



INCLINOMETERS

ELS-XX

ELS

Description

Model ELS-XX dual axis inclinometer combines an electrolytic level sensor with a CMOS hybrid signal conditioning circuit. The level sensor contains 3 platinum contacts hermetically sealed in a cover, partially filled with a conductive fluid. When the sensor is at its zero position the electrical impedance of the fluid from the central electrode to each other electrodes is equal. When the sensor tilts the movement of the fluid determines the change of the impedance in proportion to the angle of tilt. Technical performances make them ideal for application in construction machinery, civil engineering and geotechnical applications.



- Electrolytic sensor;
- Measuring range: $\pm 5^\circ$ and $\pm 10^\circ$;
- Input voltage: 20 to 30 VDC;
- Output: 1-7V (4-20 mA optional);
- Aluminium housing IP65 (IP67 optional);
- Dimensions: (body) 100mm x 65 mm height 66mm;
- Weight: 1000 g.

Features

- Designed purposely for drilling and paving machines;
- High resistance to mechanical shocks and vibrations;
- Electronic encapsulated with resin;
- No mechanical moving parts;
- Amphenol MIL 5015 connector.

Technical specifications			
Measuring range	°	± 5	± 10
Input voltage	Volt	20 to 30	
Output	-	1-7 V 4-20 mA	
X Y out zero	Volt	4V ± 50 mV	
Sensitivity	mV/°	600 e.a.	300 e.a.
Linearity	% FS	< 1	
Resolution	°	0.001	
Insulation Resistance	MOhm	> 100 @500Vdc	
Temperature compensated Range	° C	0 +60	
Stocking Temperature	° C	-40 +80	
Response time	s	0.3 (factory calibrated)	
Zero temperature drift T 0-60°	°	<0.2	
Temperature Sensitivity drift T 0-60°	°	<0.4	
Transverse sensitivity	%FS	<0.5 at 45° cross angle	
Shock resistance	MIL- STD 202 E 213 B	1000 g	
Vibration resistance	MIL STD 202E 204 D	20 g (10 to 2000 Hertz)	

