

PFM43-2211.A1421.0

Electromagnetic insertion flow meter for industrial water applications

Article number: 11267264

Preliminary

Overview

- Compact insertion flow meter
- Easy mounting for large diameters up to 2000 mm
- High pressure applications up to 100 bar
- For media with conductivity > 20 µS/cm in closed systems
- Programmable via BCP software



Technical data

Performance characteristics

Measuring principle	Electromagnetic flow measurement
Nominal diameter range	DN 80 ... DN 500
Max. flow velocity	10 m/s
Max. measuring error	± 2 % , ≥ 0,5 m/s
Measuring range, flow	0.4 ... 10 m/s
Media characteristics	> 20 µS/cm
Step response time	≤ 400 ms
Damping	0.2 ... 1000 s
Repeatability	± 0.5 %

Process conditions

Process temperature	- 10 ... 100 °C
Process pressure	≤ 100 bar

Process connection

Connection variants	G 1 A
Wetted parts material, process connection	AISI 304 (1.4301)
Wetted parts material, electrodes	Hastelloy C
Wetted parts material, gas-ket	PEEK Natura PTFE

Ambient conditions

Operating temperature range	-10 ... 60 °C
Altitude	- 200 ... 4000 m

Ambient conditions

Degree of protection (EN 60529)	IP 67
Humidity	0 ... 100 %
Insulation voltage	500 V DC

Output signal

Digital output signal	2 x pulse / frequency / alarm
Analog output (optional)	0...20 mA 4...20 mA
Voltage drop	1.2 V DC
Load resistance	≤ 500 Ω, Vs = 10 V DC ≤ 1000 Ω, Vs = 30 V DC
Short circuit protection	No
Damping	0.2 ... 1000 s

Housing

Overall size	L = 176 mm
Material	AISI 316 (1.4401)

Electrical connection

Connector	M12-A, 5-pin, stainless steel
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Power supply

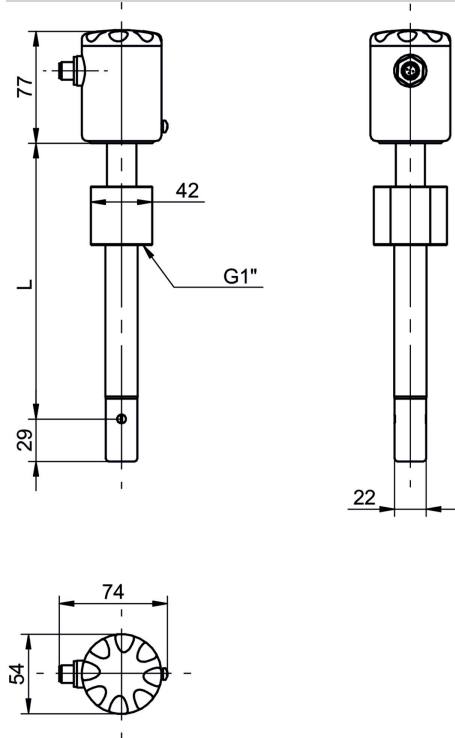
Voltage supply range	10 ... 30 V DC
Power consumption	≤ 1 W
Power-up time	≤ 30 s , standard use ≤ 15 min , warm-up for calibration
Reverse polarity protection	Yes

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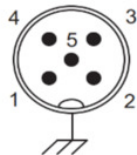
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Dimensional drawings (mm)



Electrical connection



Electrical connection		Function		Pin assignment
Vs +	Power supply +	10 ... 30 V DC		1
Vs -	Power supply -	10 ... 30 V DC		5
Dout 1	Selectable			2
Dout 2	Selectable			3
Iout	Flowrate	4 ... 20 mA		4