

Data Sheet

Litronic FMS planar sensor CCS



Technical Data

Physical principle	Capacity determination with high-frequency-stray field
Frequency	20 MHz
Sensor location	1.) Paper,- cardboard-, plastic film-, felt-, fabric webs 2.) Plastic drying plants or comparable
Measuring range	1.) 0 - 100 % moisture content (measuring window adjustable) Weight per unit area control system 5... 25.000 ...50.000 g/m ² , resolution 0,5 g/m ² ^{1.)} Coating thickness control system 5 µm ... 25 mm ... 50 mm, Resolution 0,5µm ^{1.)} 2.) 0 - 100 % moisture content (measuring window adjustable)
Capacitance resolution	3 fF
Cycle of up-date	32,64 ms
Sampling rate	16-25 10 ⁶
Measured value transmission	digital: RS-485, Multiprocessor protocol, streaming
Max. Number of sensors at the bus	16/4
Max. cable length	1200 m
Power pack	8..30V, 0.4 VA
Material temperature	Max. 80 °C
Measuring range of temperature	-10 – 80 °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
Protection class	IP68
Wearing protection	Zircon oxid (ZrO ₂ Al ₂ O ₃)
Connection cable type / length	LAPP UNITRONIC® ROBUST C 7x0,14 shielded / 6 m
Material shell / flange	1.4305
Weight: Ø / height	78 / 43 mm (61 mm with cable connection)
Weight without cable	0,900 kg
Weight clamping flange	0,300 kg

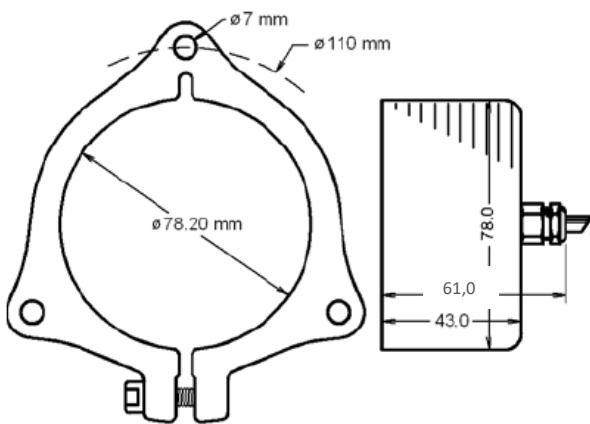
1.) depending on material

Data Sheet

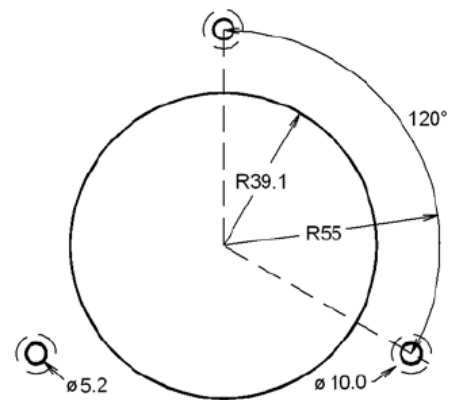
Features

- Capacitive measuring method
- Contactless measuring possible
- Temperature compensation
- Digital measured value transfer and recording.
- Up to 4 sensors per electronic module (FMSIII), up to 16 sensors per electronic module (FMSII)
- Stainless steel housing

Dimensional drawing:



Master gauge:



: