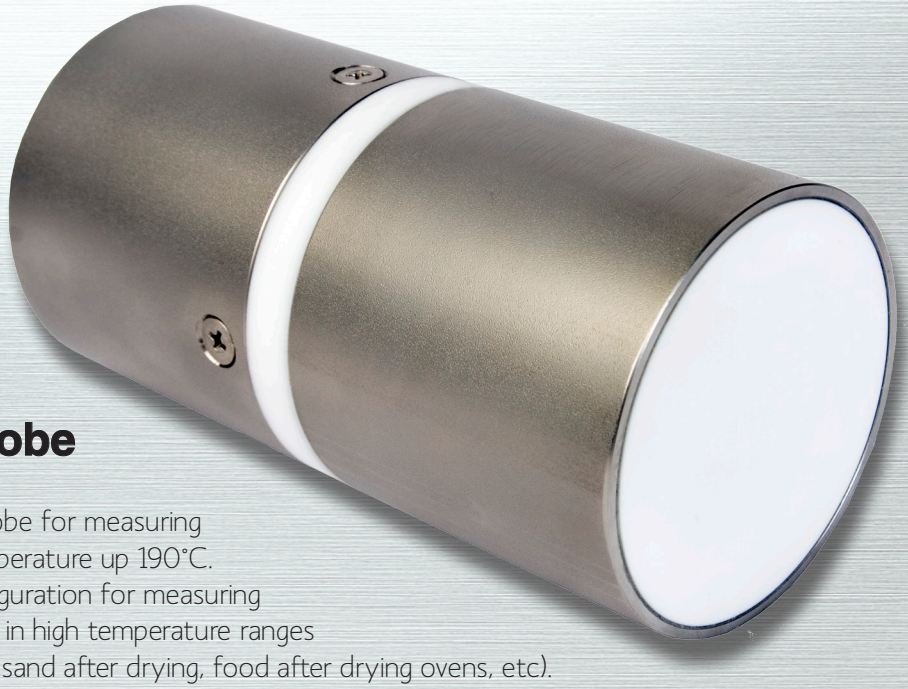
FSH - The high temperature range probe

FSH



FSH probe

Unrivaled probe for measuring
material temperature up 190°C.
Special configuration for measuring
the moisture in high temperature ranges
(e.g. foundry sand after drying, food after drying ovens, etc).
Selectable temperature range of 120°C, 140°C, 160°C or 190°C.
Continuously adjustable, very robust and different measuring surfaces
Screw-on cable; replaceable measuring surface.
Degree of protection IP68

Facts and Information

Werne & Thiel moisture measuring sensors always represent the latest technology of our well-proven high frequency measuring method and offer unique precision and reliability. Since decades we are in touch with our customers to be able to always give him an innovative product perfectly fitting his needs.

FSH Sensors of the newest generation are available by different replaceable wear protections:

- **Special-Ceramic** (extremely abrasion resistant)
- **Teflon** (for sticky materials)

Easy calibration of the sensor by integrated adjustment unit.
Output Signal: 0-10 V or 0/4-20mA - *no additional processing unit required*
Operating voltage: 9-30V DC

NEW: **Specific appointment of moisture thanks internal digital linearization of the measuring signal**

Samples of application area:

- Moisture content of many high temperature materials (up to 190°C)
- Reprocessing of foundry sand
- Moisture content of quartz sand e.g. for glass manufacture
- Quality optimizing in food processing
- Biological waste
- Ceramic powders and pastes; metal oxides
- Sludge from the sewage plants
- and many more

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Online Moisture Measuring Systems

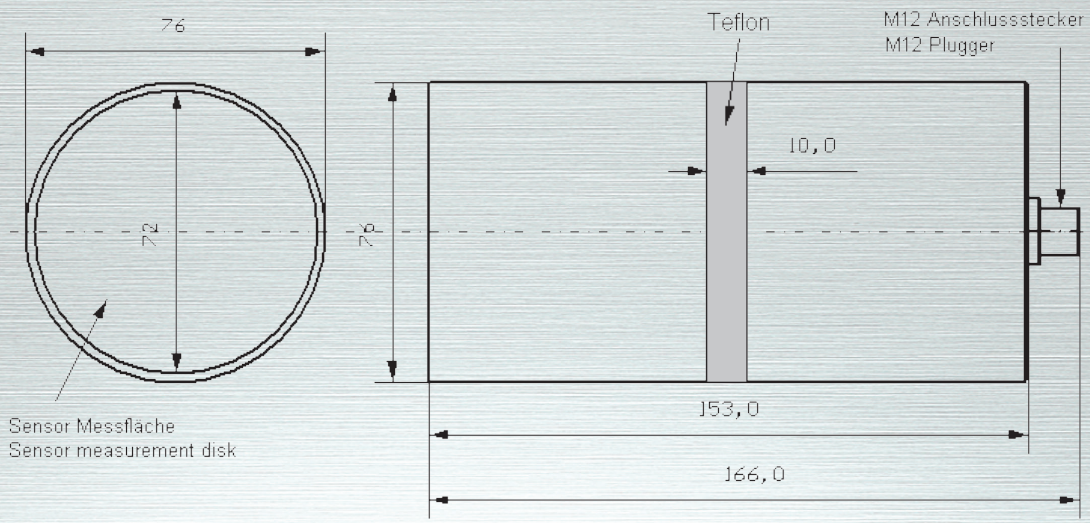
- Since 35 years one of the leading manufacturers of online moisture measuring systems
- Latest development of high frequency electronic measuring technology
- Thousands of systems approved in use worldwide

Technical details

Probe supply	+9 VDC up to +30V DC
Current input:	165 mA for 10 V supply 125 mA for 15 V supply 70 mA for 24 V supply 58 mA for 30 V supply
Signal output	Standard: 0-10 V
Output load resistance:	100 kohm
Optional signal output:	0-20 mA or 4-20 mA
Load resistance:	500 Ohm 0.1%, TK = 25 ppm
Maximum Signal Values	Voltage output: -0,7 V to app. 12V (RL = 100 k Ohm)
Current output 0-20 mA:	0 mA to app. 24 mA (Load = 500 Ohm)
Current output 4-20 mA:	+4 mA to app. 24mA (Load = 500 Ohm)
Protection against:	Overvoltage, reverse polarity and short-circuit of the output. All inputs and outputs are protected against disturbances with suppression filters.
Material-Temperature sensor:	PT100 optional

Measurement range and internal calibration of probe 0 and % adjusting trimmer for calibrating the probe
These allow one to adjust the measuring window of the probe to the desired range of moisture measurements for the material. Accessible only through a water tight screw on the probe cover.

Abrasion Protection of Sensor:	Ceramic: 3 mm thick, extremely good resistance to abrasion Teflon: for sticky materials and for use in the food industry
Depth of insertion of sensor edge:	continuously adjustable from 0 mm to app. 50 mm
Environmental conditions:	+0.5°C to +190 °C at the measuring surface only, permissible environmental temperature max 80 °C



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