

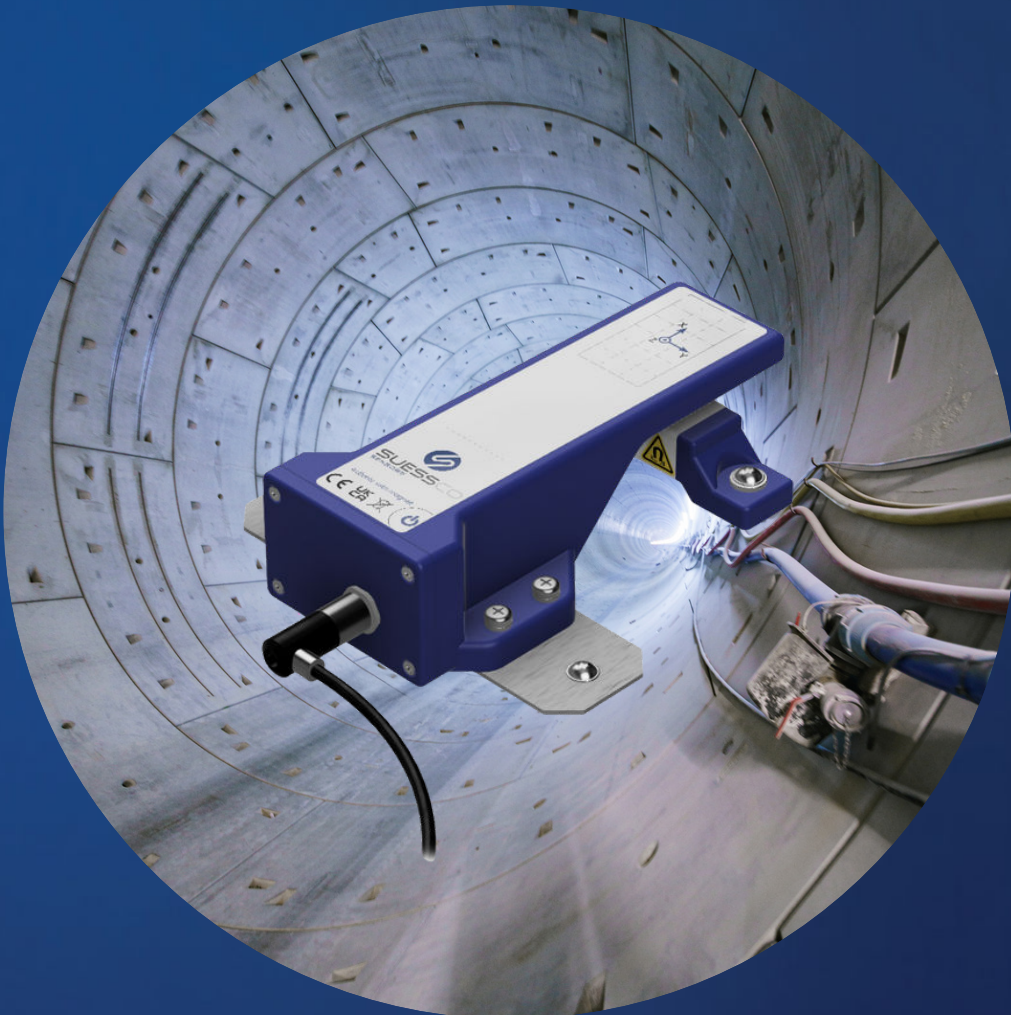


SUESSCO
SENSORS

TUNNEL-MONITORING IN 3 DIMENSIONS

Maximum safety. Early damage detection. Extended lifespan.

Monitor tunnel structures in real time with SuessCo 3D-Sensor technology. Increased safety, reduced maintenance costs, and maximum efficiency. Digital. Precise. Sustainable.



