

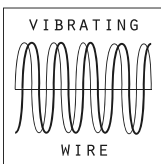
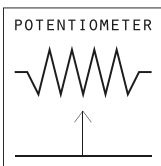
D2MX

MEXID
MINIATURIZED MPBX

EXTENSOMETERS
& JOINTMETERS



MEXID MINIATURIZED MPBX



The MEXID is a small-diameter Multi-Point Borehole Extensometer (MPBX) designed for 50 mm (2") boreholes.

The MEXID monitors up to four points along the borehole axis. Each measuring point is connected to the instrument head by a fiberglass rod. Displacement transducers at the head measure the change in distance between each anchor and the reference head.

The system incorporates steel anchors, fiberglass rods, and vibrating wire or potentiometer displacement transducers. Grouting tubes are not included and shall be sourced separately.

The output signal can be selected between vibrating wire or digital RS485 communication with MODBUS RTU protocol (4-20 mA available on request).

APPLICATIONS

- Tunnelling
- Deep excavations
- Dams
- Foundations
- Settlement monitoring
- Rock displacement monitoring

FEATURES

- Fits 50 mm (2") boreholes
- Monitors up to 4 points
- Installs flush with surface



Meets the essential requirements of the EMC Directive 2014/30/EU

TECHNICAL SPECIFICATIONS

VERSION	DIGITAL MEXID WITH POTENTIOMETER TRANSDUCERS		MEXID WITH VIBRATING WIRE TRANSDUCERS	
	50 mm	150mm	50 mm	150mm
Range				
Product codes ⁽¹⁾ (points)	- 0D2MX02D050 (2 points) 0D2MX03D050 (3 points) 0D2MX04D050 (4 points)	- 0D2MX02D150 (2 points) 0D2MX03D150 (3 points) 0D2MX04D150 (4 points)	0D2MX01W050 (1 point) 0D2MX02W050 (2 points) 0D2MX03W050 (3 points) 0D2MX04W050 (4 points)	0D2MX01W150 (1 point) 0D2MX02W150 (2 points) 0D2MX03W150 (3 points) 0D2MX04W150 (4 points)
INSTRUMENT HEAD				
Diameter / length	48.3 mm / 476 mm (1.9"/19")	48.3 mm / 816 mm (1.9"/32")	48.3 mm / 476 mm (1.9"/19")	48.3 mm / 816 mm (1.9"/32")
Material	stainless steel		stainless steel	
DISPLACEMENT TRANSDUCERS ⁽²⁾				
Output signal	RS485 non-optoisolated comm. with MODBUS RTU protocol ⁽³⁾		Frequency (displacement), Ohm (temperature)	
Sensitivity	See individual Calibration Report		See individual Calibration Report	
Accuracy MPE ⁽⁴⁾	±0.20% FS	±0.15% FS	±0.30% FS	±0.30% FS
Typical frequency range ⁽⁵⁾	-		2250 - 3000 Hz	
Operating temperature	-20°C to +70°C		-20°C to +80°C	
Power supply	8 to 28 V DC		-	
ANCHORS ⁽⁶⁾				
Diameter / Length	OD 16 mm / 400 mm (5/8" / 16")		OD 16 mm / 400 mm (5/8" / 16")	
Material	galvanized steel rebar		galvanized steel rebar	
RODS AND SLEEVES				
Product code	0D221BMFG00		0D221BMFG00	
Rods diameter / material	OD 7 mm / fiberglass		OD 7 mm / fiberglass	
Rods length	specify depth for each anchor		specify depth for each anchor	
Sleeves diameter / material	OD 12 mm / nylon 11 (rilsan)		OD 12 mm / nylon 11 (rilsan)	
CABLE				
Product code ⁽⁷⁾	0WE106IP0ZH		0WE1160LSZH	
Max. cable length to logger ⁽⁸⁾	1000 m (3280') for more information see FAQ#77		1000 m (3280') for more information see FAQ#77	

(1) Product code includes instrument head, displacement transducers, and anchors. Cable and rods are attached at factory, but specified with separate product codes.

(2) Displacement transducers are set midrange at factory. Specify different setting, if required.

