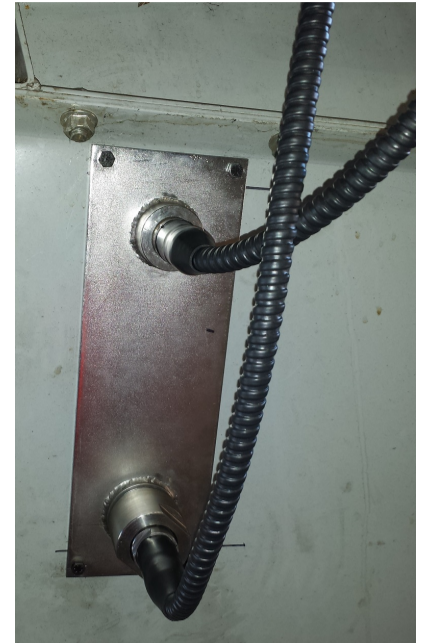


# Moisture Sensor PCE-MWM 240-A



## PCE-MWM 240-A VHF-Band Sensor / continuous moisture measurement in bulk (tank / silos)

Designed specifically for use in humidity measurement of bulk material, this moisture sensor is installed in bins, silos, troughs, bunkers case, distributors, screw conveyors and on conveyors. Material in bulk or flowing mass, such as dyes, gravel, sawdust, flyash (mineral), woodchips (surface to 5 cm) feed grain, flour, seed, pastes, ... is smoothly and continuously measurable in the process.



Also in this humidity sensor, the measuring principle is based on the use of waves in the VHF range. The unit used for measuring moisture consists of an electronic box and the moisture sensor itself. The sensor part is manufactured in two versions. Both are made of AISI 321 stainless steel (tube diameter 15 ... 30mm), but differ in their structural design.

Variant 1 (PCE-MWM 240-A): Bow sensor (length 200 mm)

The bow shape makes it extremely robust against shocks and mechanical abrasion. It is fastened by means of adapters on the wall of tanks and silos.

Variant 2 (PCE-MWM 240-B): Rod sensor (length 500 ... 1500 mm)

It is attached like a connecting strut between two container walls.

Variant 3 (PCE-MWM 240-C): Bow sensor (length 200 mm)

A bow sensor that is designed specifically for high conductivity materials like iron ores, coal, and other metals.

Both sensor types require a perfect cover with bulk (100mm) in order to ensure a high measurement accuracy. For this reason, the rod sensor is often installed in case hoppers. On the bow shaped sensor additional guiding plates provide sufficient coverage with the material to be measured. Regulation of the speed of a conveyor belt may also be sufficient to always keep a sufficient cover on the humidity sensor. This is particularly important to keep the density of the material to be measured as even as possible.

# Specifications

## Technical Data:

Measuring range	0 ... 100 %
Maximum permissible error (absolute)	Verified by lab test
Operating temperature range	0 ... +80 °C
Working mode	continuous operation
Measuring rate	1 s
Power supply	24 VDC
Current consumption	200 mA
Warm-up time (start-up)	30 min
Outputs	RS485 (Modbus RTU), 4-20 mA [RS485: max. cable length 1000m; 4-20 mA: max. length 100m (max. length up toSPS)]
Inputs	2 x digital 24 VDC
Dimensions rod sensor	L 500 ... 1000 mm, 15 ... 30 mm dia.
Dimensions bowsensor	L 250 mm, 14 mm dia.
Dimensions (electronics unit)	255 x 170 x 60 mm
Protection(sensor)	IP65
Protection(electronic unit)	IP54
Dimensions	
Rodsensor	2 ... x kg (depending on the length)
Bowsensor	3 kg
Electronics unit	2 kg

**Please note that we will need further information to provide a final price for supply and fit. We will need to know what materials are to be measured, we will need samples of the material, and we will need a technical drawing showing where the sensor is to be installed.**

# More information

Manual



More product info



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