Universal
moisture sensor

MMS

Overview of features

- Measuring of material moisture in real-time
- Measuring range free adjustable
- Variable installation depth of the sensor
- Simplest handling
- Measuring output direct from sensor
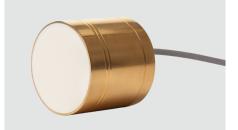- 2-point-calibration at sensor

The moisture measuring sensors are made for the toughest operations and industrial applications. The sensors are constructed based on long-terms practical experiences for permanent use. Without much effort it can be installed – also afterwards – into the process.

This universal usable sensor has an analogue measuring arrangement and uses the capacitive measuring principle for determining the moisture content of materials. By standardized analogue signals (e.g. 4...20mA) the measure values are delivered to a PLC or a controller. The calibration of the sensor has to be done by potentiometer, beyond the process.

In almost every kind of bulk material a precise determination of the moisture can be done, e.g. sand, minerals, clay, grain, food stuff, saw dust, ores, sewage sludge and so on.

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Technical details

Physical measuring principial	capacitive
	(determination with high-frequency leakage field 27 MHz)
Measuring range	Moisture: 0...100 % (adjustable)
Accuracy	+/- 0,1...0,5 % moisture
	(depending on material/sensor installation place)
Mode	continuous measuring
Ambient / material temperature	4...50 °C
Measuring depth	ca. 150 mm (depending on material/compaction)
Sensor dimensions	Ø = 76 mm / H = 70 mm
Materials housing / wear protection	Stainless steel (1.4301), ceramic ($ZrO_2Al_2O_3$)
Protection class	IP67
Sensor mounting	clamp flange (variable installation depth)
Power supply	9 ... 30V DC / 1,7 VA
Output	Analogue output, e.g. 4...20 mA, 0...20 mA, 0...10 V
Sensor cable	LiYCY 7 x 0,25 mm², shielded, 3 m long
Versions / Options	• Integrated temperature sensor Pt100
	• Sensor with extended temperature range, up to 80°C
	• Sensor for measurement in mixer
	• Sensor with teflon surface
	• Sensor with rubber surface