

QG series

QG30-KI-030E-AV-K

Inclination sensor

1 axis horizontal/vertical mounting

Output
0,5 - 4,5 V

Supply voltage
10 - 30V dc

Measuring range
 $\pm 30^\circ$



QG30-KI-030E-AV-K

Housing
Dimensions
Mounting
Ingress Protection (IEC 60529)
Humidity
Weight
Supply voltage
Polarity protection
Current consumption
Operating temperature
Storage temperature
Measuring range
Centering function
Frequency response (-3dB)
Accuracy
Offset error
Non linearity
Sensitivity error
Resolution
Temperature coefficient
Max mechanical shock
Output
Output load
Short circuit protection
Response time

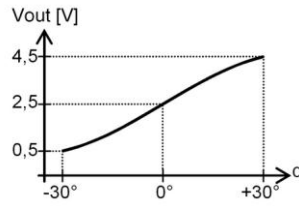
General specifications v20140211

Plastic diecast (Quadro30, PBTP black)
30x30x15 mm
2x steel zinc plated M3x16 mm pozidrive screws
IP67
0 - 100% RH
ca 15 gr (excl cable)
10 - 30V dc
Yes
≤ 10 mA
-25 .. +85°C
-25 .. +85°C
$\pm 30^\circ$
No
0 - 10 Hz ($\pm 2,5$ Hz)
overall 0,6° typ. (offset excluded)
$< \pm 1^\circ$ typ. ($< \pm 3^\circ$ max.)
$< \pm 0,2^\circ$
$< \pm 2\%$ typ. ($< \pm 3.5\%$ max.)
0,03°
$\pm 0,01^\circ/\text{K}$
3.500g
0,5 - 4,5 V
Rload $\geq 20\text{k}\Omega$, Cload ≤ 20 nF
Yes (max 10 s)
< 16 ms

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$$V_{out} = 2,5 + 2 \cdot \sin(\alpha) / \sin(30) \text{ [V]}$$

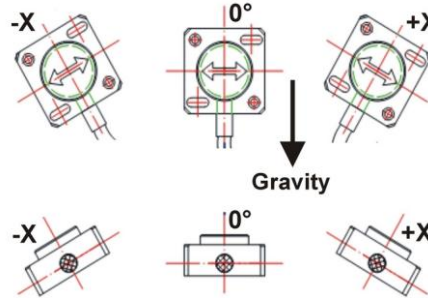
Transfer characteristic



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

Measurement orientation



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Connection

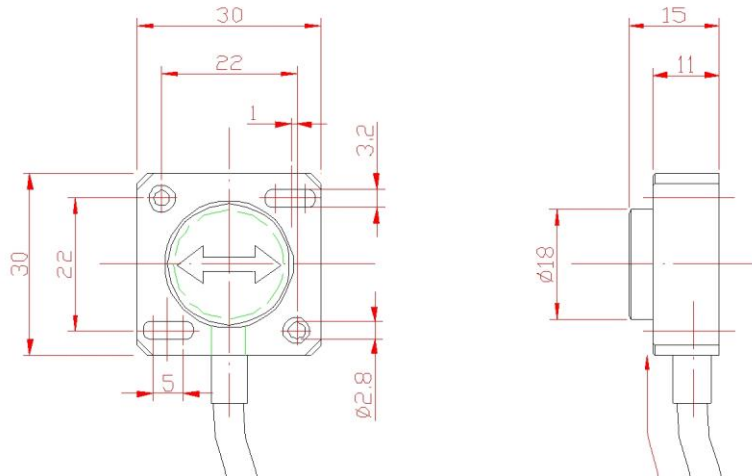
Wire / pin coding

2 m PVC/PVC Liyy, black Ø 4,6 mm, wires: 3x0,34 mm² Sensor colors (static usage)

Brown + Supply Voltage
 Black Output
 Blue Gnd

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Mechanical dimensions



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