

Technical data

# Litronic FMS planar sensor P71-HD

**Moisture sensor, Litronic-FMS planar sensor type P71-HD  
with PEEK product contact surface**



## Features

- capacitive measuring method
- sensor replacement without re-calibration
- sensitivity adjustable in three levels
- integrated microprocessor with mean value calculator
- temperature compensation
- limit value check
- digital measurement recording and transfer
- stainless steel housing
- applied regulations: EC 1935/2004; (EU) No. 10/2011
- GMP (Good Manufacturing Practice) (EU) No. 2023/2006
- suitable for CIP use
- EHEDG certified / FDA conform
- VARINLINE® housing type N process connection

**Liebherr-Mischtechnik GmbH**

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**Technical data planar sensor P71-HD**

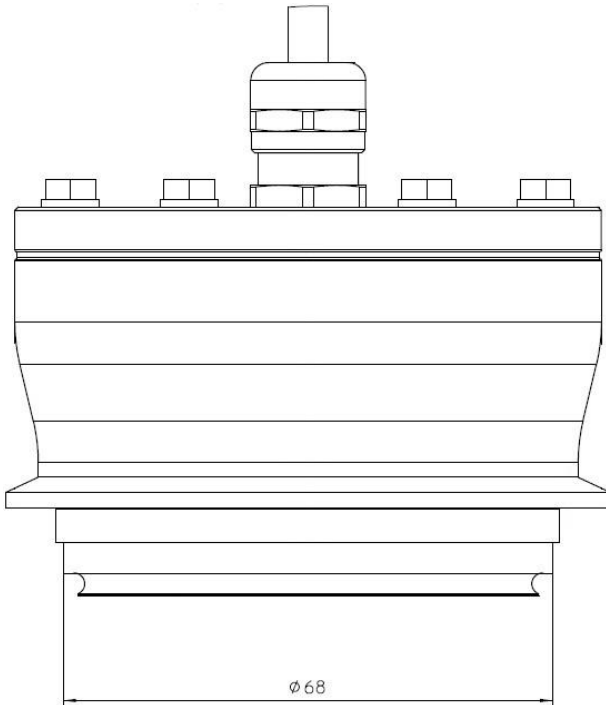
Physical principle	capacity determination with high-frequency stray field
Frequency	20 MHz
Sensor location	pipes, tanks, vats
Measuring range	0 – 100 % moisture content (measuring window adjustable)
Capacity resolution	3 fF
Update cycle	32.64 ms
Sampling rate mean value counter	16 – 25 10 <sup>6</sup>
Max. measuring accuracy	+/- 0.05 % moisture content <sup>1.)</sup>
Measurement value transfer	digital: RS-485, multi-processor protocol
Max. number of sensors on bus	16
Max. bus length	1200 m
Power supply	8...30V, 0.4 VA
Temperature measuring range	-10 – +90 °C
Temperature measurement accuracy	+/- 0.5 °C
Operating ambient temperature	5 – +80 °C
Operating temperature electronics	-20 – +80 °C
CIP – max. cleaning temperature (temperature/duration/ambient temperature)	90 °C / 30 min / 25 °C
SIP – max. sterilization temperature (steam) (temperature/duration/ambient temperature)	121 °C / 15 min / 25 °C
Storage temperature	-25 – +80 °C
Protection class	IP68
Connecting cable type	UNITRONIC®ROBUST C 7x0.14 shielded
Connecting cable length	6 m
Wear protection	PEEK
Gaskets	EPDM E7502
Housing/flange material	V4A (1.4404)
Dimensions: Ø / height	84 mm / 58 mm (without cable gland)
Weight without cable	1.2 kg
Weight clamping flange	0.162 kg

1.) representative according to the batch or the period of continuous operation with the corresponding evaluation unit Litronic-FMS II, depending on material, ideal material flow and proper calibration

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## Drawing:



## Remark:

EHEDG logo may only be published with following sensor designation (certifier threatens penalty of €10 000 per violation).

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