

Moisture measurement sensor

BMMS



Overview of features

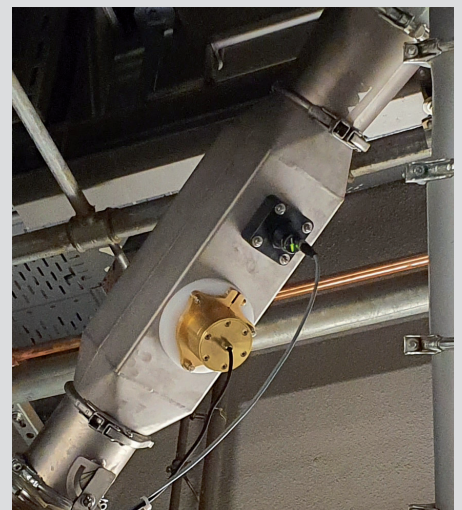
- Measuring of material moisture in real-time
- Multi-point calibration (2...8 points)
- Calibration within the process
- Integrated filters
- Analogue and digital output
- Continuous or batch operation

As a **compact sensor with fully digital measurement technology**, the BMMS moisture measurement sensor combines the innovative advantages of the digital DMMS system and the "simplicity" of analog moisture measurement sensors.

During operation, the sensor requires nothing but a power supply and a display or a controller that can receive the measurement signal... The BMMS sensor is designed for applications in which no multi-part systems are to be used but still the highest precision is required. Due to the in-process calibration, all potential interference from the sensor installation is directly compensated for.

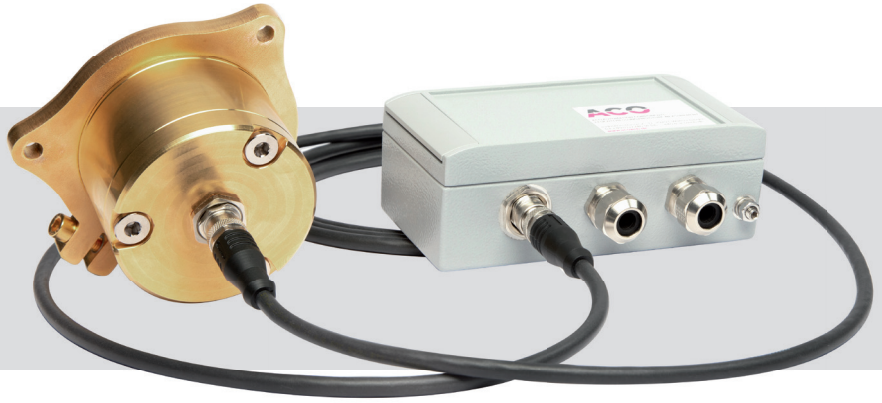
The parameterization (calibration) is carried out conveniently via slim and intuitive PC software. The measuring signal is either analog 4...20mA or optionally in digital form (RS485).

The BMMS sensor precisely determines the residual moisture of a wide range of pourable materials such as sand, minerals, clay, grain, foodstuffs, sawdust, ores, sewage sludge, etc.



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Technical details

Physical measuring principle	Capacitive (determination with high-frequency leakage field, 16...23 MHz)
Measuring range	Moisture: 0...100 % (adjustable)
Accuracy	+/- 0,05 % moisture (depending on material/sensor installation place)
Mode	Continuous or batch measuring
Ambient / material temperature	0...80 °C
Temperature compensation	of sensor electronic
Measuring depth	approx. 150 mm (depending on material/compaction)
Sensor dimensions	Ø = 76 mm / H = 70 mm
Materials housing / wear protection	Stainless steel (1.4301), ceramic (ZrO2Al2O3)
Protection class	IP68
Sensor mounting	Clamp flange (variable installation depth)
Power supply	9 ... 36 V DC / 1,1 VA
Output	Analogue output, 4...20 mA
Sensor cable	Pluggable to sensor and connection box 0,5m, 3m or 5m long, IP68
Calibration	Via software, directly in the process
Connection box	IP67, made of aluminum, with integrated calibration interface
Versions / Options	<ul style="list-style-type: none"> • Sensor for measurement in silo • Sensor for measurement in mixer • Sensor housing made of acid proof stainless steel (1.4462) • Digital interface, RS485 (max. 1,000m cable length)