(3) RS485 not-optoisolated Modbus communication with RTU Protocol. Legacy mode is not supported by this instrument. Default output is mm, other units available under request (to be requested at order). Sisgeo Modbus protocol manual is available for download on www.sisgeo.com.

(4) MPE is the Maximum Permitted Error on the measuring range (FSR). In the Calibration Report, the accuracies of the gauge are calculated using the linear regression; the error reported is the maximum residual error on the FSR.

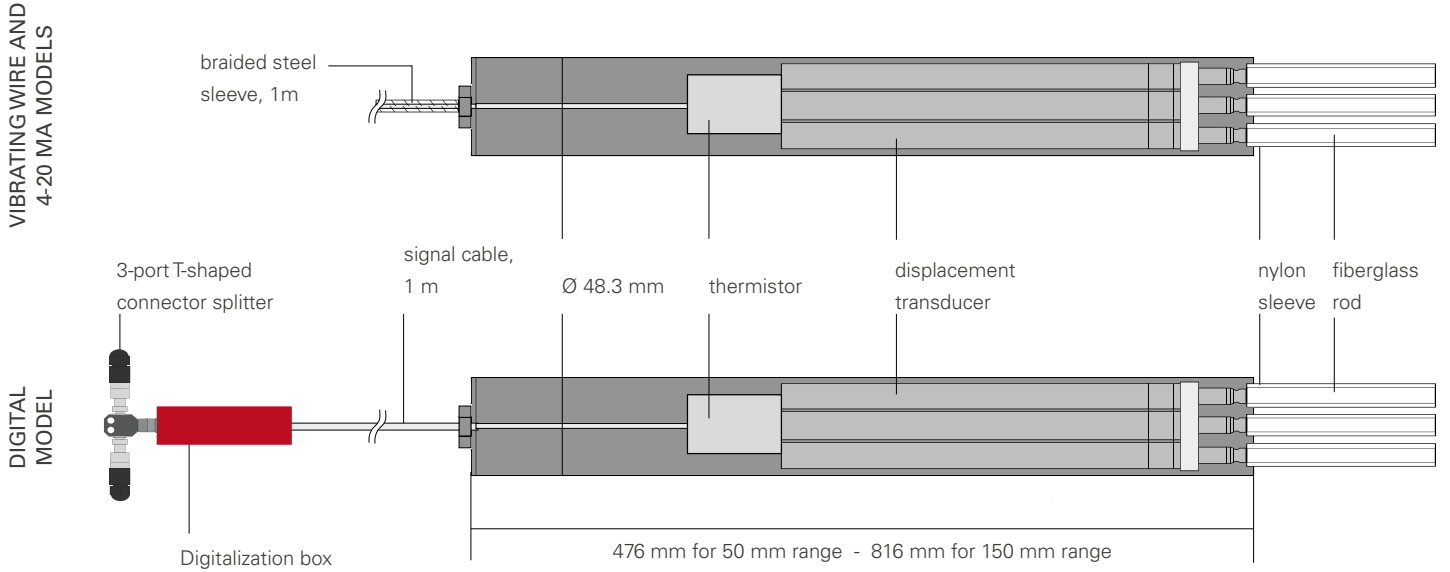
(5) Frequency range may vary ±10%.

