

Positive Displacement Spur Gear Flow Meter

Ideal for measuring the flow rates 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 Gear Meters 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:

- Ten flow ranges from 0.001 to 265.0 GPM
- Accuracy: up to 0.5% of reading
- Pressure rating up to 9,000 PSI
- Non-intrusive sensors, panel mount displays, and electronic modules available

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.

ACCURATE AND RELIABLE

This meter has 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 and 316 stainless steel bodies.

FLEXIBLE

Meter may be used in applications requiring bi-directional flow, and is offered in ten different flow ranges (0.001 to 265.0 GPM).

ECONOMIC LOW FLOW METER

The meters produce good resolution and high accuracy at low flow rates, offering an affordable replacement for older turbine technology.



Technical Specifications:

- **Ten flow ranges:**
 - 0.001 to 0.25 gpm
 - 0.003 to 0.5 gpm
 - 0.01 to 0.5 gpm
 - 0.02 to 2.0 gpm
 - 0.1 to 7.0 gpm
 - 0.1 to 20 gpm
 - 1.0 to 40 gpm
 - 1.0 to 66 gpm
 - 5.0 to 132 gpm
 - 13 to 265 gpm
- **Working pressure:** up to 9,000 psi
- **Accuracy:** ± 0.5% with 30cP fluid
- **Repeatability:** ± 0.1%
- **Max Fluid Temperature:** 350°F (180°C);

Materials of Construction:

- **Body:** 303 stainless steel (standard)*
- **Gears:** stainless steel
- **Ball bearings:** tungsten carbide
- **O-Ring:** PTFE; FKM optional

*Consult factory for other materials available.

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	0.001 to 0.26	155,000	41.0	2.9"	1.61"	2.9 / 1.3	M12x1.5	¼" NPT	120	9,000 psi
ZHM-01/1	0.001 to 0.5	100,300	26.5	2.99"	1.61"	3 / 1.3	M12x1.5	¼" NPT	120	9,000 psi
ZHM-02/1	0.013 to 0.52	31,000	8.2	3.33"	2.0"	4.6 / 2.1	M12x1.5	¼" NPT	120	9,000 psi
ZHM-02	0.025 to 2.0	15,900	4.2	3.33"	2.16"	4.9 / 2.2	M12x1.5	¼" NPT	120	9,000 psi
ZHM-03	0.13 to 7.0	6,600	1.74	3.33"	2.63"	6.4 / 2.9	M12x1.5	¼" NPT	120	9,000 psi
ZHM-04	0.13 to 19.0	1,800	0.47	4.92"	3.78"	18.7 / 8.5	M20x1.5	¾" NPT	200	9,000 psi
ZHM-05	0.13 to 40.0	500	0.13	6.88"	5.24"	50.7 / 23	M33x2.0	1" NPT	200	6,000 psi
ZHM-06/1KL	1.3 to 66	400	0.10	7.40	5.51	59.5 / 27	SAE 1 ¼" flange	flange	300	6,000 psi
ZHM-06KL	5.0 to 132	200	0.05	7.40	7.09	77 / 35	SAE 1 ¼" flange	flange	300	6,000 psi
ZHM-07KL	13.0 to 265.0	90	0.02	9.13	7.87	146 / 66.5	SAE 1 ½" flange	flange	300	6,000 psi



Recommended Sensors:

Sensor Type	Model	Sensor Features
Carrier frequency single sensor	VTER/P	For ZHM-01, supply voltage 7-29 VDC, 5-pin
Carrier frequency single sensor	VTEK/P	For ZHM-02-04, supply voltage 7-29 VDC, 5-pin
Carrier frequency single sensor	VTEL/P	For ZHM-05-07, supply voltage 7-29 VDC, 5-pin
Carrier frequency dual sensor	TD-01	For ZHM-01, supply voltage 8-30 VDC, 5-pin
Carrier frequency dual sensor	TD-11	For ZHM-01/1, supply voltage 8-30 VDC, 5-pin
Carrier frequency dual sensor	TD-21	For ZHM-02/1, supply voltage 8-30 VDC, 5-pin
Carrier frequency dual sensor	TD-02	For ZHM-02, supply voltage 8-30 VDC, 5-pin
Carrier frequency dual sensor	TD-03	For ZHM-03, supply voltage 8-30 VDC, 5-pin
Carrier frequency dual sensor	TD-04	For ZHM-04, supply voltage 8-30 VDC, 5-pin

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