

ZHM series Stainless steel circular gear positive displacement flowmeter

ZHM gear flow meters are used for the precise flow measurements of various fluids with a huge range of viscosities from 5 up to 25,000mm²/s. Providing high accuracy ($\pm 0.5\%$), high pressure ratings (up to 1000 Bar on request) and wide measuring range (0.005 up to 1000 l/min) make this a great meter for demanding applications.



- Pressure rating up to 100 Bar
- High resolution up to 82,000 Pulses per Litre
- Flow rates down to 5 mL/Min
- ATEX EEx design

Materials

Housing:	standard: stainless steel as per DIN 1.4305 / AISI 303
Special:	DIN 1.4404 / AISI 316 L or 1.4571 / AISI 316 Ti
Gears:	stainless steel as per DIN1.4122 / AISI 303, special: DIN 1.4460 / AISI 329
Shafts, bearings:	tungsten carbide, ball on request
Seals:	Viton, NBR, EPDM (for brake fluids) or Teflon

Signal pick up options

- VTE*/P: carrier-frequency amplifier with single pickup, for fluids up to +150°C
- VTE*/P Ex: carrier-frequency amplifier with single pickup, for fluids up to +150°C. ATEX certified.
- VTM: local display unit with integral frequency-and analogue output, for fluids up to +150°C
- TD*: carrier-frequency amplifier with twin pickup, for fluids up to +80°C
- VTQ: quadruple carrier-frequency pickup an amplifier with integral divider, for fluids up to +80°C
- FOP: fibre-optical amplifier for electrostatic environment, fluids up to +60°C
- IF*/VIEG: inductive pickup and amplifier for fluids up to +180°C
- IF*/VIEG Ex: inductive pickup and amplifier for fluids up to +180°C. ATEX certified.
- HE, HD: halleffect amplifier for fluids up to +80°C

Options & Ordering Information

ZHM type	Connection thread (female)	Measuring range		K-factor (pulses/ltr)		Pressure bar	Frequency range Hz, single pickup
		ltr/min	Single pickup	Twin pickup			
ZHM01	1/4" BSP	0.005 to 1	41,000	82,000	630	3.4 to 683	
ZHM01/1*	1/4" BSP	0.005 to 2	26,500	53,000	630	2.2 to 883	
ZHM01/2*	1/4" BSP	0.02 to 3	14,000	28,000	630	4.6 to 700	
ZHM02/1*	1/4" BSP	0.05 to 2	8,200	16,400	630	6.8 to 273	
ZHM02*	1/4" BSP	0.1 to 7	4,200	8,400	630	7 to 490	
ZHM03	3/8" BSP	0.5 to 25	1,740	3,480	630	14 to 725	
ZHM04	1/2" BSP	0.5 to 70	475	950	630	4 to 554	
ZHM05	3/4" BSP	5 to 150	134	268	400	11 to 335	
ZHM06/1	SAE 1.1/4" flange	5 to 250	106	212	400	8.8 to 442	
ZHM06	SAE 1.1/2" flange	20 to 500	53	106	400	18 to 442	
ZHM07	SAE 1.1/2" flange	50 to 1,000	24	48	400	20 to 400	

* Replace with sensor code for short or long pickup depending on meter size and fluid temperature.

Ordering examples

ZHM02KL.VTEL/P	ZHM stainless steel gear flow meter 0.1 to 7 L/min. Ball bearings (KL) with carrier-frequency amplifier with single pickup, for fluids up to +150°C
ZHM05ST.IF/VIEG	ZHM stainless steel gear flow meter 5 to 150 L/min. Hard metal bearings (ST) with inductive pickup and amplifier for fluids up to +180°C

Recommended Instruments: FBT11, FRT12, FEB10