# DATASHEET MVM-001-PN

## MAG-VIEW MVM-001-PN

Low-Flow Magnetic Inductive Flow meters for water-like liquids

MASSFLOW-ONLINE PRODUCT



## Electromagnetic flow meters for low flow rates of water and aqueous solutions

MAG-VIEW instruments are electromagnetic inductive flow meters for electrically conductive liquids with a minimum conductivity of 50  $\mu$ S/cm. The compact, weatherproof (IP65) flow meters do not contain any moving parts, cause virtually no pressure loss and can be mounted in any position, requiring no straight inlet or outlet runs.

MAG-VIEW flow meter model MVM-001-PN has a nominal diameter of DN2 for flow rates of 0,0083...1 l/min, suited for operating pressures up to 16 bar(g). The pulse output of the instrument is proportional to the flow.

#### **Technical specifications**

#### Measurement / control system

Flow rates	0,0083 1 l/min
Volume flow accuracy	±1% RD at 050% of measuring range ±2% RD at 50100% of measuring range (incl. factory calibration certificate; test conditions: water 23°C)
Turndown ratio	1:120
Reproducibility	1 % FS
Signal output starting from	~ 0,005 l/min
Media	Water and other conductive liquids (minimum conductivity of 50 $\mu$ S/cm)
Response time (sensor)	< 500 msec
Medium temperature	-20 90 ℃
Mounting	Any position, attitude insensitive
Flow indication	green LED, flow proportional flashing

#### **Mechanical parts**

Material (wetted parts)	Electrodes: Stainless Steel 1.4571 Process connections: Stainless Steel 1.4571 Measuring pipe: PEEK-GF30 Gasket: EPDM
Housing	Aluminium pressure diecasted
Diameter	DN2

## **Mechanical parts**

Process connections	1/4" BSP male thread
Ingress protection	IP65
Nominal pressure	PN16

## **Electrical properties**

Power supply	24 Vdc ±10 %
Max. power consumption	≤ 150 mA
Frequency output	Pulse rate / K-factor : 10000 pulses/l
	Resolution: 0,1 ml/pulse
	Signal shape : Square wave signal - duty cycle 50:50
	Push-Pull - NPN open collector [o.c.] - PNP o.c.
	Signal current : max. 100 mA, current limited
Electrical protection measures	Short-circuit proof, protected against polarity reversal
Electrical connection	5-pin-plug M12x1

#### **Electrical connection**

## Control valve options

External actuator options to be connected to the controller

**Ex-proof specifications** 

## Approvals / certificates

Technical specifications subject to change without notice.

For dimensional drawings and hook-up diagrams please visit the  $\underline{product\ page}$  on our  $\underline{website}$ 

## **Related products**



#### MAG-VIEW MVM-001-PA

Flow range 0,0083 ... 1 l/min

Pressure rating 16 bar

Non-obstructive; low  $\Delta P$ 

No moving parts; long

life cycle

Analog/Pulse output



#### MAG-VIEW MVM-002-PN

Flow range 0,05 ... 2

l/min

Pressure rating 16 bar

Non-obstructive; low  $\Delta P$ 

No moving parts; long

life cycle

Pulse output



#### MAG-VIEW MVM-002-PA

Flow range 0,05 ... 2

l/min

Pressure rating 16 bar

Non-obstructive; low  $\Delta P$ 

No moving parts; long

life cycle

Analog/Pulse output



#### MAG-VIEW MVM-002-QA

Flow range 0,1 ... 2 l/min

Pressure rating 10 bar

Non-obstructive; low ΔP

No moving parts; long

life cycle

Cost-optimized (plastic)

model



Bronkhorst High-Tech designs and manufactures innovative instruments and subsystems for low-flow measurement and control for use in laboratories, machinery and industry. Driven by a strong sense of sustainability and with many years of experience, we offer an extensive range of (mass) flow meters and controllers for gases and liquids, based on thermal, Coriolis and ultrasonic measuring principles. Our global sales and service network provides local support in more than 40 countries. Discover Bronkhorst®!