





## 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, dedicated grouting tubes, and vibrating wire or 4-20mA displacement transducers.

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	MEXID WITH POTENTIOMETER TRANSDUCERS		MEXID WITH VWTRANSDUCERS	
Range	50 mm	150mm	50 mm	150mm
Product codes (1) (points)	0D2MX01A050 (1 point) 0D2MX02A050 (2 points) 0D2MX03A050 (3 points) 0D2MX04A050 (4 points)	0D2MX01A150 (1 point) 0D2MX02A150 (2 points) 0D2MX03A150 (3 points) 0D2MX04A150 (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	4-20mA (displacement), Ohm (temperature)		frequency (displacement), Ohm (temperature)	
Accuracy Pol. MPE <sup>(3)</sup>	±0.20% FS	±0.15% FS	±0.30% FS	±0.30% FS
Typical frequency range (4)	-		2250 - 3000 Hz	
Operating temperature	-20°C to +80°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 FAQ#77	

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

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

<sup>(3)</sup> Pol. MPE is the polynomial Maximum Permitted Error on the measuring range (FSR).

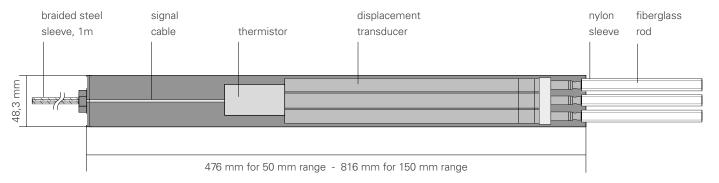
<sup>(4)</sup> Frequency range may vary  $\pm 10\%$ .

<sup>(5)</sup> Anchors will be assembled at site screwing them to the end of the rods

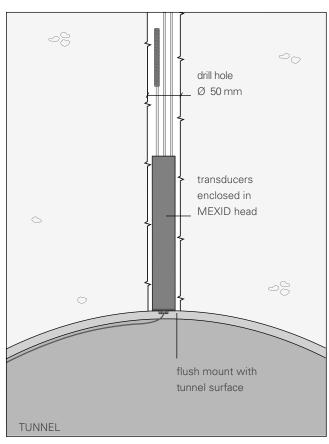
<sup>(6)</sup> Cable attached at factory. Specify length from MEXID head to readout station (or logger). (7) Refer to FAQ section of Sisgeo website: www.sisgeo.com/it/assistenza/faq.html



#### PHYSICAL FEATURES

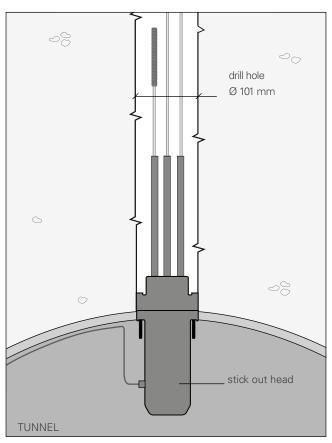


#### COMPARISON MEXID VS MPBX



**MEXID** 

Required drill hole:  $\varnothing$  50 mm (2"),  $\varnothing$  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

## ACCESSORIES AND SPARE PARTS

#### FIBERGLASS ROD OD221BMFG00

Fiberglass measuring rod (Ø 7 mm) with nylon antifriction sleeve (Ø 12 mm). Supplied already mounted.

### 16-WIRE SIGNAL CABLE OWE1160LSZH

Multicore cable with 8 pairs of 24 AWG wire and LSZH jacket. Used to connect instruments to multiplexer, switch box, or datalogger.

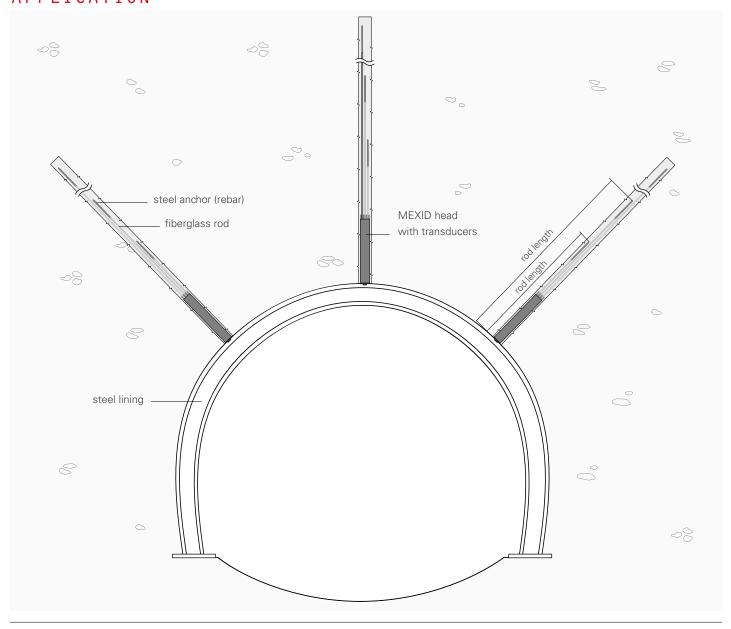
## MULTIPLEXER BOX OOMNOOMUXBO

Multiplexer board with surge protection, housed in IP67 box. Local operation with New Leonardo readout; remote operation with datalogger connected by RS484 digital bus.



# D2MX

# TYPICAL TUNNEL APPLICATION



#### READABLE BY







Refer to separate datasheets for further information.

All the information in this document is the property of Sisgeo S.r.l. and should not be used without permission from Sisgeo S.r.l. We reserve the right to change our products without prior notice. 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.

#### SISGEO S.R.L.

VIA F. SERPERO 4/F1 20060 MASATE (MI) ITALY PHONE +39 02 95764130 FAX +39 02 95762011 INFO@SISGEO.COM

#### 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