(6) Anchors will be assembled at site screwing them to the end of the rods

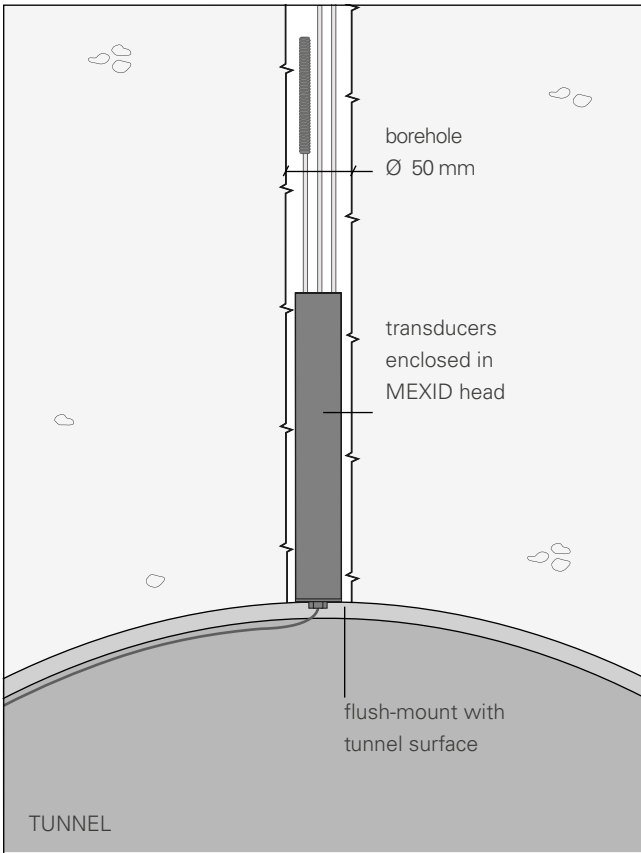
(7) Cable attached at factory. Specify length from MEXID head to readout station (or logger).

(8) Refer to FAQ section of Sisgeo website: www.sisgeo.com/it/assistenza/faq.html

