

1 Application

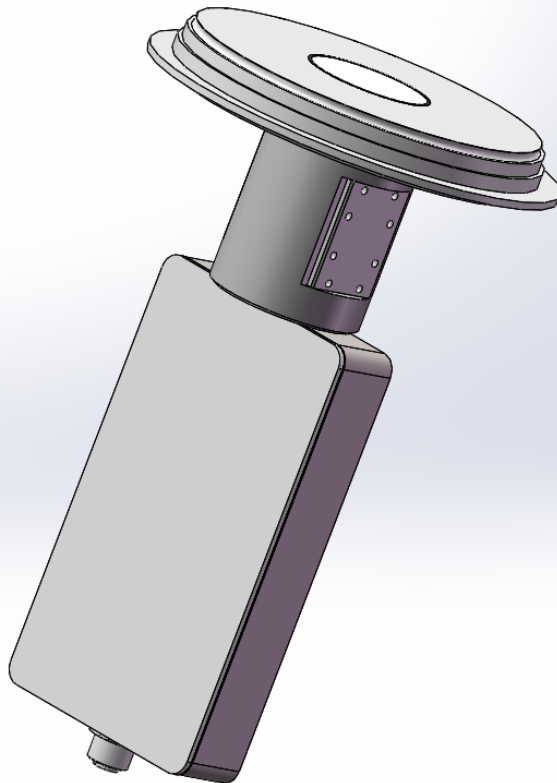
Microwave sensor for measuring moisture or water content with measurement range from 0% up to 100% moisture.

The sensor head is built with a plug fitting GEA VarInline DN125 and DN75.

Available interfaces are Ethernet and current loop 4...20mA.

2 Setup

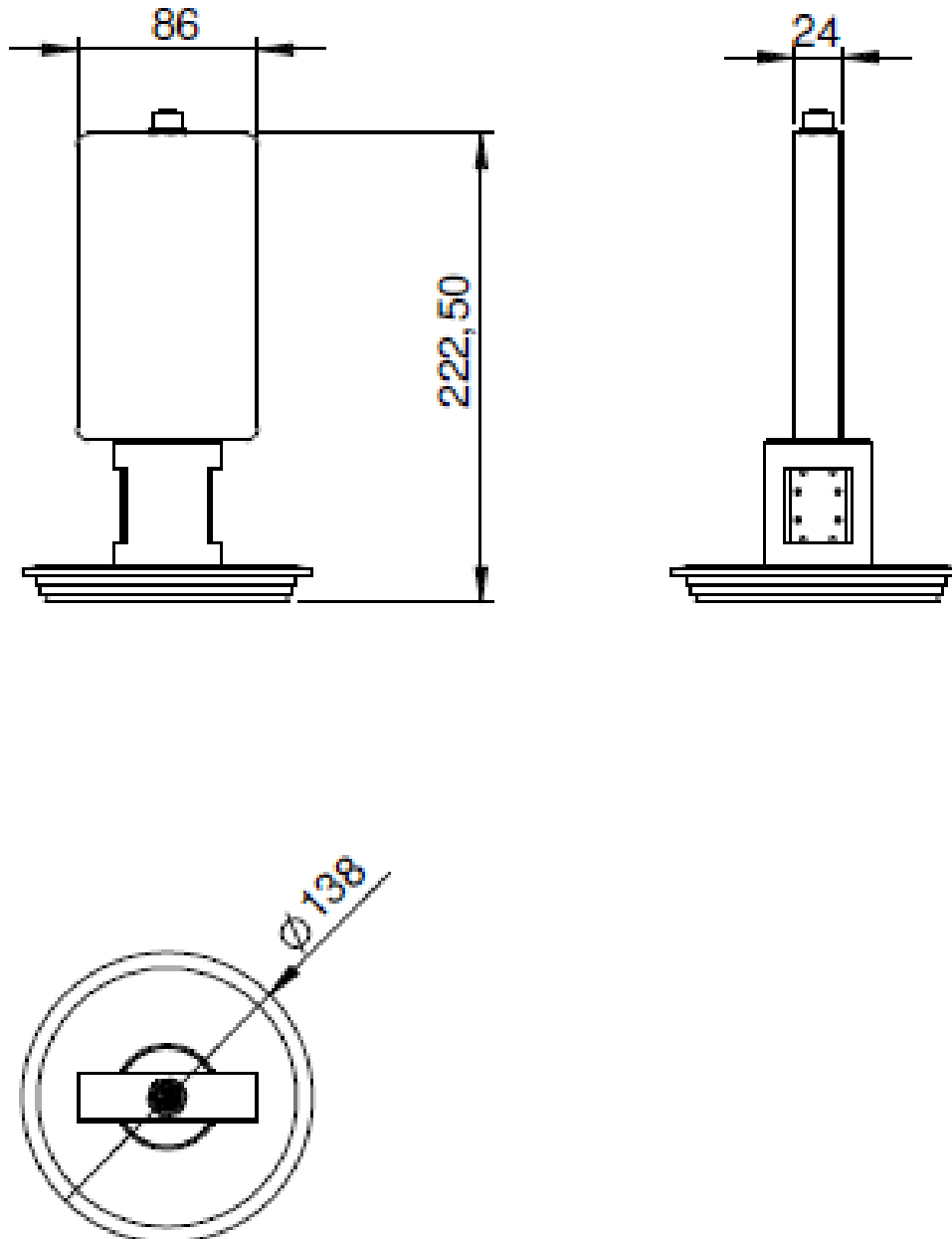
picture 1 : Microwave sensor 87150.033 for DN125



