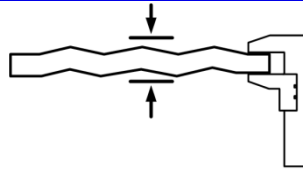


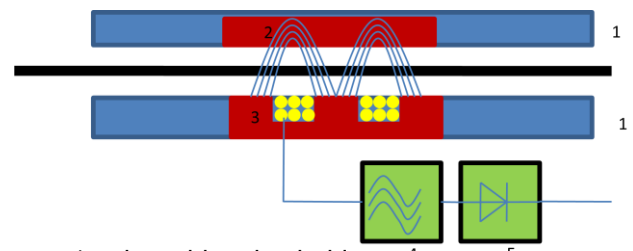
Description



Double air bearing Thickness measurement MRP CLP TETE 2008

Double air bearing thickness measurement for thicker paper, cardboard and paperboard by changing the magnetic resistance for thicker products

The continuous measurement of the thickness is, in addition to the weight per unit area measurement on running webs, an essential tool for the evaluation of the product quality in many processes. Here it is important to measure the thickness of the various types of cardboard with a high degree of accuracy under extreme environmental conditions. The use of a thickness gauge therefore helps to ensure product quality as well as to minimize waste.



- 1 air cushion ring holder
- 2 Ferrite plate
- 3 Coil with ferrite carrier
- 4 Oscillator
- 5 Demodulator

Indicator / Characteristics

Contact thickness measurement is characterised by the following features:

- ferrite plates with an air cushion of approx. 50 µm floating on both sides
- especially suitable for cardboard and pen products
- online capable
- applicable in industrial environment

Physical principle

The thickness gauge measures the change in magnetic resistance. For this purpose, a ferrite plate is placed on a constant air cushion on one side of the cardboard or paperboard web. On the other side there is a small coil embedded in a ferrite plate, also on an air cushion. An applied alternating voltage creates a magnetic field with the opposite ferrite plate, the resulting air gap changes the magnetic resistance due to changes in the thickness of the product.



The sensor only requires a 24V supply voltage from the outside. The sensor output signal is available as Profibus DP signal.

Messgenauigkeiten

Typ	MRP-CLP TETE 2008
Measuring range	250 µm - 6000µm
Resolution	1,5 µm
Accuracy - 2 Sigma bei 1 sec	0,5% but not better than ±8 µm
Accuracy at reference foil	0,2% but not better than ±3,5 µm
Operating temperature	10°C-70°C