Technical data

Litronic FMS coaxial tube sensor type RMH 12

The Litronic-FMS RMH12 pipe sensor is a so-called „intelligent sensor“, i.g. the internal microprocessor enables complete problem-solving wthin a single part. Furthermore, it also offers expanded functionality. The sensor transfers all of the relevant factory calibration data to the evaluation and transfer module 8 s after being switched on, and following this capacity raw value and both temperatures 30 times per second.

Technical Data

Physical principle	coaxial field in the cylinder condenser
Frequency	20 MHz
Measuring point	Pipeline Diameter 12mm
Process Connection	Ermeto compression fitting 2 mm, M18x1,5
Measuring range	0 - 100 % water content (measuring window adjustable)
Capacitance resolution	250 aF
Cycle of up-date	33,33 ms
Measuring precision maximally	+/- 10 ppm water content [1.)]
Measured value transmission:	digital: RS485, streaming
Max. Number of sensors at the bus	4
Max. cable length	1200 m
Power pack	12-24 V, 0.5 VA
Measuring range of temperature	5 – 90 °C
Measuring precision measurement of temperature	+/- 0.5 °C
Working – ambient temperature	5 – 60 °C
Storing temperature	- 40 – 60 °C [2.)]
Protection class	IP65
Max. Pressure	6 bar
Volume flow rate	5...1200 l/h
Connecting cable type / length	UNITRONIC® ROBUST C 7x0,14 shielded / 6 m
Material shell	V4A (1.4305)
Weight: Ø / length	54 / 219 (230) mm
Weight without cable	ca. 2,1 kg

Liebherr-Mischtechnik GmbH
Postbox 145, 88423 Bad Schussenried, Germany
Tel: +49 7583 949-807, E-Mail: mt.lmt@liebherr.com
www.water-content-measurement.com

Technical data

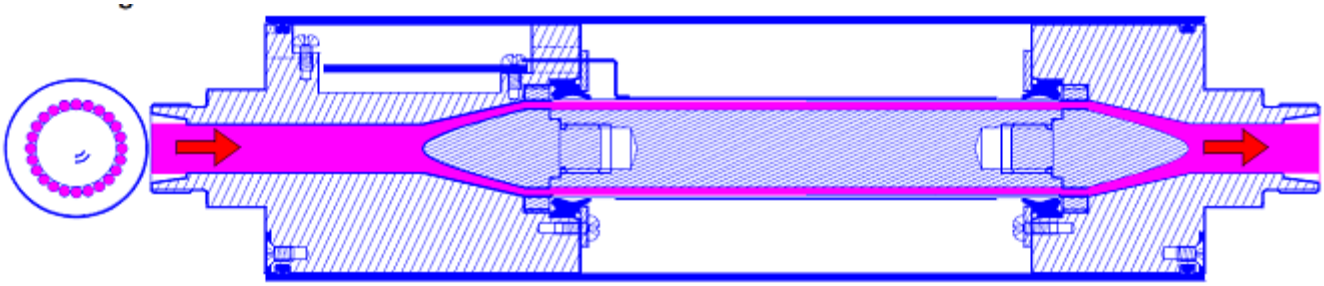
1.) depending on material, ideal material flow and calibration according to the rules.

2.) clear of liquid

Characteristics

- Direct digital measuring process
- Extremely high capacity resolution due to patented measuring circuit
- 30 measurements per second also enable assessment of the dynamic behavior
- Automatic reference equalization every second
- Temperature-stabilized, regulated quartz time base (TCXO)
- High-resolution temperature measurement and temperature compensation of the liquid
- High-resolution temperature measurement and temperature compensation of the circuit
- Extremely high water resolution due to optimum geometry of the coaxial condenser
- Ceramic coaxial condenser
- High quality stainless steel housing
- Resistant to aggressive liquids and to oils
- Flow-optimized throughout with even cross-section
- Simple process connection
- Digital interface and networking
- Data-streaming technology with automatic bus arbitration

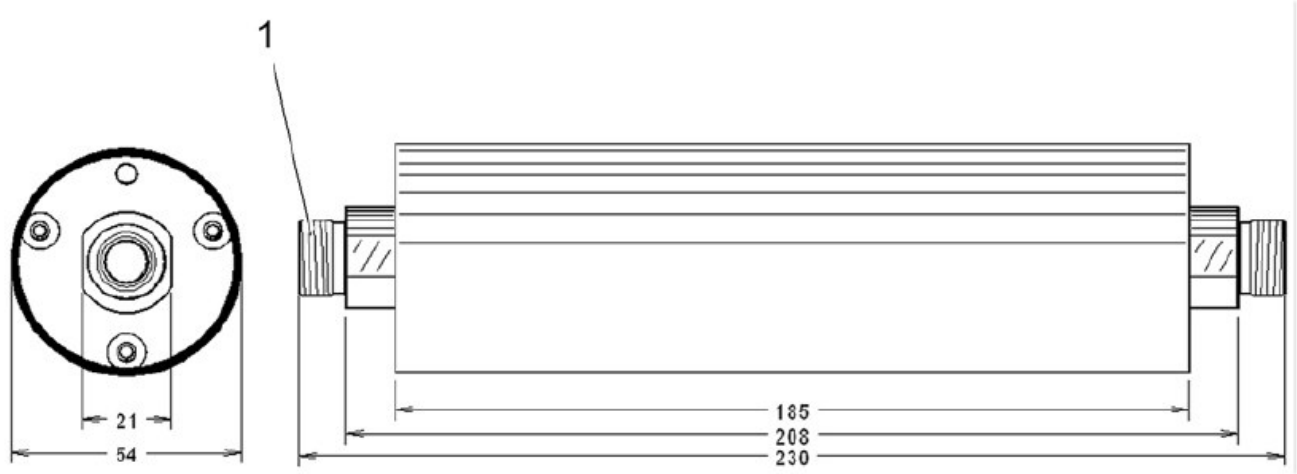
Flow:



Liebherr-Mischtechnik GmbH
Postbox 145, 88423 Bad Schussenried, Germany
Tel: +49 7583 949-807, E-Mail: mt.lmt@liebherr.com
www.water-content-measurement.com

Technical data

Dimensional drawing:



S006133

1 Compression ring screw connection 12 mm. M18x1.5

Liebherr-Mischtechnik GmbH
Postbox 145, 88423 Bad Schussenried, Germany
Tel: +49 7583 949-807, E-Mail: mt.lmt@liebherr.com
www.water-content-measurement.com