



Positive Displacement Meter Flowal OF-MFE

Positive displacement meter for liquids



- Viscosity independent
- No infeed and outfeed sections required
- High measuring accuracy and reproducibility
- Insensitive to vibrations, pressure changes, pulsations
- Easy installation



Positive Displacement Meter Flowal OF-MFE

Positive displacement meter for liquids

Funktion

The oval wheel meter Flowal OF-MFE works according to the measuring principle of the positive displacement meter. This oval wheel meter has a particularly robust design and is characterized by its simplicity and user-friendliness. The Flowal OR-MFE is a compact built-in oval gear meter with DIN or ANSI flange connection and directly mounted multifunction electronics. With the MFE-3 electronics, an optionally integrated temperature sensor enables the compensation of temperature-dependent volume changes and calculates the mass. The display and the current output directly show the mass value.

Features

- Direct recording of the volume
- No infeed and outfeed sections required
- Robust design for a long life and reliability
- Especially high long-term stability
- High measuring accuracy and reproducibility
- Easy installation
- Insensitive to vibrations, pressure changes, pulsations, viscosity changes

Application

The Oval Wheel Flowal OF-MFE measures the flow of Newtonian, non-abrasive fluids such as water, oils, alkalis, acids, fats, alcohols, fuels, solvents, paints, lacquer, etc.

Technical data

Error of measurement*	< ± 0,5% of final value
Repeatability	0,1% of final value
Medium temperature	-10°C up to +70°C
Ambient temperature	-20°C up to +70°C
Process connection	Flange DIN DN15/25/50; ANSI ½“, 1“, 2“
Electrical supply	MFE-1, Battery MFE-2 24VDC MFE-3
Display	LCD 7 Segment display, 8 digits
Outputs	Pulse (Open Collector NPN, NAMUR, REED), current output 4-20mA
Material housing on request wheels seal	Stainless steel, aluminum PP, PVDF PEEK Viton, alternative FEP
Protection	IP 65 (On-site display)

(* at reference conditions >3mPas)

Types

OF-MFE-1	Battery powered display
OF-MFE-2	Battery powered display with pulse output
OF-MFE-3	Pulse output, current output 4-20mA, PT 1000 input, memory for density and correction factor, power supply directly via the current loop

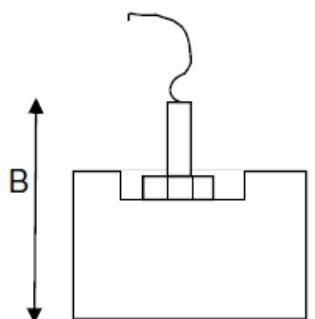


Positive Displacement Meter Flowal OF-MFE

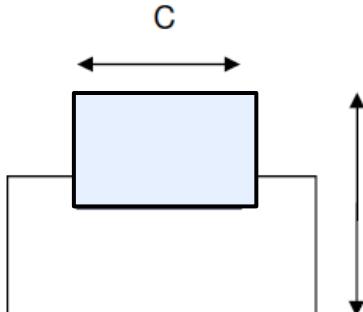
Positive displacement meter for liquids

Dimensions

Blind version



Compact version with MFE electronics



A A

Type	A	B	C
OF2	140	135	80
OF10	170	180	80
OF50	184	192	80
OF115	180	270	80

Maße in mm

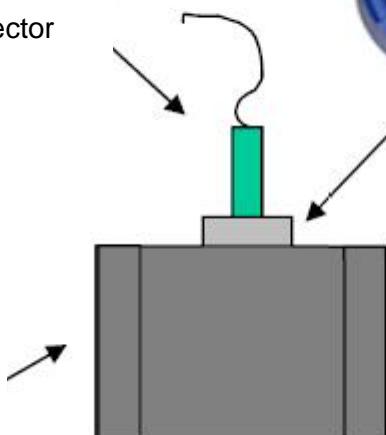
Measuring range

Type	Measuring range
OF2	1 – 30 l/min
OF10	3 – 120 l/min
OF50	15 – 350 l/min
OF115	35 – 700 l/min

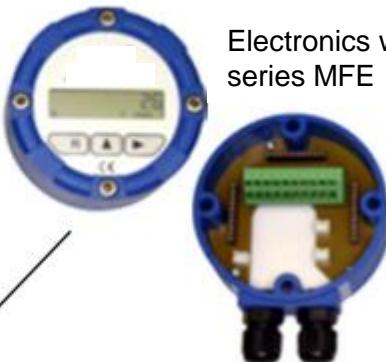
Pulse sensors and electronics

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 connection

Flange DIN DN15, DN25, DN50
ANSI ½“, 1“, 2“

Material

Oval wheels: PEEK
Housing: stainless steel, aluminum
(on request: PP, PVDF)