MICRO-EPSILON

More Precision

capaNCDT // Capacitive sensors for displacement, distance & gap

Rotation speed measuring system for industrial counting tasks
capaNCDT CST6110

- Material-independent rotation speed measurement of 1 … 400,000 rpm
- Adjustable rotary switch (max. 16) for rotation output
- Measurement from the first detection
- Easy integration due to compact sensor size
- Ideal for industrial environments with electromagnetic radiation

The capaNCDT CST6110 is a capacitive measuring system for non-contact rotation speed measurement of conductive measuring objects such as metals and non-conductive objects such as ceramics or plastics. This non-contact measurement is performed, for example, in drives, on rotor blades or on position marks of shafts.

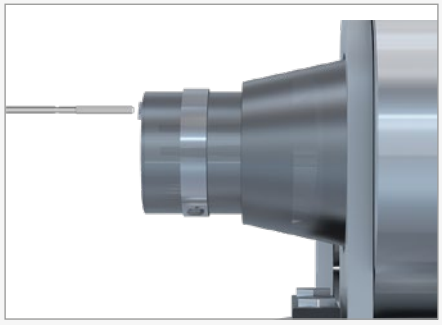
The sensor can be mounted in axial and radial direction to the target in order to detect objects such as blades, teeth, rings or nubs. The measuring range from 1 to 400,000 rpm enables the detection of both the startup from the first rotation and high rotational speeds reliably.

The adjustable rotary switch supports the rotation output of objects which have several measuring points per rotation, e.g., rotor blades. Data output is via a voltage output or a digital interface.

The CST6110 rotation speed system consists of a compact industrial sensor which is connected to the robust controller via a sensor cable.

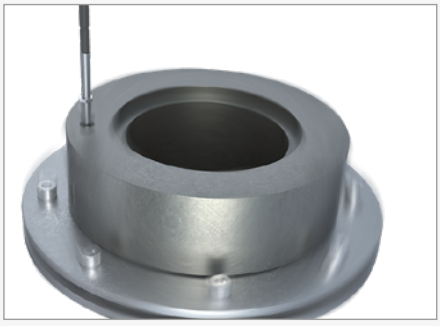
Controller	CST6110
Sensor	CS025/M5-CAm1,0/RS with a measuring range of 0.25 mm
Speed range (measuring range)	1 ... 400,000 rpm
Start of measuring range	max. sensor distance from measuring object is 1 mm
Frequency response (-3dB)	110 kHz
Linearity	< ±0.2 % FSO
Target material	Electrically conductive / non-conductive

The sensor design with M5 thread allows for secure mounting in environments with limited installation space. Its interference immunity enables it to operate the system in environments with electromagnetic fields.



Axial installation: rotation speed monitoring on shafts

Radial installation: measurement in turbines

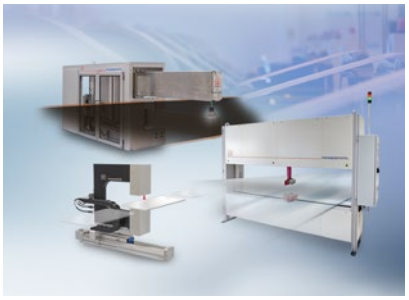


Axial installation: rotation speed in drilling rigs

Sensors and Systems from Micro-Epsilon

Sensors and systems for displacement, distance and position

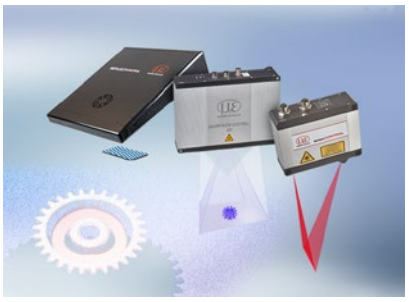
Sensors and measurement devices for non-contact temperature measurement



Measuring and inspection systems for metal strips, plastics and rubber

Optical micrometers and fiber optics, measuring and test amplifiers

Color recognition sensors, LED analyzers and inline color spectrometers



3D measurement technology for dimensional testing and surface inspection

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