



SPEETEC®

CAPTURES MOTION. WITHOUT CONTACT.

Non-contact motion sensors

SICK
Sensor Intelligence.

SPEETEC® transcends the limits in the monitoring of movements. Non-contact and with no measuring elements or scales, it reliably determines the length, position and speed of all kinds of objects and surfaces. Whether it be continuous roll materials or single items, paper, plastic, metal, wood or textile. Its advantages are particularly evident for sensitive or soft surfaces, which can be damaged by conventional tactile sensors. Being virtually wear and maintenance free in operation, it is so economical that the investment pays off in no time at all.

SPEETEC® at a glance

- Ensure a high level of product quality by using optical sensors and avoiding damage and contamination to the surfaces being measured
- The class 1 laser saves costs as no additional laser protection measures are required
- High measurement accuracy and reproducibility, including in start-stop operation and at short measurement lengths
- Optimized productivity and process quality through measurement without slippage
- Broad range of applications thanks to compatibility with many materials, colors and surfaces



SPEETEC® stands for non-contact measurement of speed, length and position.

SPEETEC® MEASURES WHATEVER COMES IN FRONT OF THE LASER

SPEETEC® can be employed in applications where tactile sensors have not been able to be used in the past due to the characteristics of the material. This opens up a whole new range of possibilities for measuring a wide range of different

and also sensitive, soft or smooth materials. SPEETEC® also offers significant advantages over existing applications using rotative or measuring wheel encoders if the speed and dynamics of the processes are increasing.

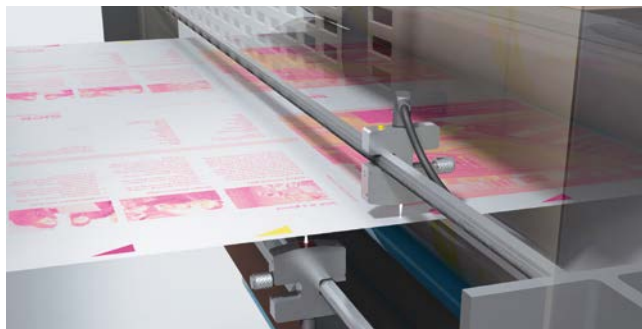
Example applications

Packaging



Measurement of speed and length in a packaging process with simple electrical and mechanical integration and without damaging the material or abrading it with a measuring wheel.

Digital printing



Speed measurement directly on the object being printed on without damaging the sensitive surface and with a high signal quality and resolution delivers the best print results.

Tire manufacturing



Non-contact and precise speed and length measurement directly on the rubber and other soft or slippery materials eliminates slippage.

Extrusion



Quality control for cutting processes through automated 100 % length measurement directly on the material and efficient statistical process control.

Technical data

Dimensions	140 mm x 95 mm x 32.5 mm
Measuring dimensions	1D, bi-directional
Speed measuring range	> 0 m/s ... 10 m/s
Repeatability	≥ 0.05 % (> 0.25 m, > 0.2 m/s)
Measurement accuracy	≥ 0.10 % (> 0.25 m, > 0.2 m/s)
Measurement step	Max. 4 µm, (configurable in the factory)
Interface	12 ... 30 V DC, TTL or HTL
Working distance/static field depth	50 mm / ± 5 mm (material-dependent)

SPEETEC® is expected to be available from November 2020.