

QG65-series®

Measurement of 360° rotation and inclination

The Quadro-G is a MEMS based sensor for measurement of vibration, acceleration or inclination. With the QG65 series we can offer a combination of two-axis 180° inclination and one-axis 360°-inclination sensor with Can-Open interface. The robust metal housing, with M12 connectors is suitable for the harshest environments. Thanks to its right-angled sides, it has a very high rigidity. The vulnerable electronics is mounted in a flexible filling compound. As a result, the sensor is highly resilient to shock and vibration.

The Quadro-G sensor can be customized to your specific requirements. Options are:

- Measuring ranges from 0...0,5G to 0...12G
- Acceleration, Inclination or rotation
- Specific output configuration (analog, voltage/ current, digital SPI, CAN-open)
- Led indication
- Custom cable or connector
- Self-test function



APPLICATIONS

Application area's:

- industry automation
- agriculture machines
- building cranes
- forklift trucks

FEATURES

- Broad range of application areas
- Simply adjustable to your needs
- Very compact, simple mounting
- On the spot self test function
- Reverse polarity protection
- Resilient to shock and vibration
- Direct connection to PLC's
- Secure cable entry
- IP68

Technical data

Measurement	1-axis 0 to 360° inclination 2-axis -90 to +90° inclination 2-axis acceleration up to 4G
Frequency response (-3 dB)	8 – 28 Hz
Accuracy	< 0,1%
Repeatability	0.01%
Power supply voltage	10 – 30 Vdc, typical 24 Vdc
Power supply current	20 mA
Output interface	CAN 2.0 A and B according to ISO 11898-2
Output protocol	CAN Open - Transmission: Polled mode, cyclic mode, sync mode - Baud-rate and CAN-identifier - Heartbeat Function
Baud rate	125 Kbit/s
Can-bus termination	120 Ohm
Polarity protection	Yes
Led	2x Green, indicates: "Can protocol ok"



Environmental

Temperature range	-25 to 85 °Celsius
Humidity	0 – 100% RH
Protection	IP67

Mechanical

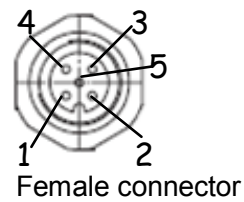
Material housing	AL diecast
Shock resistance	> 20.000 g
Mounting screws	M4x25 mm (Stainless)
Fixing pins	Ø4x5 mm

Connection diagram

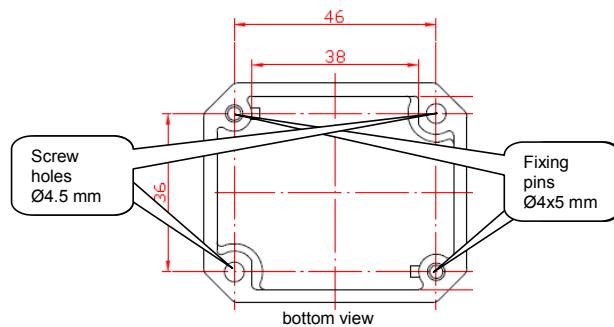
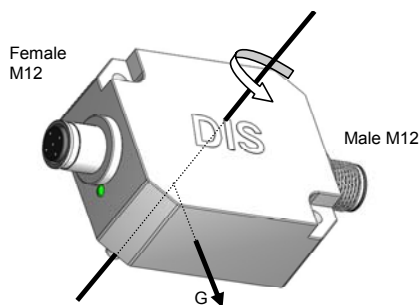
CANopen connectors

M12 male and M12 female, pinout according DeviceNet

- Pin 1 : Shielding
- Pin 2 : +Vcc
- Pin 3 : Gnd
- Pin 4 : CANH
- Pin 5 : CANL

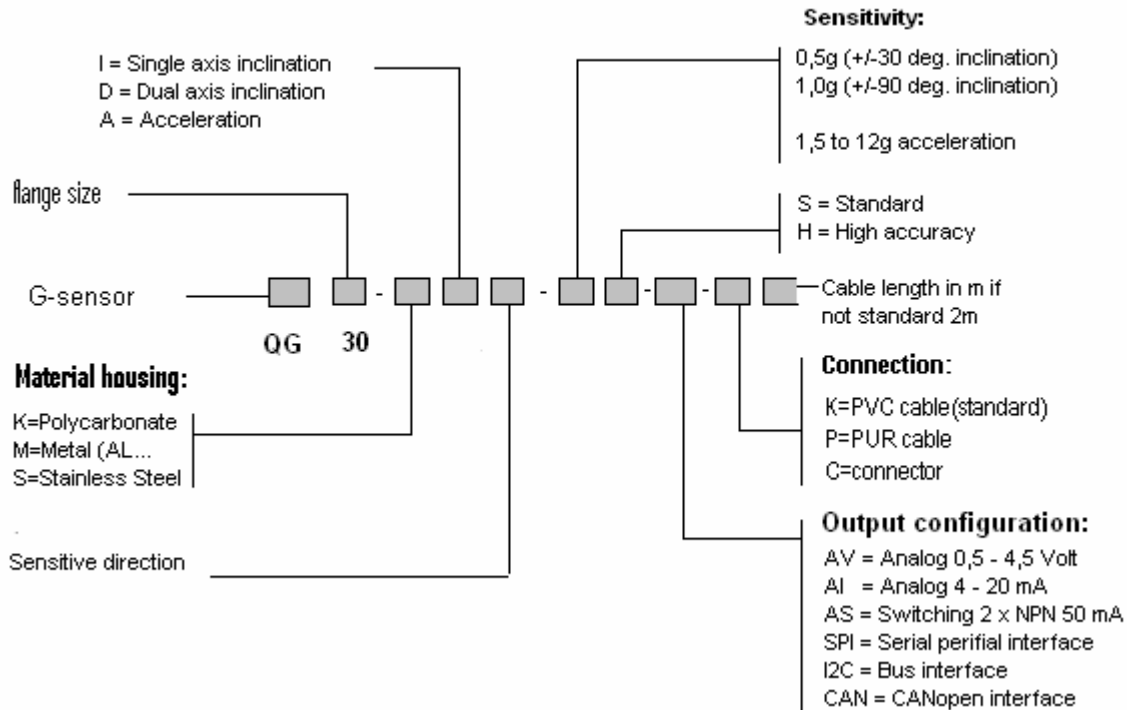


Dimensions



Ordering info

Quadro-G identification code



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