Gearwheel Flow Meter with Ball Bearings

for Liquids

Flow
Pressure
Level
Temperature
Measurement
Monitoring
Control

Model: ADI-K...

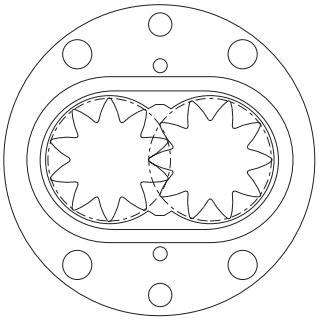
- Measuring ranges: 0,1-7 to 0,5-70 l/min. liquid
- Linearity: ± 0,5 (0,75 %) of measured value
- $p_{max.}$ 630 bar; $t_{max.}$ 120°C
- Viscosity range: 5-10.000 mm²/s
- Connection: G ¼ to G ½ female
- Material: St.St.
- Output: pulses

Model: KZM

Model:
KZM...

Method of Operation

The use of ball bearings has rendered the model KZM Kobold gearwheel flow meter an economical all-metal flow meter; the flow meter is based on the principle of positive displacement. The medium is forced to flow causing the gearwheels to rotate. A transducer screwed into the gearwheel sensor picks up the speed of the gearwheels through the casing wall in a non-contacting manner. The signal is then converted and amplified, and the output is an »open collector« signal – that is proportional to the flow rate.



Typical applications are to be found in hydraulics. A calibration report with eight measuring points is supplied with each meter.

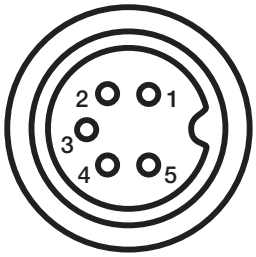
Areas of Application

For all viscous, non-abrasive liquids, such as:

heating oil, lubricating oil, greases, pastes

- Mixing and dosing systems
- Chemical Industry
- Food Industry
- Furnaces

Electrical Connection



1 = +UB
2 = 0 V
3 = n. c.
4 = OC signal (collector)
5 = OC signal (emitter)

Technical Specifications

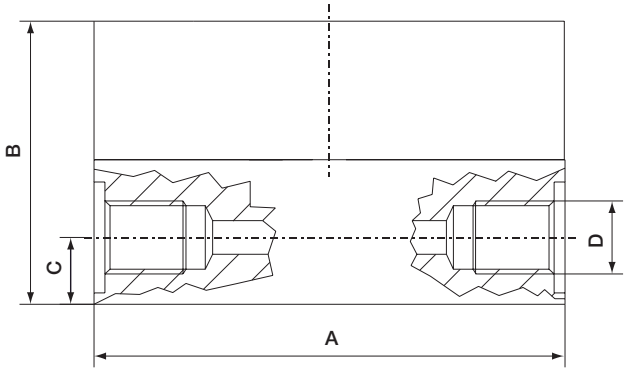
Materials:	Case: St.St. 1.4305 Gearwheels: St.St. 1.4122 Bearings: ball bearing Gaskets: Viton Teflon optional
Temperature:	-20 to +120 °C
Viscosity range:	5 -10.000 mm²/s

Pulse output

Auxiliary power:	7 to 29 VDC
Output:	NPN/OC passive
Voltage level:	U_{max} 30 V $U_{High} > U - (I_{out}$ [mA] x 1,3 kΩ) $U_{Low} < 0,6$ V + (I_{out} [mA] x 1,3 kΩ)

Electrical connection: 5-pin amphenol connector

Dimensions



Model	A	B	C	Max. nominal pressure
KZM-1202	84,5	55	12	PN 630 bar
KZM-1203	84,5	67	27	PN 630 bar
KZM-1204	12,5	96	17	PN 630 bar

Order Details (Example: KZM-1202 T)

Measuring range (l/min)	Connection female	K factor (Imp./l)	Linearity of measured value ≥ 10 mm²/s	Linearity of measured value ≥ 30 mm²/s	Model	Gaskets
0,1-7	G ¼	8.400	± 0,75 %	± 0,5 %	**KZM-1202..**	**..V**=Viton
0,5-25	G ¼	3.480	± 0,75 %	± 0,5 %	**KZM-1203..**	**..T**=Teflon
0,5-70	G ½	950	± 0,75 %	± 0,5 %	**KZM-1204..**	

Digital indicators and transducers see end of brochure.