

## Multi-Point Borehole Extensometers

### Description

Stability and movement behavior of soil and rock masses can be determined by the use of borehole extensometers. A typical rod extensometer consists of a reference head, usually installed at the collar of a drill hole, and one or more in-hole anchors, each of which is fixed in place at a known depth in the borehole. As the soil or rock deforms, the distances between adjacent in-hole anchors change, as do the distances between the individual in-hole anchors and the reference head. This allows an accurate determination of distribution, magnitude, rate and acceleration of deformation in the rock or soil mass intersected by the drill hole.

The number of anchors and anchor depths should be selected based on site geology, geometry of structures in the area, and other site-specific details. The use of two, or more, anchors at various depths allows the engineer to distinguish between potentially dangerous deep seated movements and more trivial surface spalling.

### Specifications

Sensor Range	50, 100, 150, 200 mm
Accuracy	+/- 0.25% FSR
Resolution	0.025% FSR
Linearity	0.5% FSR
Operating Temperature	-20°C to 80°C
Thermal Zero Shift	<0.05% FSR/°C
Number of Anchors	1 to 6
Borehole Diameter Recommendation	Minimum 4" (101 mm)
Contact RST Instruments for available custom options.	

### FLEXIBLE ROD

**ORDERING METHOD:** 1) Select Above Grade or Below Grade Installation 2) Select Manual or Combination Head 3) Select type and range of sensors 4) Select type and length of rods 5) Select type of anchors

### RIGID ROD SPECIFICATIONS

#### Heads

##### ITEM

Combination Heads

Mechanical Heads

##### Part #

MPBX

EXMPBXMA1 (1 point) EXMPBXMA2 (2 points)  
EXMPBXMA3 (3 points) EXMPBXMA4 (4 points)  
EXMPBXMA5 (5 points) EXMPBXMA6 (6 points)

#### Rods

1/4 in. Standard, Stainless Steel Individual PVC Sheath

EXRO2502 (0.25 m)  
EXRO2505 (0.5 m)  
EXRO2510 (1.0 m)  
EXRO2515 (1.5 m)  
EXRO2520 (2.0 m)  
EXRO2530 (3.0 m)  
EXRO2535 (3 ft.)  
EXRO2550 (5 ft.)  
EXRO2600 (10 ft.)

#### Anchors

Groutable

EXMP11000M (metric) EXMP11000 (imperial)

Hydraulic Borros  
Groutable with Spring Legs  
Bladder Anchor

EXHY13000 (double acting)  
EXMP12000M (metric) EXMP12000 (imperial)  
EXIL14000 (customer specifies borehole diameter)

## SPECIFICATIONS