



Positive Displacement Meter Flowal OR-MFE

Positive displacement meter for liquids



- Resistant to changes in viscosity
- No straight inlet and outlet sections required
- High accuracy and repeatability
- Resistant to vibration, pressure changes, pulsations
- Easy installation

D-EN-OR-20180418



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Advantages of Flowal OR-MFE

- Direct measurement of volume and flowrate
- No straight inlet and outlet sections required
- Long service life and high reliability due to robust construction
- High long-term stability
- High accuracy and repeatability
- Easy installation
- Resistant to vibration, pressure changes, pulsations, changes in viscosity

Technical Data

Accuracy*	< ± 0,5% of actual value
Repeatability	0,1% of actual value
Liquid temperature	-10°C to +70°C
Ambient temperature	-20°C to +70°C
Process connection	Female threads G¼, G½, G¾, G1, G2
Power supply	MFE-1, MFE-2 Battery MFE-3 24VDC
Display	LCD 7 segments, 8-digit
Outputs	Pulses (open collector NPN, NAMUR, REED), current output 4-20mA
Materials Body: Optional: Oval wheels: Seals:	Stainless steel, aluminium PP, PVDF (on request) PEEK Viton, alternative FEP
Protection class	IP 65 (local display)

(*at reference conditions >3mPas)

Description

Meters of the Flowal series are based on a robust concept with simplicity and can be adapted to a wide field of applications. The innovative design is the result of merging long years experience with the latest technologies.

The OR series are compact oval wheel meters with female threads and directly mounted compact multifunctional electronics MFE. An optional temperature sensor allows the compensation of volumetric expansion caused by temperature changes. The MFE-3 electronics offers the option to enter a density value and calculates mass. The display and the analogue output are directly related to mass units.

Accurate, reliable and economical measurement of flowrate, volume and mass – OR with multifunctional electronics MFE (8-digit LCD / actual flowrate and totalizer).

- OR-MFE-1: battery-powered
- OR-MFE-2: battery-powered with pulse output
- OR-MFE-3: pulse output, current output 4-20 mA, PT1000 input, memory for density and correction factor, powered directly by the current loop

Important instructions!

Technical changes and errors reserved. Pictures can be similar.

The operating instructions belonging to this device must be observed! Download at www.schmidt-messtechnik.com.



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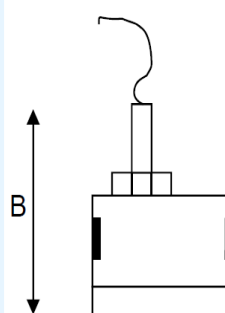
Positive displacement meter for liquids

Measuring Ranges		
Type	Range*	
OR-015	0,03 – 1 l/min	G¼
OR-06	0,2 – 7 l/min	G¼
OR-1	0,4 – 14 l/min	G½
OR-2	1 – 30 l/min	G¾
OR-5	2 – 60 l/min	G1
OR-10	3 – 120 l/min	G1
OR-50	15 – 300 l/min	G2
OR-115	35 – 700 l/min	G2

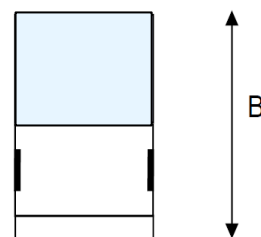
* Ranges for H₂O, range limitations with stainless steel wheels, or at viscosities >150mPas

Dimensions

Blind-Version



Kompakt-Version with electronics MFE



Type	A	B
OR015	78	100
OR06	78	105
OR1	78	115
OR2	99	115

Type	A	B
OR5	112	119
OR10	112	146
OR50	184	192
OR115	180	225

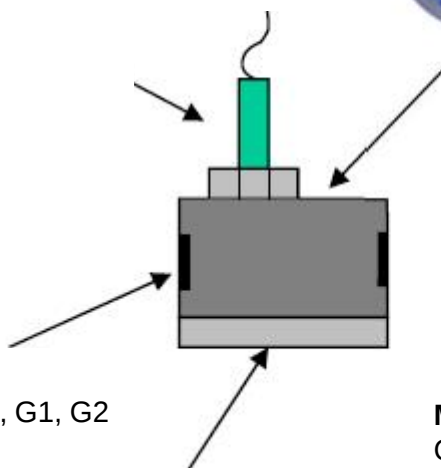
Pulse sensors and electronics

Pulse sensors (M12x1)

- Hall pulse sensor with open collector output (original pulses NPN)
- Magnetic pick-up NAMUR (for hazardous area)
- REED contact



Electronics with display series MFE



Process connections:

Female threads G¼, G½, G¾, G1, G2

Measuring chamber cover

Material:

Oval wheels: PEEK, stainless steel
Housing: stainless steel, aluminium
(upon request: PP, PVDF)

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