# Schmidt Mess- und Regeltechnik



## Positive Displacement Meter Flowal® Plus, **Series OR Plus**

Positive displacement meter for mineral oils and fuels







- · Direct recording of the volume
- No infeed and outfeed sections required
- · High durability and reliability due to robust construction
- Easy installation
- Accuracy ± 0.5% at 3 mPa · s / ± 0.25% with limited measuring range
- Repeatability ± 0.02%
- Viscosity up to 3000 mPa · s

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# Positive Displacement Meter Flowal® Plus, **Series OR Plus**

Positive displacement meter for mineral oils and fuels

#### **Features**

- · Direct measuring of volume
- · No straight inlet and outlet sections required
- · Long service life and high reliability due to robust construction
- · Easy installation
- Accuracy up to ± 0.5% at 3 mPa·s / ± 0.25% limited measuring range
- Repeatability up to ± 0.02%
- Viscosity up to 3000 mPa·s

### Constructive design

- Housing in aluminum PN40
- PEEK Oval wheels
- · Seals in Viton, seals in EPDM

### Description

The positive displacement meters Flowal® Plus series OR Plus allow accurate, reliable and economical measurement of flowrate, volume and mass . They are based on a robust concept with simplicity.

The OR series are compact oval wheel meters with female threads and directly mounted compact multifunctional electronics MFE (8digit LCD ) or with pulse output (Open collector NPN, NAMUR, REED).

## **Application**

The Oval Wheel Meters are ideally suited for dispensing, filling or blending applications of mineral oils and fuels.

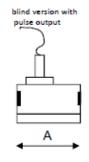
The counters are highly suitable for viscous products, and are characterized by low pressure losses. They are suitable for small amounts and are insensitive to pulsating flows.

### Version with multifunctional electronic MFE

- OR-MFE-1: battery-powered display
- OR-MFE-2: battery-powered display pulse output
- OR-MFE-3: power supply 24V DC, pulse output, current output 4-20mA, PT 1000 input for density correction

### Version with pulse output

- OR-RM: REED pulse output Ex
- OR-N1: NPN pulse output non Ex
- OR-P1: PNP pulse output non Ex
- OR-A1: NAMUR Sensor Ex



compact version with





### **Application examples**

- Hydraulic test benches
- Bio-diesel blending
- Burner consumption measurement
- Bitumen / asphalt production
- Lubricating oil blending and dosage

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Technical data Flowal® Series OR Plus – for mineral oils and fuels							
Materials	Housing	Aluminum (AL)					
	Oval wheels	PEEK (PK)					
	Bearing shafts	Stainless steel (1)					
	Seals	Viton / EPDM					
				_		_	
Technical data	Nominal size	G ¼"	G ½"	G ½"	G ¾"	G 1"	G 1"
	Measuring range	0,03 – 1 l/min	0,2 – 7 l/min	0,4 – 14 l/min	1 – 30 l/min	2 – 60 l/min	3 – 120 l/min
	Nominal pressure	PN 40					
	Temperature	minus 10°C up to 80°C					
				_			
Installation data A	Face to face	78 mm	78 mm	78 mm	99 mm	112 mm	112 mm
Pulse output	RM, ex		•	•	•	•	•
	N1, non ex	•	•	•	•	•	•
	P1, non ex	•	•	•	•	•	•
	A1, ex	•	•	•	•	•	•
	or						
Multifunctional electronic*	MFE-1 exi	•	•	•	•	•	•
	MFE-2 exi	•	•	•	•	•	•
	MFE-3 exi	•	•	•	•	•	•

Ordering code example: OR1 AL1PK MFE-2

### 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.

<sup>\*</sup>degree of protection electronic: IP 65