PHYSICAL FEATURES

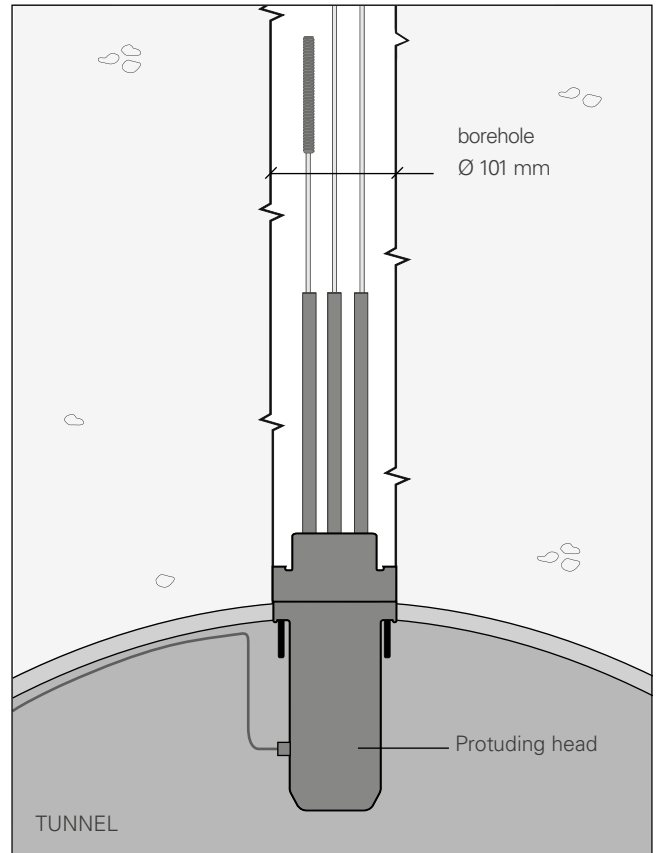


COMPARISON MEXID VS MPBX



MEXID

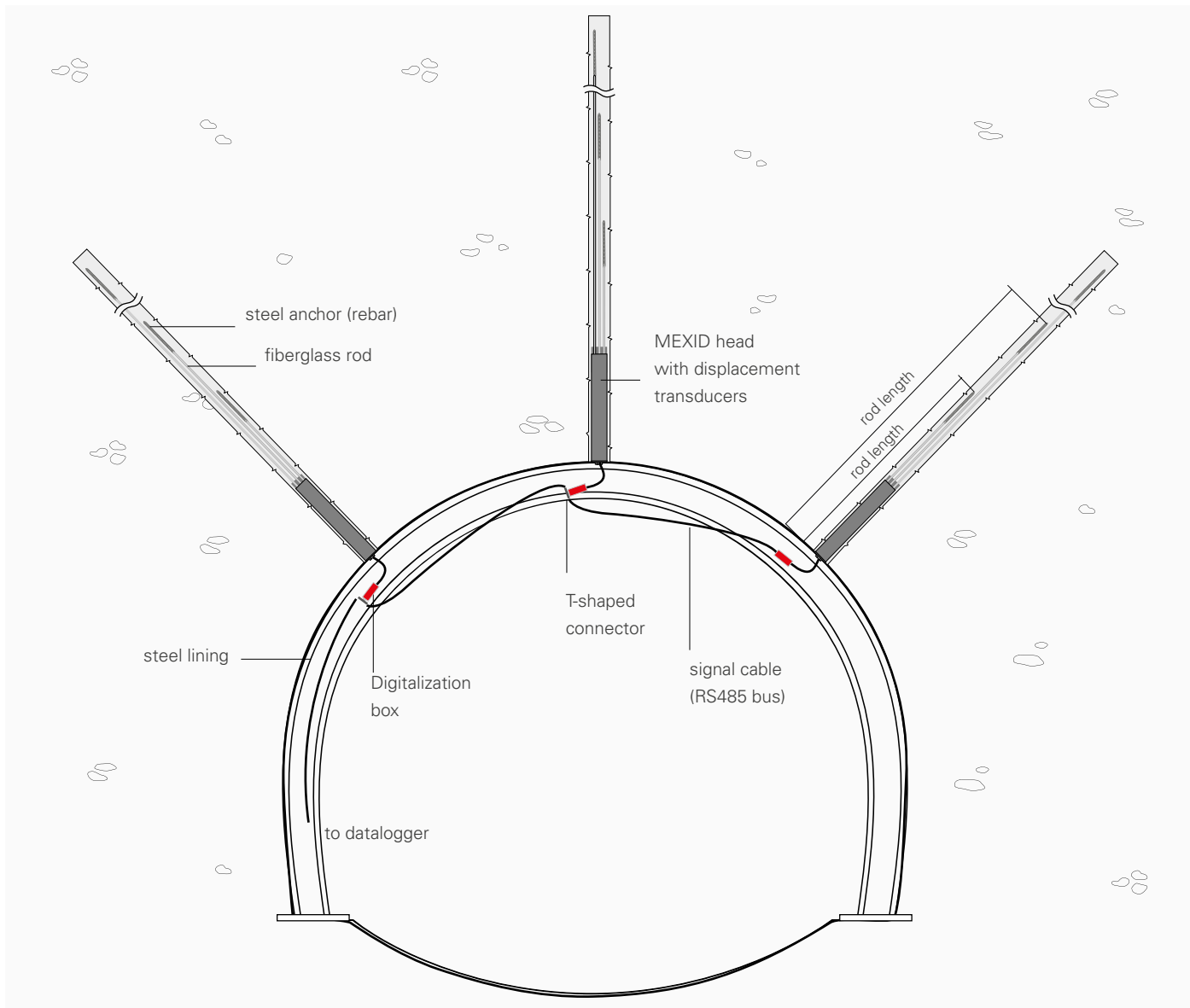
Required borehole: Ø 50 mm (2"), Ø 75 mm (3") for the first metre
 Flush-mount head maximizes clearance
 Transducers enclosed in the instrument head



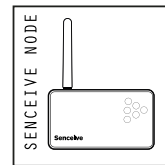
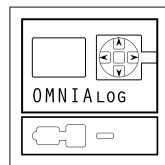
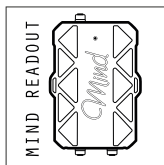
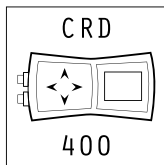
MPBX MULTIPOINT BOREHOLE EXTENSOMETER

Required borehole: Ø 101 mm (4"), Ø 140 mm (5.5") for the first metre
 Protruding head reduces clearance by up to 510 mm
 Transducers installed on site

TYPICAL TUNNEL APPLICATION WITH DIGITAL MEXID



READABLE BY



For further information refer to readouts datasheets

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TECHNICAL ASSISTANCE

SISGEO offers customers e-mail and phone assistance to ensure proper use of instruments and readout and to maximize performance of the system.

For more information, please refer to the FAQ pages on our website or email us: assistance@sisgeo.com