Zertifiziertes QM-System
DIN EN ISO 9001
Zertifikat-Nr. 01017

Magnetic-Inductive Flow Meter / Monitor

measuring • monitoring • analysing

- Measuring range: upto 5 m/s
- Accuracy: ± 2% of measured value
- p_{max} 16 bar, t_{max} 120 °C
- Monitoring and measuring
- Easy to use
- Installation in pipes from DN 25

KOBOLD companies worldwide:
ARGENTINA, AUSTRIA, BELGIUM, CANADA, CHILE, CHINA, CZECHIA, FRANCE, GERMANY, GREAT BRITAIN, INDIA, INDONESIA, ITALY, MALAYSIA, MEXICO, NETHERLANDS, POLAND, SINGAPORE, SLOVAKIA, SPAIN, SWITZERLAND, THAILAND, USA, VENEZUELA, VIETNAM

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Model:
PME

Theory of operation

The KOBOLD magnetic inductive flow meter and switch monitor the flow of conducting liquids, slurries, and suspensions.

Functional description

When an electrical conductor moves in a magnetic field, a voltage is generated in this conductor due to the motion. In this case, the conductor is the conducting measured medium. The magnetic field is at right angles with the direction of flow. The induced voltage is directly proportional to the local flow velocity.

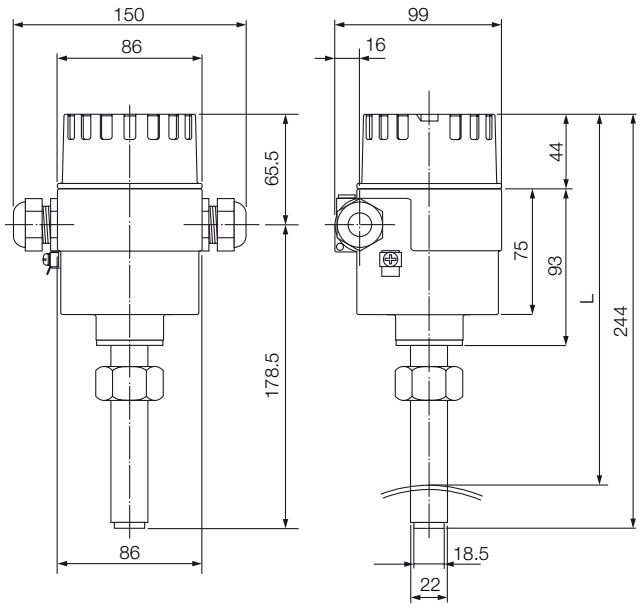
Technical details

Auxiliary power:	24 V_{DC} (20 ... 30 V_{DC})
Power input:	< 2.5 W
Current output:	4 ... 20 mA, active - bi-directional measurement - output is always positive
Relay output:	floating changeover contact 60 V_{AC} / 0.4 A 75 V_{DC} / 0.5 A switches in both directions
Ambient temperat.:	-20 ... 60 °C
Temperature of measured medium:	-20 ... 120 °C (weldable connecting sleeve 1.4435 with clamping ring -20 ... 100 °C (weldable connecting sleeve St. 37 with clamping ring and NBR seal)
Pressure:	16 bar at 25 °C 10 bar at 120 °C
Full-scale value:	1 ... 5 m/s (can be progressively adjusted)
Accuracy:	± 2 % of measured value at the measuring electrode with local adjustment for flow velocities > 1 m/s
Repeatability:	± 2 % of measured value
Conductivity:	≥ 20 µS/cm
Noise immunity:	acc. to CE EN 50081-1-2 and EN 50082-1-2
Protection:	IP 66 / NEMA 4 X / Type 4 X

Materials

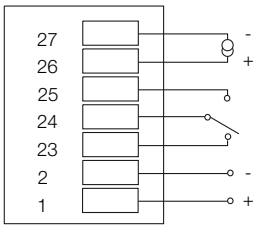
Sensor tip:	PVDF, FPM O-ring
Electrodes:	1.4435/316L
Measuring probe:	1.4435/316L with clamping ring 1.4571/316Ti, for weldable connection sleeve 1.4435/316L 1.4435/316L with clamping ring and NBR-seal for weldable connection sleeve St. 37/A 570
Case:	Aluminium, Epoxy powder coated
Weldable connecting sleeve:	1.4435/316L or St. 37/A 570
Weight:	approx. 1.2 kg

Dimensions



L: from 237 mm (NW 25) to 201.5 mm (NW 300)

Electrical connection



Current output 4...20 mA
Load RL = 750 max.

Relay output
75 V_{DC}/0,5 A or 60 V_{AC}/0.4 A

Auxiliary power 20...30 V_{DC}

Terminal block

Installation

The magnetic inductive flow meter and flow indicator is installed with the accompanying weldable connecting sleeves. The devices can be delivered with mounting sleeves for pipes with NW 25 or for pipes from NW 40 to 300.

Order details

Order no.	Flow meter / monitor
PME-12R25	with weldable connection sleeves for NW 25, st. steel
PME-13R25	with weldable connection sleeves for NW 25, steel
PME-12R40	with weldable connection sleeves for NW 40..300, st. steel
PME-13R40	with weldable connection sleeves for NW 40...300, steel