

QG series

Inclinometers

Inclinometers measure the angle with respect to the direction of the force of gravity in one or two axes. Inclinometers from the DIS Sensors QG series are based on robust MEMS technology, and their modular design makes it easy to optimize each sensor for a specific application. What's more, for certain models, the handy configurator enables the end customer to easily adjust the sensor according to preference.

Specifications:

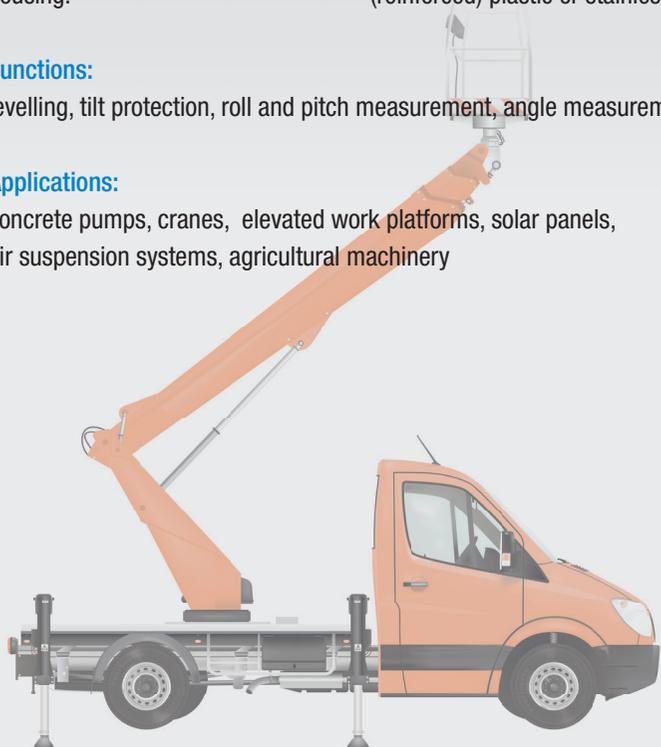
single axis measurement range:	$\pm 10^\circ$; $\pm 30^\circ$; $\pm 90^\circ$; 0 - 360°
double axis measurement range:	$\pm 10^\circ$; $\pm 30^\circ$; $\pm 90^\circ$
energy supply:	5 V dc or 10 - 30 V dc
analogue output:	0.5 - 4.5 V or 4 - 20 mA
digital output:	CANopen (Safety); RS232
level of protection:	IP67, IP68 or IP69K
precision:	depending on model and range: as high as $\pm 0.02^\circ$
programmable:	filtering, measuring range
zeroing possibility:	depends on model
functional safety:	SIL2/PLd (optional)
housing:	(reinforced) plastic or stainless steel

Functions:

levelling, tilt protection, roll and pitch measurement, angle measurement

Applications:

concrete pumps, cranes, elevated work platforms, solar panels, air suspension systems, agricultural machinery



Application example

Boom lifts (or 'cherry pickers') come in all shapes and sizes, but they have one thing in common: every type must be equipped with an inclinometer. First, to verify that the machine is level before raising the boom; then to continuously check for potential instability during operations.

DIS Sensors offers a wide range of inclinometers for this application, including many with SIL2/PLd certificate.

CANopen safety sensor for safety applications

DIS Sensors offers various inclinometers and accelerometers that are certified compliant with SIL2 (IEC 62061) and PLd (as per EN ISO 13849).

This certification makes these sensors suitable for use in safety applications. The sensors are available in both the standard QG65 reinforced plastic housing and the QG76 stainless steel housing.