Reference earth pressure cell

Type RE



The reference earth pressure cell type RE is instrument for earth pressure with an additional, optimally integrated tiltmeter. The research and development team at GLÖTZL GmbH was motivated by the question:

How to determine significant changes in the installation position of an earth pressure cell, that can occur in an embankment dam during the construction phase respectively during the filling process and consolidation phase?

The reference pressure cell solves this task by measuring the direction in addition to earth pressure. By measuring the inclination of the cell, the earth pressure can be evaluated according to the direction and corrected if necessary. This increases the significance of the measured data.

General	
Cell dimensions:	Ø 12, Ø 17, Ø 30, Ø 35, 7x14, 10x20, 15x25, 20x30 and 40x40 mm (special dimensions: circular up to Ø 1500 mm, or on request)
Operating temperature:	-20 °C +80 °C
Pressure sensor	
Measuring range:	02 bar up to 01000 bar
Linearity incl. hysteresis:	< ± 0,5 % f.s. (optional: ± 0,1 % f. s.)
Sensor options:	AU [mV], AI [mA], VW [f²/µs]
Inclination sensor	
Measuring range:	\pm 30° biaxial (optional: \pm 90° biaxial)
Accuracy:	1 mm/m
Resolution:	0,06 mm/m
Temperature sensitivity:	0,001 %/°C





