

# Technical Data

## Litronic FMS planar sensor P78



Physical principle:	Capacity determination with high-frequency-stray field
Field frequency:	20 MHz
Sensor location:	outside silo via deflector, on conveyor belt with sliding shoe, pipes, worm conveyor
Measuring range:	0 – 100 % moisture content (measuring window adjustable)
Capacitance resolution:	3 fF
Cycle of up-date:	32.64 ms
Measuring precision maximally:	+/- 0.05 % moisture content <sup>1)</sup>
Measured value transmission:	digital: RS485, multiprocessor protocol
Max. Number of sensors at the bus:	16
Max. cable length:	1200 m
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
Protection class:	IP68
Connecting cable type:	UNITRONIC®ROBUST C 7x0,14 shielded
Connecting cable length:	6 m
Wearing protection:	Zirkon oxid (ZrO <sub>2</sub> Al <sub>2</sub> O <sub>3</sub> )
Material shell / flange:	V4A (1.4404)
Weight: Ø / height:	78 / 57 mm alternative: 30 / 94 mm

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Weight without cable: 0,500 kg

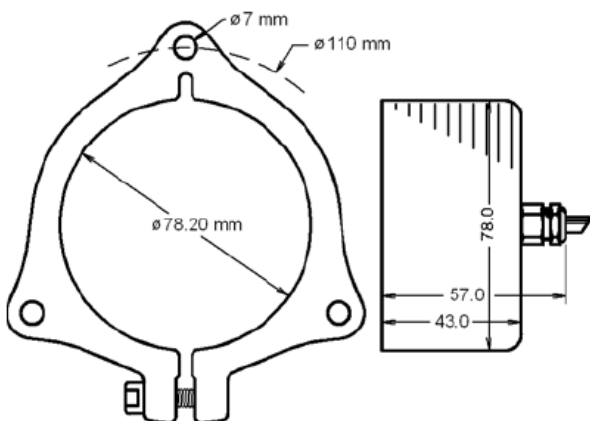
Weight clamping flange: 0,300 kg

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.
- Temperature compensation.
- Limit value check.
- Digital measured value transfer and recording.
- High-strength ceramic wear shield.
- Stainless steel housing.

Measurement gauge:



Master gauge for holes:

