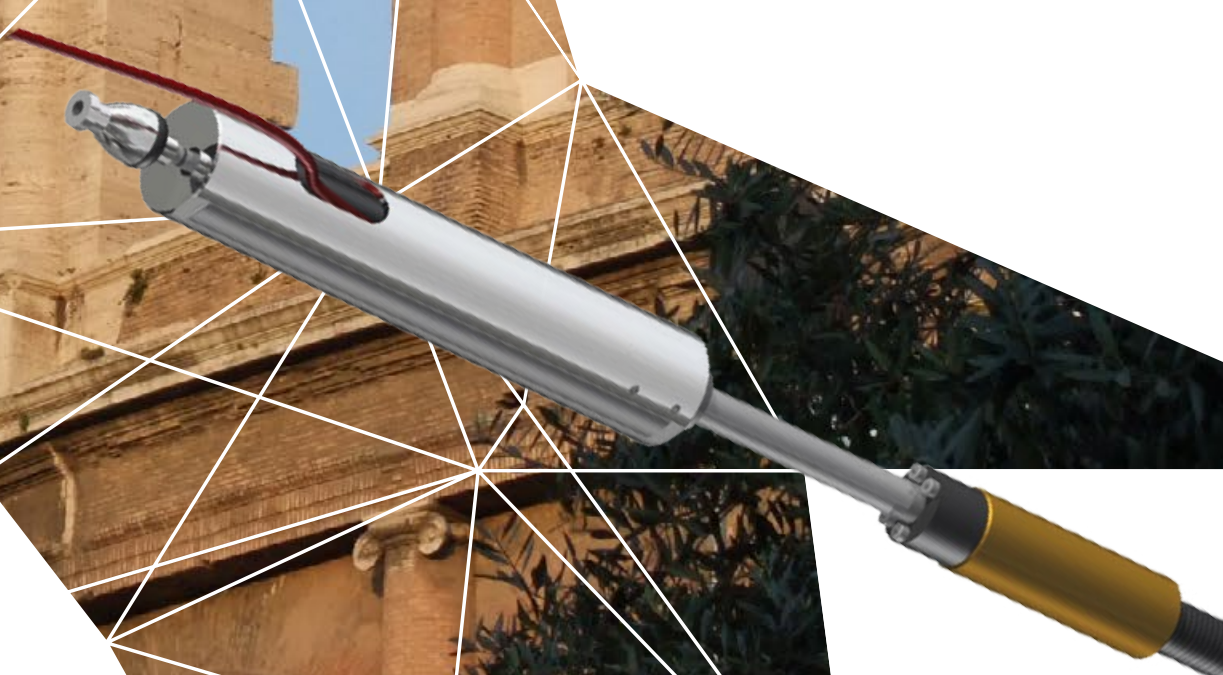


D235

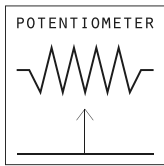
— CONVERGENCE EXTENSOMETER

EXTENSOMETERS
& JOINTMETERS





CONVERGENCE EXTENSOMETER



Convergence extensometers are used to monitor displacements / convergence in buildings, tunnels, caves, underground openings, and caverns over a span of several meters.

The system consists of a telescopic very rigid tube made of carbon fibre and thus is very strong and light weighted.

The thermal expansion of the system is practically neglectible. Linear potentiometric sensors for displacement measurement of different range are available.

The system can be easily extended and adapted to the requested distance of measurement. Fixation points, normally groutable bolts include spherical joints to enable a simple installation.

APPLICATIONS

- Room and pillar type mining
- Tunnels
- Shafts and drifts
- Buildings
- Joints and faults in rock slopes

FEATURES

- State of the art construction
- Measuring range 200 mm
- High accuracy and resolution
- Practically neglectible thermal effects
- Output signal 4-20 mA suitable for long distance transmission

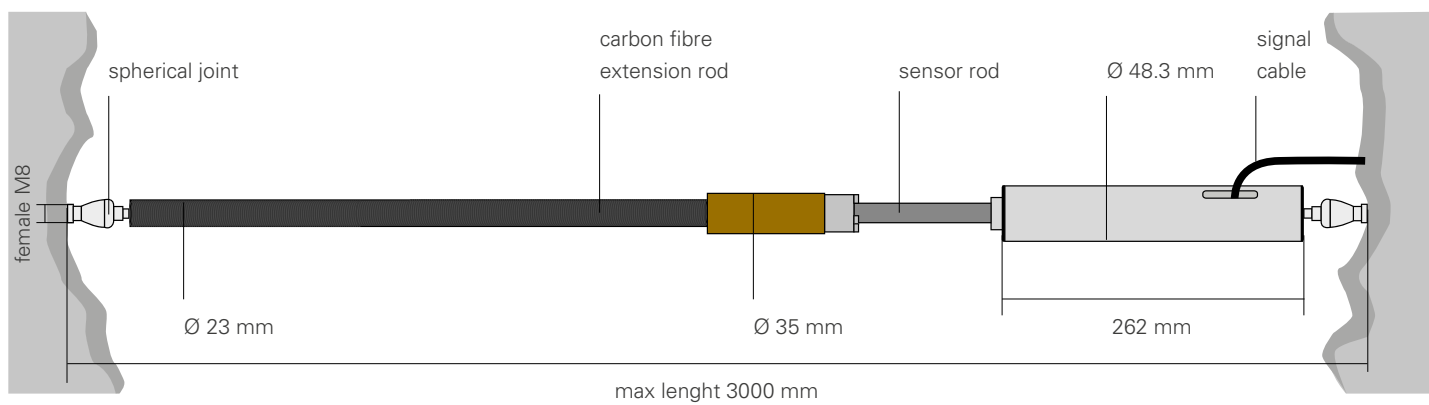
CE Meet the essential requirements of the EMC Directive 2014/30/UE

TECHNICAL SPECIFICATIONS

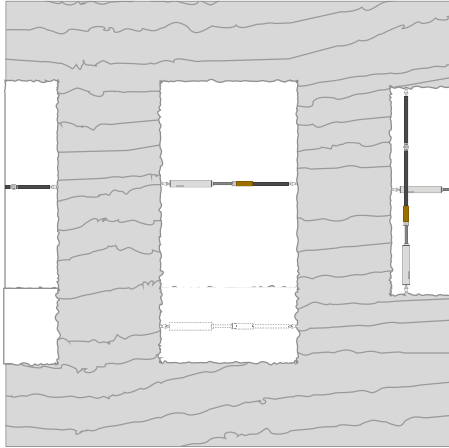
PRODUCT CODES	0D235MA0L30
Range	200 mm (7.9")
Measurement principle	potentiometer (magnetic cursor)
Output signal	4-20 mA (current loop)
Accuracy Pol. MPE ⁽¹⁾	< ± 0.2% FS
Resolution	< 0.03 mm (0.001")
Sensitivity ⁽²⁾	see calibration report
Power supply	12-24 V dc
Typical thermal expansion	< 1.5 x 10 ⁻⁶ x L / °C (L= base length)
Operating temperature	-20 +80 °C
Protection class	IP68 up to 100 kPa
Connections	female M8 treaded connection on both ends (anchors not supplied)
Materials	sensor housing: stainless steel - extension rod: carbon-fibre
Base length (L)	maximum 3 m, longer bases on request
Diameter	rod: 23 mm (0.9"), sensor housing: 48.3 mm (1.9")
Signal cable	0WE102KEOZH
Max. distance to datalogger ⁽³⁾	1000 m (for more information see FAQ#77)

(1) MPE is the Maximum Permitted Error on the measuring range (FSR). In the Calibration Report, the accuracies of the gauge are calculated using both linear regression and polynomial correction (≤ Pol. MPE)
 (2) Sensitivity is a specific parameter different for every gauge. The sensitivity is calculated during gauge calibration test and inserted into the calibration report.
 (3) Refer to FAQ section of Sisgeo website: www.sisgeo.com/faq