*"A sensor that can be installed with true plug & play –
it couldn't be more efficient."*

Franz Felsberger, Building inspector, Austria

3D – Sensor XT

The Sensor at a Glance

The patented SuessCo 3D-Sensor XT uses innovative magnetic field technology to detect even the smallest movements. The results are instantly available online – *digitally and permanently.*

1 Sensor, 3 Dimensions

The sensor precisely records the absolute position changes between two objects and measures the three spatial axes (X, Y, Z) as well as temperature data. It enables precise analysis of tunnel movement in real time. Its low profile preserves the tunnel's clearance profile. Compared to other measurement systems, it is easier to install, maintenance-free, and wirelessly delivers continuous online data for the safety of critical infrastructure.



Measurement range:

X-axis: 60 mm

Y-axis: 30 mm

Z-axis: 20 mm

Repeatable accuracy:

50 μ m

Battery life:

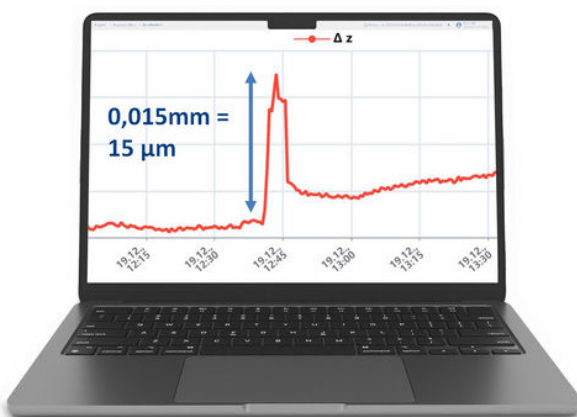
10 years at 1 hour intervals

Communication:

LTE-M, Wi-Fi

Interval:

Adjustable



Data Monitoring Dashboard

SuessCo sensors are constantly connected to the SuessCo Datahub. The digital monitoring system visualizes movement and temperature data in real time on an intuitive interface. Individually adjustable alarm values ensure that tunnels and other critical infrastructure are monitored precisely according to the operator's requirements. This allows you to keep an eye on the current status at all times and quickly make informed decisions.

The Future of TUNNEL MONITORING

Why are SuessCo sensors particularly suitable for tunnels?

Tunnels place unique demands on monitoring systems: limited space, difficult accessibility, and ongoing operation. This is exactly where the compact SuessCo sensors demonstrate their strengths.

Your SuessCo Advantages:

- **Space-saving and flexible** – Compact design, ideal for narrow tunnel environments, without costly additional constructions. The clearance profile is preserved.
- **3 dimensions in one sensor** – Multiple axes are captured simultaneously by a single sensor, where other systems require several.
- **Easy installation** – Wireless, quick to mount, no additional systems required.
- **Long-term stability** – Up to 10 years of battery life, drift-free measurements thanks to patented magnetic field technology.
- **Wireless data transmission** – Data transmission via LTE-M or Wi-Fi.
- **Industrial-grade performance** – Non-contact measurement a robust design without moving parts. Resistant to water, dust, and salt mist. Perfect for long-term use in tunnels.



Precision & Reliability

The integrated monitoring solution consists of sensors and a web dashboard and is easy to deploy – without requiring specialized knowledge. SuessCo Sensors combine cutting-edge scientific research with proven practical implementation quality.





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SENSORS

SUESSCO SENSORS

The Future of Monitoring.

Leading operators of bridges, tunnels, and critical infrastructure in Europe already rely on SuessCo Sensors' technology.



**Die
Autobahn**

ZÜBLIN
WORK ON PROGRESS

STRABAG
WORK ON PROGRESS



Niederösterreich
Bahnen



**Stadt
Wien**

Why?

Highest precision, maximum safety, optimal cost efficiency. Protect your structure with state-of-the-art monitoring solutions from SuessCo Sensors.

SuessCo 3D – Sensor

SuessCo also provides a fully integrated solution for crack monitoring.

Learn more at www.suessco.com



SuessCo sensors are available across Europe through our SuessCo Distributors.

Find out more: <https://suessco.com/en/distributors/>



Download the data sheet now