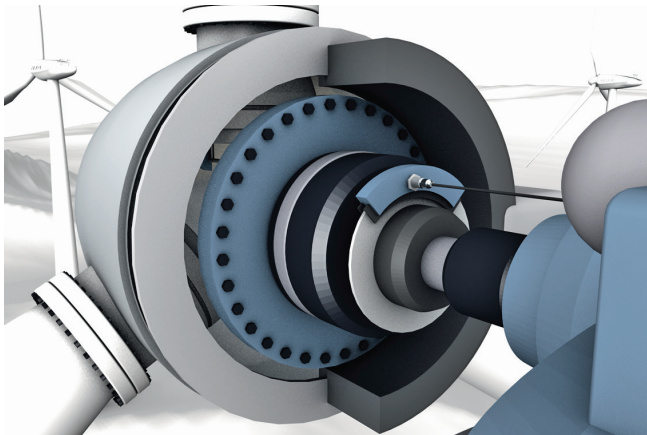


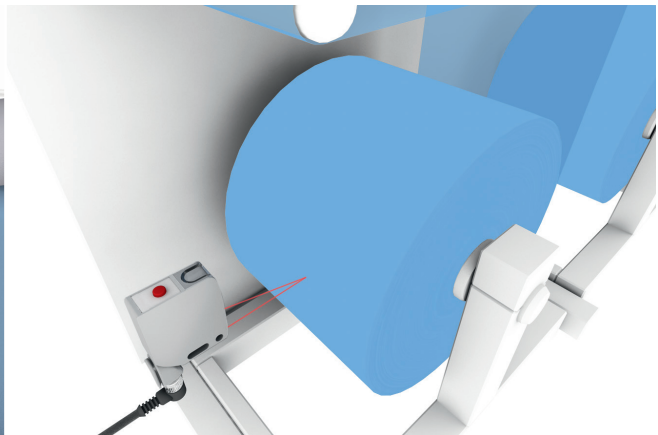
Measurement – Distance measurement

ONE OF THE MOST COMMON TASKS FOR SENSORS

Is your challenge to measure the distance to an object automatically and with precision? Then our distance sensors will help. When selecting the right sensor we recommend taking into account the range of the sensor and the type of object to be measured. The measuring ranges can be anything from a few millimeters to several meters.



Condition monitoring of brake pads in wind power generators using inductive distance sensors



Reliable measurement and monitoring of the diameter of material rolls using a photoelectric sensor

Disk brakes are used at various locations in wind power plants. With their durability and precise measurement, inductive distance sensors monitor these brake disks continuously and provide a timely warning if the brake linings need to be changed. In winding and unwinding equipment, a photoelectric sensor continuously measures the increasing or decreasing roll diameter regardless of roll material or color. This means the rolls can be changed with minimal stoppages.



Inductive sensor for measuring distance to metal objects up to approx. 50 mm



Photoelectric sensor for distance measurement of all materials from a few millimeters to several meters



Ultrasonic sensor for distance measurement of all materials up to several meters



Capacitive sensor for distance measurement of all materials up to approx. 50 mm

Distance measurement is a common task for sensors. Various kinds of sensors are used in industry which vary in their technical principles:

- **Inductive sensors** measure distance to a metal object in harsh ambient conditions
- **Capacitive sensors** measure the distance to any material
- **Photoelectric sensors** and **ultrasonic sensors** are suited for distances in the meter range