

DM01

Compact Magnetic Inductive Flowmeter

- independent of viscosity, density, pressure or temperature of medium
- maintenance free
- practically no pressure drop
- high measurement accuracy
- turndown ration 1:50
- smallest dimensions



Description

The compact magnetic inductive flowmeter DM01 works without moving parts. It is designed especially for low flow rates and tight mounting conditions. Ranges from 0.1 l/min to 200 l/min are available.

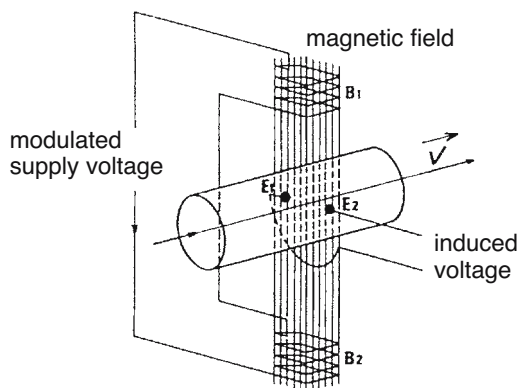
Advantages

- no moving parts, therefore no maintenance and no wear and tear.
- no parts obstructing the flow in the measuring pipe.
- under normal operating conditions no influence of temperature, viscosity, concentration or pressure changes.
- the high turndown ratio makes the unit universally suitable.
- particles in the medium and viscous or polluted media may be measured without problems.
- the compact design and the low price allows the use for OEM applications.

Operating principle:

The magnetic inductive flow meter works according to Faradays law of induction. The liquid to be measured (which must be electrically conductive) flows perpendicular to a magnetic field.

This induces a voltage in the liquid. This voltage is picked up by means of two electrodes located in the measuring tube and fed into an electronic which converts it into a flow proportional output frequency.



Order Code:

Order no. **DM01. 1. D. 01 0**

Compact Magnetic Inductive Flowmeter

power supply:

1 = 24 VDC
2 = 12 VDC

Materials:

D = st. steel / Delrin
P = st. steel / PVDF

Ranges:

01 = 0.1...5 l/min
02 = 1...20 l/min
03 = 2...50 l/min
04 = 5...100 l/min
05 = 10...200 l/min

special version:

0 = without
1 = please describe

Versions:

DM01.D: wetted parts:
measuring tube and electrodes:
st. steel 1.4435
process connections: Delrin

DM01.P: wetted parts:
measuring tube and electrodes:
st. steel 1.4435
process connections: PVDF

Ranges and Dimensions

measuring range (lpm)	width x height (mm)	diameter of measuring tube (mm)	process connection	K-factor (pulses per litre)
0.1...5	84,5 x 123	8	G 1/2 AG	1000
1...20	84,5 x 123	8	G 1/2 AG	800
2...50	90 x 123	14	G 3/4 AG	160
5...100	90 x 123	18	G 1 AG	160
10...200	90 x 123	18	G 1 AG	80

technical specifications:

max. pressure: 6 bar

medium temperature: -10...+40 °C

wetted parts: st. steel, Delrin®
st. steel, PVDF

max. inaccuracy: ± 1,5% of actual value
for range 0.1...5 l/min ± 10%
to 1l/min, ±1,5% ex 1l/min

min. conductivity: 20 µS/cm

supply voltage: 24 VDC +/- 10%
12 VDC +/- 10%

max. current consumption: max. 50 mA

output signal: flow proportional frequency,
square wave

electrical protection: IP 65

response time: 50ms