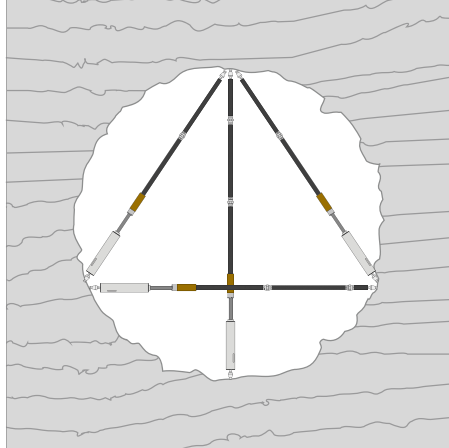
PHYSICAL FEATURES



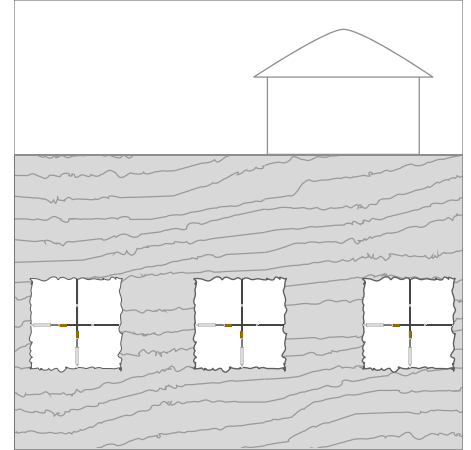
EXAMPLES OF APPLICATIONS



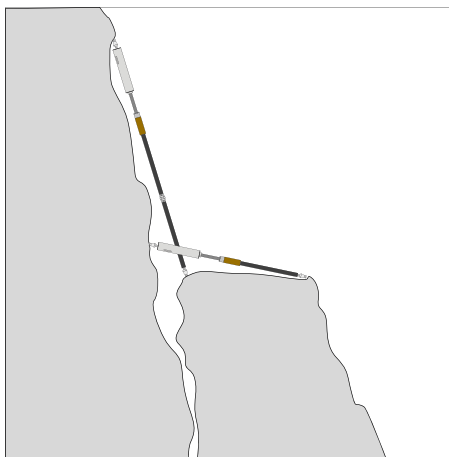
Room and pillar mining



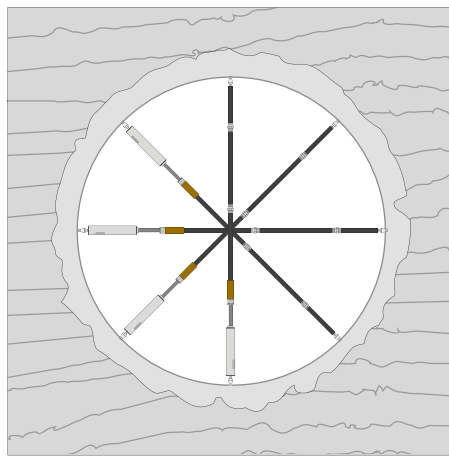
Tunnel / drift



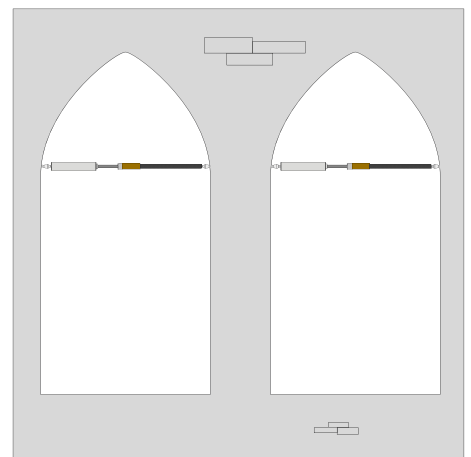
Structure above mine



Unstable rock cliff

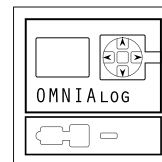
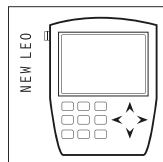
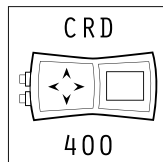


Pressure tunnel grouting



Structure of cultural heritage

READABLE BY



Refer to separate datasheets for further information.

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TECHNICAL ASSISTANCE

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