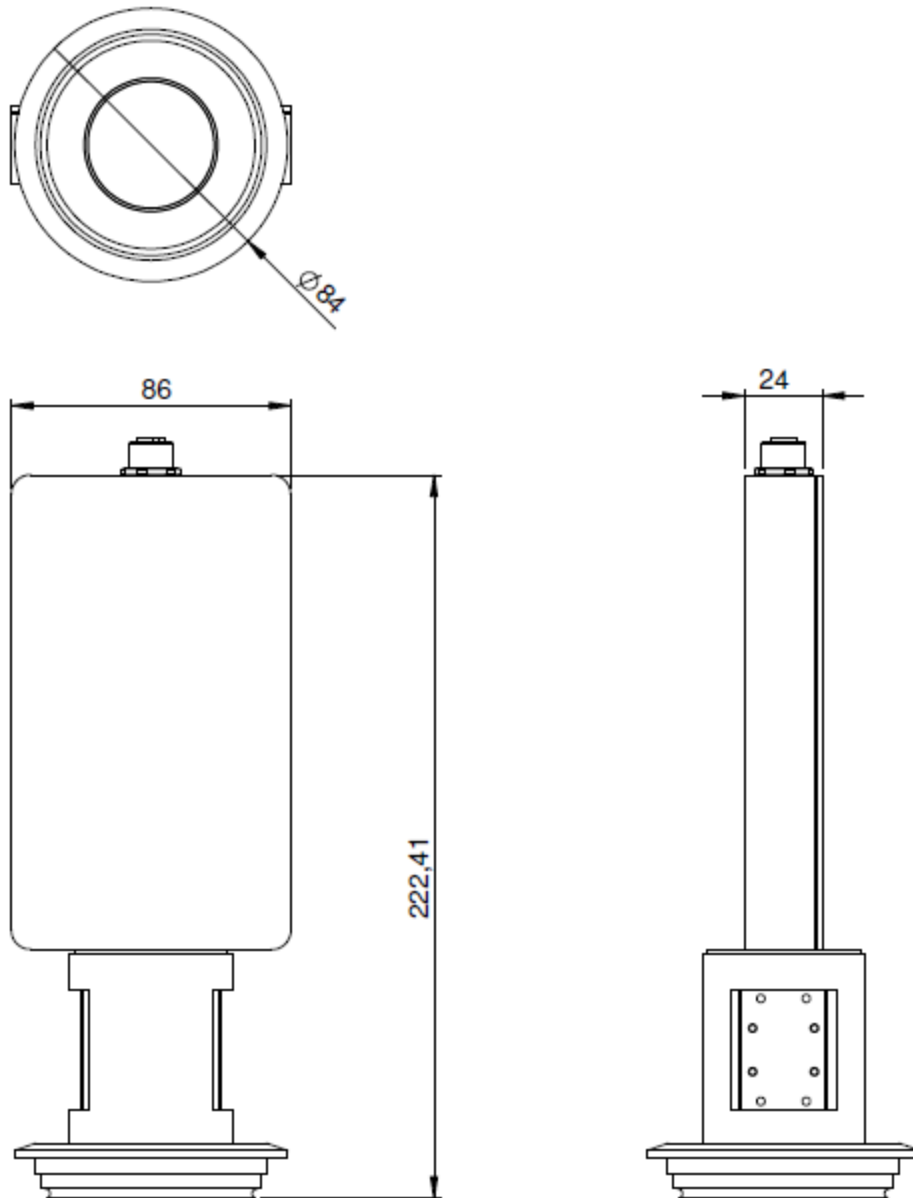
White ceramic plate of $d=40\text{mm}$ is the sense area of the sensor. The sealing gasket between the ceramic and the case of stainless steel is made of FPM. Therefore the sensor is used for applications in the food industry.

