

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 0.05 l/min to 250 l/min are available.

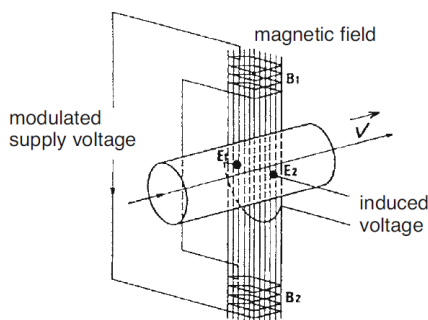
Advantages

- 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.



Versions:

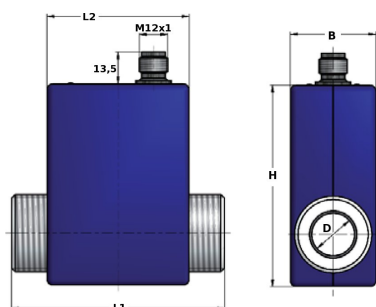
DM01.x.D wetted parts:
measuring tube and electrodes ss 1.4435
process connections: POM

DM01.x.P wetted parts:
measuring tube and electrodes ss 1.4435
process connections: PVDF

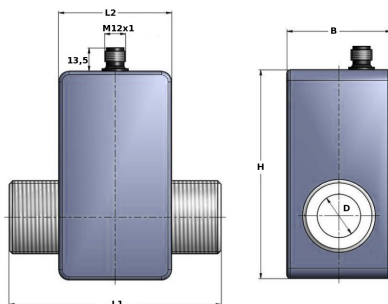
Ranges and Dimensions:

Mes.-range l/min	±1% error ≥ l/min	Dimensions L1, L2, H, B mm	D mm	Connection	K-Factor pulse/l
0,05...2	0,1	85, 59, 89, 36	3	G 3/8 AG	10000
0,1...5	0,25	85, 59, 89, 36	8	G 1/2 AG	4000
0,25...20	1	85, 59, 89, 36	8	G 1/2 AG	1000
1...50	2,5	90, 59, 89, 36	14	G 3/4 AG	400
2...100	5	90, 59, 89, 36	18	G 1 AG	200
4...200	10	90, 59, 89, 36	18	G 1 AG	100
5...250	12,5	122, 65, 120, 60	25	G 1 1/4 AG	80

Version measuring range 0M...05 (G 3/8 ... G1):



Version measuring range 06 (G 1 1/4):



Order code:

Order number: DM01. 1. P. 01. 1 0

Compact Magnetic Inductive Flowmeter

Power supply:

1 = 24 VDC
2 = 12 VDC

Materials:

P = Stainless steel / PVDF (standard)
D = Stainless steel / POM

Measuring ranges:

0M = 0,05...2 l/min
01 = 0,1...5 l/min
02 = 0,25...20 l/min
03 = 1...50 l/min
04 = 2...100 l/min
05 = 4...200 l/min
06 = 5...250 l/min

Electrical connection:

1 = round plug M12x1 4 pin
2 = cable box M12x1 4 pin without cable
3 = cable box M12x1 4 pin with 3 m cable
4 = cable box M12x1 4 pin with 5 m cable
5 = cable box M12x1 4 pin with 10 m cable

Special version:

0 = without
1 = please describe

Technical specifications:

Max. pressure: 10 bar (20 °C)
8 bar (40 °C)
6 bar (60 °C)

Medium temperature: -10...+60 °C
ambient: -5...+60 °C

Wetted parts: st. steel 316L, PVDF (standard)
st. steel 316L,, POM

Max inaccuracy: ± 1,0 % FS
lower part of scale: ± 5 %
see table

Min. conductivity: 20 µS/cm

Indicators: LED red: power
LED green: flow

Power supply 24 VDC ± 10 %
12 VDC ± 10 %

Power consumption: 0,6 W

Output signal: flow proportional frequency,
square wave switching to
+Ub or ground

Protection: IP 65
(with mounted mating connector)

Response time: < 100 ms