# Schmidt Mess- und Regeltechnik



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

Positive displacement meter for chemical fluids







- · 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 150 mPa · s

# Schmidt Mess- und Regeltechnik



# Positive Displacement Meter Flowal® Plus, Series OR Plus

Positive displacement meter for chemical fluids

#### **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 150 mPa·s

#### Constructive design

- · Housing in stainless steel PN68
- PEEK Oval wheels
- Seals in Viton, seals in FEP (PN25)
- · Housing in in PVDF or PP on request

#### 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.

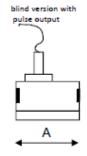
The OR series are compact oval wheel meters with female threads and directly mounted compact multifunctional electronics MFE (8-digit LCD ) or with pulse output (Open collector NPN, NAMUR, REED) .

#### **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-PT: PNP pulse output non Ex, Tmax: 130°C
- OR-A1: NAMUR Sensor Ex



compact version with electronics MFE

# \_\_\_\_



#### **Application**

The Oval Wheel Meters are ideally suited for dispensing, filling or blending applications of chemical liquids.

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.

#### **Application examples**

- Acid and lye doses
- Filling of corrosive media
- · Paint and varnish production
- Plastic Machinery

# Schmidt Mess- und Regeltechnik



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

Positive displacement meter for chemical fluids

Technical data Flowal® Series OR Plus – for chemical fluids							
Materials	housing	Stainless steel (SS)					
	oval wheels	PEEK (PK)					
	Bearing shafts	Stainless steel (1)					
	seals	FEP / Viton					
Technical data	nominal size	G 1⁄4"	G 1⁄2"	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 68 (Viton) / PN 25 (FEP)					
	temperature	minus 20°C up to 70°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	•	•	•	•	•	•
	oder						
Multifunctional electronic*	MFE-1 exi	•	•	•	•	•	•
	MFE-2 exi	•	•	•	•	•	•
	MFE-3 exi	•	•	•	•	•	•

Ordering code example: OR1 SS1PK 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