing viscosity conditions, with accuracy of +0.5% of reading.

### Rugged Construction

The ZHM's solid construction is offered in 303 stainless steel.

### Flexible

Meter may be used in applications requiring bi-directional flow, and is offered in six different flow ranges (0.001 to 40.0 GPM).

## MATERIALS OF CONSTRUCTION

Body	303 Stainless Steel (standard)*
Gears	Stainless Steel
Bearings & Shaft	Tungsten Carbide
O-Ring	PTFE; FKM Optional
Bolts	Inconel (ISO 4762)

\*Consult factory for other materials available.

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## METER DATA

Meter Size	Flow Range (GPM)	Impulses/ Gallon	Impulses/ cc	Diameter (in)	Height (in)	Weight (Lbs / Kg)	Ports	Adaptor Pb	Filtration (microns)	Pressure Rating
ZHM-01/1	0.001 to 0.5	100,300	26.5	2.99"	1.61"	3 / 1.3	M12x1.5	¼" NPT	120	6,000 psi
ZHM-01/2	0.005 to 0.8	53,000	14.0	2.99"	1.97"	3.5 / 1.6	M12x1.5	¼" NPT	120	6,000 psi
ZHM-02	0.025 to 1.85	15,900	4.2	3.33"	2.16"	4.9 / 2.2	M12x1.5	¼" NPT	120	6,000 psi
ZHM-03	0.13 to 6.6	6,600	1.74	3.33"	2.63"	6.4 / 2.9	M12x1.5	¼" NPT	120	6,000 psi
ZHM-04	0.13 to 18.5	1,800	0.47	4.92"	3.78"	18.7 / 8.5	M20x1.5	¾" NPT	200	6,000 psi
ZHM-05	1.3 to 40.0	500	0.13	6.88"	5.24"	50.7 / 23	M33x2.0	1" NPT	200	3,600 psi

## RECOMMENDED SENSORS

Sensor Type	Model	Sensor Features
Carrier frequency single sensor	VTE02-K	For ZHM-01/ to -04, supply voltage 7-29 VDC, 5-pin
Carrier frequency single sensor	VTE02-L	For ZHM-05, supply voltage 7-29 VDC, 5-pin
Carrier frequency dual sensor	VTD03-11	For ZHM-01/1 & -01/2, supply voltage 8-30 VDC, 5-pin
Carrier frequency dual sensor	VTD03-20	For ZHM-02 & -03, supply voltage 8-30 VDC, 5-pin
Carrier frequency dual sensor	VTD03-50	For ZHM-05, supply voltage 8-30 VDC, 5-pin



VTE02 SENSOR ►

◄ VTD03 SENSOR

Products may be subject to change without notice - Contact factory for the most up-to-date product information.