

Compact  
system

# AMMS



Based on long-term practical experiences the moisture measuring sensors are **made for the toughest operations and industrial applications**. The AMMS sensor with its integrated microprocessor establishes a transition between the DMMS system and the analogue moisture measuring sensor MMS. The AMMS sensor combines the advantages of calibration in the process with a direct measured-value transfer (e.g. 4...20mA) brought together in a compact version.

Beside a power supply this sensor only needs a display or a PLC which is waiting for its measuring value. The AMMS sensor has been designed for applications which do not need a multi-pieced system but benefit of a precise on-line calibration that is able to compensate the influences of the sensor installation. It's also possible to calibrate the AMMS sensor directly by an integrated rotary encoder. This work actually takes place before the sensor has been installed.

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.

## Overview of Features

- Measuring of material moisture in real-time
- Multi-point calibration
- Calibration within the process
- Integrated averaging
- No evaluation unit necessary



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## Technical details

Physical measuring principle	Capacitive (determination with high-frequency leakage field 27 MHz)
Measuring range	Moisture: 0...100 % (adjustable)
Accuracy	+/- 0,1% moisture (depending on material/sensor installation place)
Mode	Continuous measuring
Ambient / material temperature	4...70 °C
Temperature compensation	of sensor electronic
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 <sub>2</sub> Al <sub>2</sub> O <sub>3</sub> )
Protection class	IP67
Sensor mounting	clamp flange (variable installation depth)
Power supply	9 ... 30 V 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 mm <sup>2</sup> , shielded, 3 m long
Calibration	Directly at sensor with integrated encoder (2-point-calibration) or with optional calibration software (multi-point-calibration and averaging)
Connection box	IP67, made of aluminum, with integrated calibration interface
Versions/ Options	<ul style="list-style-type: none"> <li>• Integrated temperature sensor Pt100</li> <li>• Sensor for measurement in silo</li> <li>• Sensor for measurement in mixer</li> <li>• Sensor with teflon surface</li> <li>• Sensor with rubber surface</li> </ul>

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