

Product Information

**Flow Transmitter
MID1**



- For all electrically conductive fluids
- Fixed frequency output range as signal
- No moving parts in the area of flow
- High medium overload safety
- Low pressure loss
- Compact design

Characteristics

The MID1 system consists of a number of sensors which measure the flow speed of a flowing fluid according to the principle of Faraday's law of induction. For this, the fluid must have a minimum electrical conductivity of 50 µS/cm. Three nominal widths are available. The sensors are available with different evaluation electronics, which vary in type and number of outputs, and in operating convenience. This transmitter has a non-programmable frequency output (400 Hz at full scale value).

Technical data

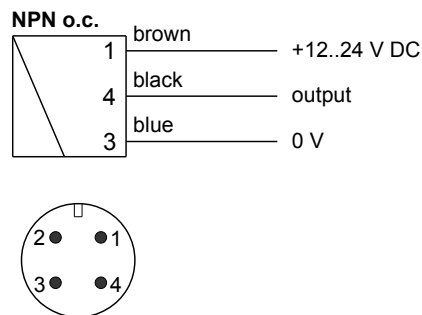
Sensor	magnetic-inductive	
Nominal width	DN 8..25	
Process connection	male thread R 1/4", R 1/2", R 1"	
Metering ranges	0.05..60 l/min	for details, see table "Ranges"
Measurement accuracy	0.05..1.5 l/min	
Repeatability	1 %	
Minimum electrical conductivity (medium)	50 µS/cm	
Pressure resistance	PN 10 bar	
Pressure loss	max. 0.3 bar at max. flow	
Medium temperature	0..60 °C (avoid frost and dew)	
Ambient temperature	0..60 °C	
Storage temperature	-20..+80 °C	
Materials medium-contact	stainless steel 1.4404, PPS, FKM	
Supply voltage	12..24 V DC	
Current consumption	approx. 100 mA	

Signal output	NPN o.c., 400 Hz at full scale value	
Electrical connection	for round plug connector M12x1, 4-pole	
Ingress protection	IP 64	
Weight	R 1/4"	approx. 0.2 kg
	R 1/2"	approx. 0.2 kg
	R 1"	approx. 0.3 kg
Conformity	CE	

Ranges

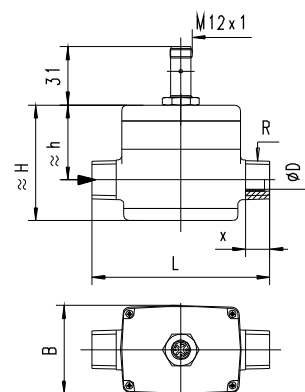
R	Nominal width	Metering range l/min H2O	Measurement accuracy
R 1/4"	DN 8	0.05.. 1	2.5 % of the measured value, at least 0.005 l/min
R 1/2"	DN 15	0.50..10	2.5 % of the measured value, at least 0.05 l/min
R 1"	DN 25	3.00..60	2.5 % of the measured value, at least 0.3 l/min

Wiring



Before the electrical installation, it must be ensured that the supply voltage corresponds with the data sheet. It is recommended to use shielded wiring.

Dimensions



R	Types	L mm	H mm	h mm	x mm	B mm	D mm
R 1/4"	MID1-008	85	59	39	9	47	5
R 1/2"	MID1-015	95	63	42	13	47	10
R 1"	MID1-025	110	72	45	16	49	20

Product Information

Handling and Operation

Installation

The device is screwed into the pipework by means of two male threads or into suitable connection pieces. Here, attention must be paid to the direction (arrow marked on the housing in the direction of flow). Seal using Teflon tape or a fluid seal.

Use the following torques:

R 1/4": 3 ±0.5 Nm
 R 1/2": 5 ±0.5 Nm
 R 1: 12 ±1.0 Nm

The sensor can be operated in any location. However, air bubbles should be avoided. Direction of flow from bottom to top is recommended.

The electronics head is supplied mounted on the sensor body.

Avoid angular loading of the sensor. Pipework in which sensors are installed should be permanently flooded. 10 x D should be used in the inlet and outlet.

Programming

The setting of this transmitter has been fixed in the factory. Changes of parameters must be requested from HONSBERG.

Ordering code

MID1- 1. 2. **A** 3. **P** 4. 5. **M** 6. **S** 7.

○=Option

1. Nominal width				
008	DN 8 - R 1/4"			
015	DN 15 - R 1/2"			
025	DN 25 - R 1"			
2. Process connection				
A	male thread			
3. Housing material				
P	PPS			
4. Metering range				
001	0.05.. 1 l/min			●
010	0.50..10 l/min			●
060	3.00..60 l/min		●	
5. Signal output				
M	frequency output NPN o.c.			
6. Electrical connection				
S	for round plug connector M12x1, 4-pole			
7. Filter time		Filter	Accuracy	
01	○ 0.1 s		± 4.2 %	of the full scale value
03	○ 0.3 s		± 3.6 %	
06	○ 0.6 s		± 3.1 %	
10	○ 1.0 s		± 2.7 %	
20	2.0 s		± 2.0 %	
40	○ 4.0 s		± 0.5 %	

Options

- Housing material PEEK

Accessories

- Cable/round plug connector (KB...) see additional information "Accessories"