





MEXID

MINIATURIZED MPBX

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

The MEXID is ready to monitor up to four points. The system incorporates steel anchors, fiberglass rods, and vibrating wire or potentiometer transducers. Grouting tubes are not supplied. The output can be chosen between vibrating wire or digital RS485 communication with MODBUS RTU protocol (4-20mA available only under request)

The stainless steel extensometer head installs flush with the surface. minimizing any obstruction of the work area.





APPLICATIONS

- Tunneling
- Deep excavations
- Dams
- Foundations
- Settlement monitoring
- Rock displacements

FEATURES

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



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





TECHNICAL SPECIFICATIONS

VERSION	DIGITAL MEXID WITH POTENTIOMETER		MEXID WITH VWTRANSDUCERS		
Range	50 mm	150mm	50 mm	150mm	
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	stainle	stainless steel		stainless steel	
DISPLACEMENTTRANSDUCERS	(2)				
Output signal	RS485 non-optoisolated comm. with MODBUS RTU protocol (3)		frequency (displacement), Ohm (temperature)		
Accuracy MPE ⁽³⁾	±0.20% FS	±0.15% FS	±0.30% FS	±0.30% FS	
Typical frequency range (4)	-		2250 - 3000 Hz		
Operating temperature	-20°C to +70°C		-20°C to +80°C		
ANCHORS (5)					
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 (6)	0WE1160LSZH		0WE1160LSZH		
Max. cable length to logger (7)	1000 m (3280') for more information see FAQ#77		1000 m (3280') for more information see <u>FAQ#77</u>		

⁽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).

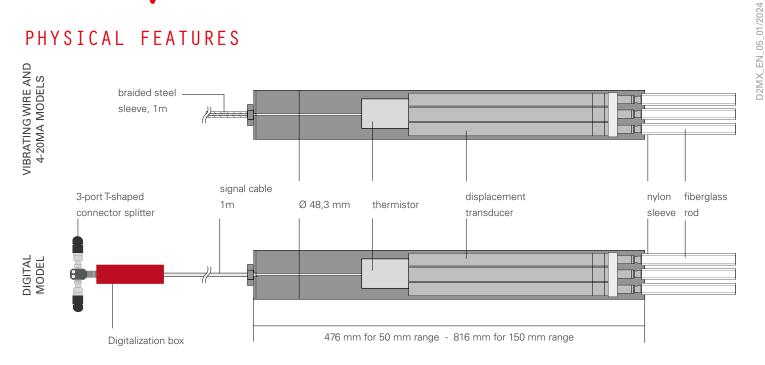
⁽⁸⁾ Refer to FAQ section of Sisgeo website: $\underline{www.sisgeo.com/it/assistenza/faq.html}$



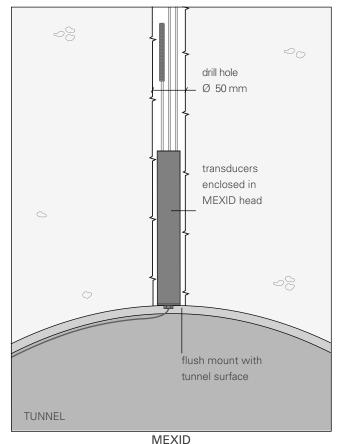


D2MX

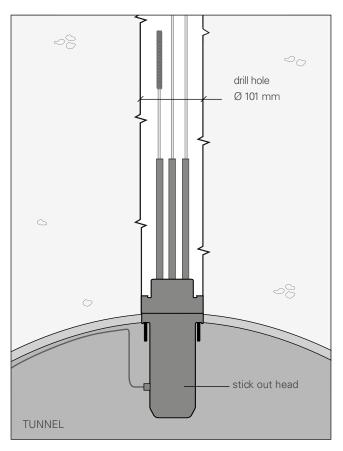
PHYSICAL FEATURES



COMPARISON MEXID VS MPBX



Required drill hole: Ø 50 mm (2"), Ø 75 mm (3") first meter Flush mount maximizes clearance Enclosed transducers

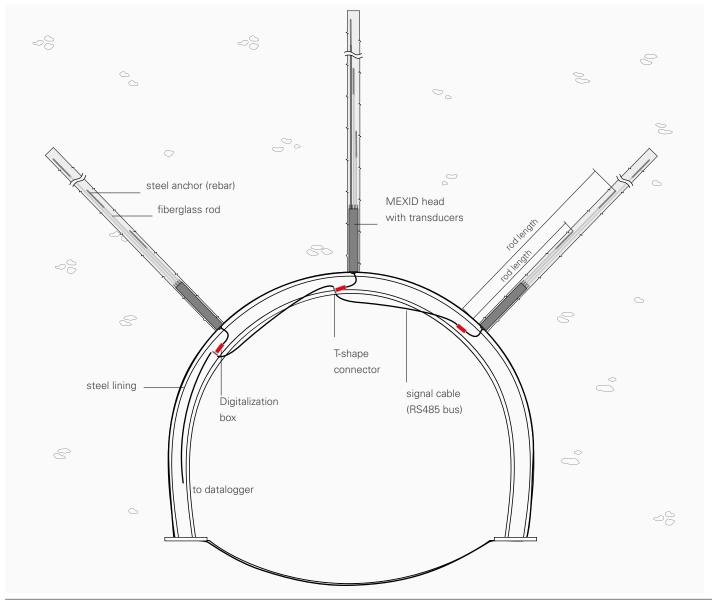


MPBX MULTIPOINT BOREHOLE EXTNSOMETER Required drill hole: Ø 101 mm (4"), Ø140 mm (5.5") first meter Stick out reduces clearance up to 510 mm Transducers installed at site





TYPICAL TUNNEL APPLICATION WITH DIGITAL MEXID



READABLE BY







For further information refer to their own datasheets

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For the specific accuracy performance of each product, please refer to the Calibration Report issued for each instrument.

The datasheet is issued in English and other languages. In order to avoid discrepancies and disagreement on the interpretation of the meanings, Sisgeo Srl declares that English Language prevails.

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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, email us: assistance@sisgeo.com