3 Dimensions

picture 2 : Microwave sensor 87150.033 DN125 , dimensions in mm

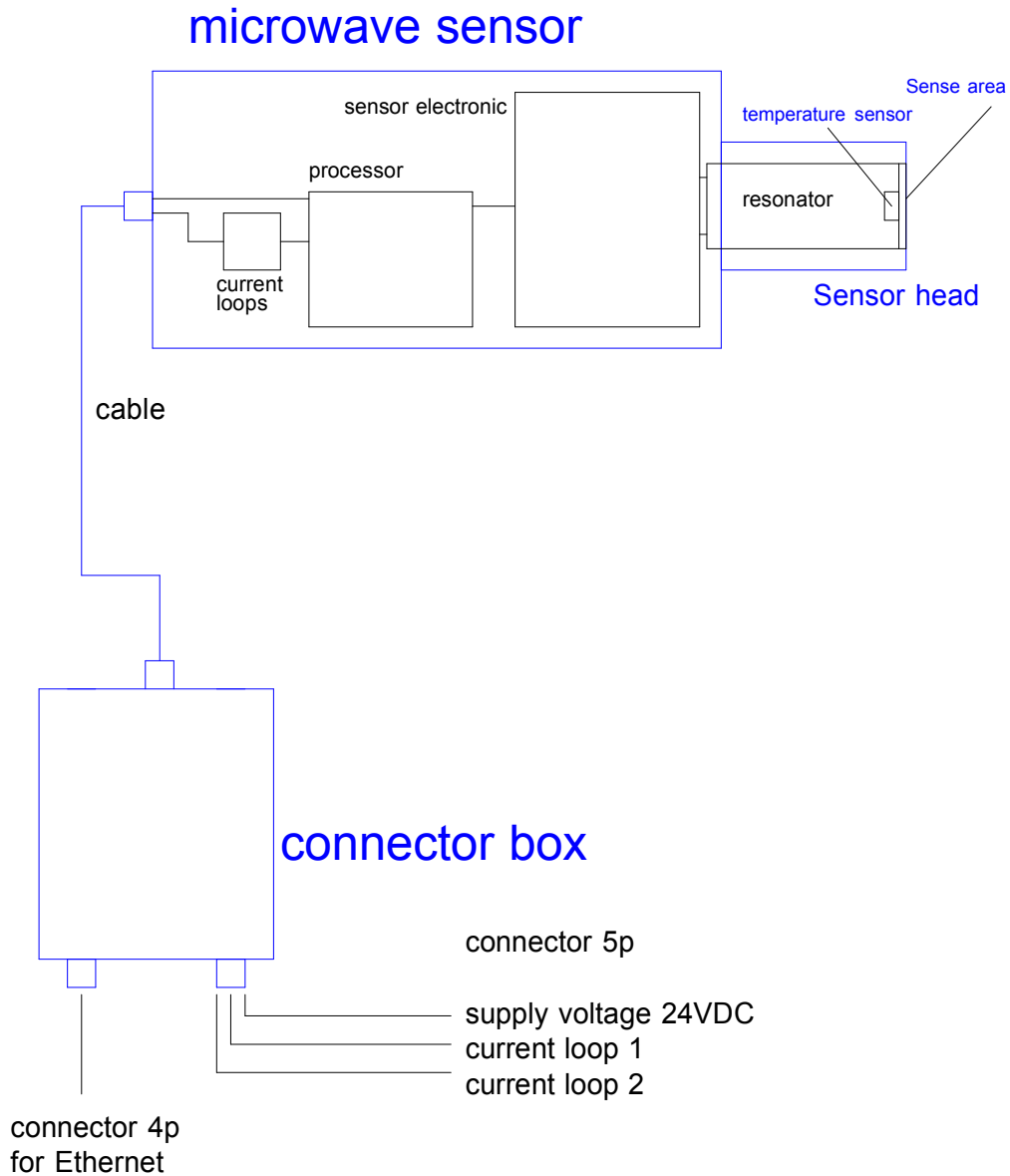


picture 3 : Microwave sensor 87150.034 DN75 , dimensions in mm



4 Connection of sensor

picture 6 : interconnection of sensor and connector box



5 Order information

Sensor

Model - Nr	Description	Connector
87150.033	- Resonator head with plug DN125 - with current loop 4...20 mA - measurement range 0...100% moisture	M12 8-pole connector
87150.034	- Resonator head with plug DN65 - with current loop 4...20 mA - measurement range 0...100% moisture	M12 8-pole connector

6 Technical data

Description		
	Microwave sensor for measuring moisture or water content of a paper web or sheet	
	Frequency range 1 GHz	
Measurement principle		
	Resonance method	
	Sensor with direct contact to measured material	
	Measurement range: 0 ... 100% moisture or water content	
Power supply		
	supply voltage	+22 ... +30V typ: +24V
Temperature		
	sensor head	0 ... +100°C option T140 : 0 ... +140°C
	sensor body with electronics	0 ... +80°C
Current consumption	current is measured with connector box at 24V	
	operational current	ca. 280mA
	inrush current	<1A
Ingress protection		
		IP68
Weight		
	weight	ca. 2,0 kg