

Technical Data

Litronic FMS planar sensor P30-S



Physical principle:	Capacity determination with high-frequency-stray field
Frequency:	20 MHz
Sensor location:	Small installation place, pipe, screw conveyor, dryers...
Measuring range:	0 – 100 % moisture content (measuring window adjustable)
Capacitance resolution:	3 fF
Cycle of up-date:	32.64 ms
Sampling rate mean value counter:	16 – 25 10 ⁶
Measuring precision maximally:	+/- 0.05 % moisture content ^{1.)}
Data interface:	RS-485 EIA-485
Max. cable length:	1200 m
Measured value transmission:	half-duplex
Bus arbitration:	master / slave
Data format:	9600bit/s 9 data, 1 stop
Protocol:	proprietary multiprocessor protocol
Max. Number of sensors at the bus:	16
Measured value streaming:	simplex
Bus arbitration:	automatically
Data format:	19200 bit/s, 8 data, 1 Stop no Parity
Output:	binary 2 temperatures and raw value
Output cycle:	33Hz
Max. Number of sensors at the bus:	4
Power pack:	8..30V, 0.4 VA
Measuring range of temperature:	-10 – 90 °C
Measuring precision measurement of temperature:	+/- 0.5 °C
Working – ambient temperature:	5 – 72 °C
Working temperature electronics:	-20 – 80 °C
Storing temperature:	-25 – 80 °C

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Protection class:	IP68
Connecting cable type:	UNITRONIC®ROBUST C 7x0,14 shielded
Connecting cable length:	6 m
Wearing protection:	PEEK
Material shell / flange:	V4A (1.4404)
Weight: Ø / height:	30 / 94 mm
Weight without cable:	0,500 kg

- 1.) Representative according to the batch or the period of continuous operation with the corresponding evaluator Litronic-FMS II, depending on material, ideal material flow and calibration according to the rules.

Features

- Capacitive measuring method
- Sensor replacement without re-calibration
- Sensitivity adjustable in three shoulders
- Integral microprocessor c/w mean value computing
- Material flow identification
- Digital measured value transfer and recording
- Temperature compensation
- Limit value check
- Stainless steel housing

