Moisture in materials

Sensor for measuring the moisture in materials FHA 696 GF1 For determining the moisture content in granulated materials such as wood chips, wood pellets, and sawdust



- The sensor operates on the principle of an open plate capacitor. The moisture contained in a material can be measured in terms of that material's dielectric constants.
- Moisture content can be determined in a matter of seconds in wood chips or wood pellets, and sawdust, in grain and cereals, and other granulated materials.
- The characteristics of the materials to be measured can be specified on a highly customized basis; a wide variety of granulates, e.g. various cereal types, can thus be measured

Technical Data

Measuring principle capacitive		Dimensions		
Measuring range	0 to 99.9 % water content as a weight percentage H_2O	Sensor head	Sensor head $\emptyset = 22 \text{ mm}, \text{ length} = 200 \text{ mm}$ Rounded tipExtensions β pieces, screw-on $\emptyset = 18 \text{ mm}, \text{ length} = 300 \text{ mm}$	
Resolution	0.1%	Extensions		
Measuring radius / p	penetration depth approx. 10 cm around the sensor	End piece	$\phi = 18$ mm, length = 300 mm $\phi = 22$ mm, length = 30 mm	
Temp. range of material +5 to +40 °C		Cable terminal	Mountable male connector on sensor head	
Operating temp. range +5 to +40 °C				
Storage temp. range	-20 to +70 °C	Cable	PVC, length = 2 meters with ALMEMO [®] connector The cable is led through the extension tubes and end piecet.	
Signal output	ALMEMO [®] (voltage)			
Power supply	5 V from ALMEMO [®] measuring instrument			
Current consumptio	n approx. 5 mA	_		

Option

Determining characteristics for special customer-specific materials

1. We need a sample of approx. 10 liters of your granulate (e.g. wood, cereal, plastic). This sample should be sealed in an air-tight package, e.g. shrink-wrapped in plastic film.

- 2. We use various dried samples to determine the characteristics of your particular material.
- 3. We then program these characteristics in the ALMEMO® connector for the moisture content probe..

Pro rata processing costs per material sample, net (service)

Advisory note:

If the material cannot absorb water (not hygroscopic), it will not be possible to measure its moisture content.

In this case the processing fee we charge will be reduced.

Order no. OA9696GFK

Order no.



Variants

Sensor for measuring moisture in granulated wood chips and pellets comprising :

Sensor head, 3 screw-on extensions, end piece, connecting cable 2 meters, with ALMEMO® connector programmed for wood FHA696GF1 chips (also programmable for wood pellets; if required, please indicate) including carry case Test block for FHA696GF for wood chips and wood pellets

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