

gSENS TLT-C

Detecting orientation angles of mobile machines

Applications

- Mobile Cranes
- MEWP
- Telehandler
- Reach Stackers
- Boom Trucks
- Knuckle Boom

Special Features

- Relative linearity error <math><0.1\%</math> FS over entire measuring range
- Good damping behavior, no effect on gravity influence
- Sea water resistance, IP67
- Low temperature drift



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Description

gSENS TLT-C inclination sensors detect the orientation angle of an object in relation to the gravitational field of the earth. The fields of application for these sensors are diverse. In cranes or MEWP, the inclination angle of the booms is measured to calculate whether the machine stays within the safety regulations specified by the manufacturer.

The sensor has a measuring range of up to 360° and offers an extraordinarily high accuracy and precision over the entire measuring range. The measured value resolution is 0.01°.

Technical Specifications

gSENS TLT-C	
Measuring range	0...360°
Relative linearity error	<0.1% FS
Resolution	0.01°
Cross slop error ≤10 ° ≤45 °	<0.05° <0.20°
Temperature drift	0.0016% FS/K
Operating temperature	-40° ... +85°C
Electrical connection	M12x1
Output signal	CAN or 4 ... 20mA (3-wire)
Voltage supply	9... 36 VDC
Protection rating	IP67
Shock (EN 60068-27)	Class 5M3 acc. EN 60721-3-5:1997 30g, 6ms, 100 shock, half-sine
Vibration (EN 60068-6)	Class 5M3 acc. EN 60721-3-5:1997 5-11Hz, +/-10mm, 11-2000Hz, 10g, 1 Octave/min, 20 sweeps per axis
CE marking	EN 61000-6-1, -2, -3, -4
Housing material	Aluminium (sea water resistance grade)

Dimensions

