moisture measuring

online down to the core

Moisture measuring systems
Industrial components
Special solutions
Sensors
Evaluation
ANALOGUE MOISTURE MEASURING SYSTEM • sensors MMS

**Physical measuring principle:**
High frequency dielectric shift

**Operating voltage:**
24 VDC (9...30 VDC)

**Signal output:**
0/2...10 VDC, 0/4...20 mA
galvanically isolated

**Protection against:**
wrong polarity, over voltage, short circuit

**Measuring depth into the material:**
up to 150 mm
(depending on material)

**Moisture measuring range:**
0...100% (free selectable)

**Accuracy:**
+/- 0.1%

**Ambient temperature:**
0... 60°C

**Material temperature:**
> 4°C (no measuring on ice)

**Sensor housing:**
diameter 76 mm, length 70 mm

**Measuring surface:**
ceramic 2 mm, for mixer sensors 10 mm
circon oxide ceramic (ZrO₂Al₂O₃), Teflon

**Installation depth:**
up to 60 mm wall depth;
Silo sensor: arm legth 600 mm

**Housing silo arm:**
stainless steel V4A, polished, galvanized

**Sensor mounting:**
clampping flange or mounting flange (silo)

**Options:**
integrated PT100 temperature probe
wear out protection probe
80°C ambient temperature

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**Standard sensor MMS-0**

for installation in silo walls, at materials chutes, on or under conveyor belts (with ACO sensor sleighs), in tubes and screw conveyors.

**Silo sensor MMS-1**

for installation inside silos and flow path bins for measuring directly in the material flow.

**Mixer sensor MMS-2**

for moisture measuring at installation places with extremely heavy mechanical load on the sensor (e.g. mixers) or for highly abrasive materials (10 mm ceramic disc).

**High temperature sensor MMS-3**

for moisture measuring at installation places with very high material temperatures up to 200°C and ambient temperatures up to max. 80°C.
With the **ACO** evaluation and processing device DIGISYS all preconditions are fulfilled for digital measuring, evaluation and control of material moisture on every step of a production process. Together with the digital sensors DMMS it meets all requirements for precise moisture measuring.

Up to 16 sensors can be connected to the basic element. The modular structure enables any extension.

Parameterisation and calibration are done on a standard PC (Windows) by ACO DMMS software.

On exchange of a sensor no new calibration is necessary. The system is determined for highest operational safety during fully automatic operation as well as on manual operation (changeover at terminal).

For more technical information please ask for our data sheet.
Digital silo sensor DMMS-1

for installation inside silos and flow path bins for measuring directly in the material flow.

Digital mixer sensor DMMS-2

for moisture measuring at installation places with extremely heavy mechanical load on the sensor (e.g. mixers) or for highly abrasive materials (10 mm ceramic disc).

Planar sensor EX

with approval for
Ex-Zone 20/21 (dust)
nach ATEX CE Ex II 1/2D, T 80° C IP6x Eex ia II C
Ex-Zone 0/1 (gas)
nach ATEX CE Ex II 1/2G, EEx d ia II C T6
Samples for typical installation places of ACO moisture sensors are at silo walls, at canted silo outlets, at material chutes, also inside a silo, with a sensor sleigh on or under a conveyor belt, in a screw conveyor, at continuous casting for bricks and tiles, as well as in mixers and before or behind dryers, and many more.

ACO presents a solution for nearly every possible installation situation, creating suitable solutions for your application.

For any installation of the ACO sensor only a 76 mm diameter hole is needed and three screw holes for 6 mm screw mounting.
We are
*the experts for moisture measuring.*

We offer
*creative solutions for all branches.*

We supply
*tailor-made products of highest quality.*

*The best solution is not enough for us!*  

Please find latest information on our website:
www.acoweb.de

Or just call us:  
it’s a pleasure for our staff to be at service for you.

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