**Inclination sensor**

1 axis

Non-programmable device

Output: 0.5 - 4.5 V

horizontal/vertical mounting

For standard applications

Measuring range ± 10°

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**General specifications**

Housing: Plastic injection molded housing (Arnite T06 202 PBT black)

Dimensions (indicative): 30x30x15 mm

Ingress Protection (IEC 60529): IP67

Weight: approx. 15 gram (cable excluded)

Supply voltage: 10 - 30 V dc

Polarity protection: Yes

Current consumption: ≤ 10 mA

Operating temperature: -25 .. +80 °C

Storage temperature: -25 .. +80 °C

Measuring range: ± 10°

Centering function: No

Frequency response (-3dB): 0 - 10 Hz (±2.5 Hz)

Typ. Accuracy @20°C (2σ): overall 0.3° typ. (offset excluded)

Offset error: < ± 1° typ. (< ± 3° max.)

Non linearity: < ± 0.2°

Sensitivity error: < ± 2% typ. (< ± 3.5% max.)

Resolution: 0.03°

Temperature coefficient: ± 0.02°/K typ

Max mechanical shock: 3500g

Output: 0.5 - 4.5 V

Output load: Rload ≥20kΩ, Cload ≤20 nF

Short circuit protection: Yes (max 10 s)

Repeatability: 0.1°

Programming options: not applicable
**QG series**

**QG30-KI-010E-AV-K**

<table>
<thead>
<tr>
<th>Transfer characteristic</th>
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<tbody>
<tr>
<td><img src="image" alt="Transfer characteristic graph" /></td>
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</table>

**Measurement orientation**

The QG30 can be used in both vertical and horizontal mounting position.

**Connectivity (length ±10%)**

Connection: 2 m PVC/PVC Liyy, black Ø 4.6 mm, wires: 3x0.34 mm² Sensor colors (static usage)

<table>
<thead>
<tr>
<th>Wire / pin coding</th>
<th>Description</th>
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<tbody>
<tr>
<td>Brown</td>
<td>+ Supply Voltage</td>
</tr>
<tr>
<td>Black</td>
<td>Output</td>
</tr>
<tr>
<td>Blue</td>
<td>Gnd</td>
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**Mechanical dimensions (indicative only)**

**Remarks**

As this device is accelerometer-based the sensor is inherent sensitive for accelerations/vibrations. Application specific testing must be carried out to check whether this sensor will fulfill your requirements.