

# QG series

QG30-KI-090E-AI-K

## Inclination sensor

1 axis horizontal/vertical mounting

Output  
4 - 20 mA

Supply voltage  
10 - 30V dc

Measuring range  
 $\pm 90^\circ$



### QG30-KI-090E-AI-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

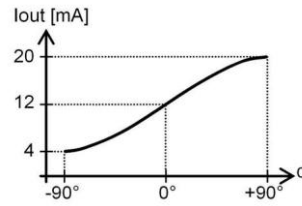
### General specifications 11460, v20140211

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
$\leq 10$ mA ( excluding output signal )
-25 .. +85°C
-25 .. +85°C
$\pm 90^\circ$
No
0 - 10 Hz ( $\pm 2,5$ Hz)
overall 0,9° typ. (offset excluded) (-45°...+45°)
$< \pm 1^\circ$ typ. ( $< \pm 3^\circ$ max.)
$< \pm 0,7^\circ$ (-45°...+45°)
$< \pm 2\%$ typ. ( $< \pm 3,5\%$ max.)
0,03°
$\pm 0,01^\circ/\text{K}$
3.500g
4 - 20 mA
Rload $\leq (50 \cdot V_s - 300)$ [ $\Omega$ ] (Eg: $V_s = 24$ V: Rload $\leq 900$ $\Omega$ )
Yes (max 10 s)
$< 16$ ms

## QG30-KI-090E-AI-K

$$I_{out} = 12 + 8 \cdot \sin(\alpha) \text{ [mA]}$$

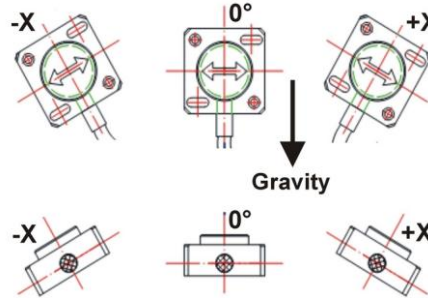
## Transfer characteristic



## QG30-KI-090E-AI-K

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

## Measurement orientation



## QG30-KI-090E-AI-K

### Connection

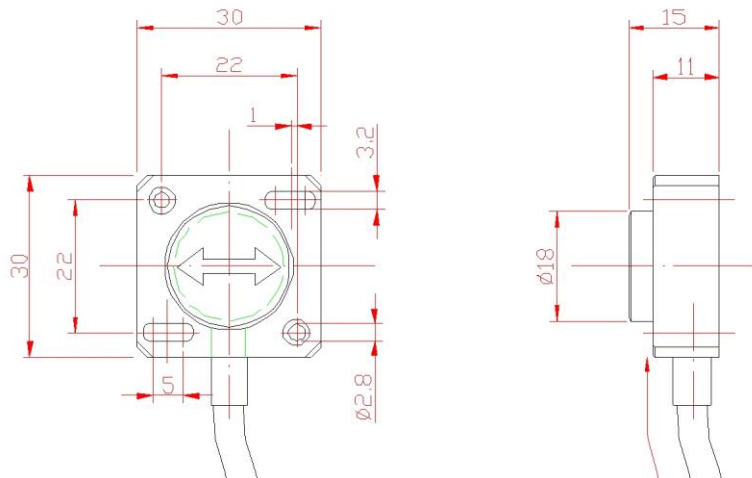
2 m PVC/PVC Liyy, black Ø 4,6 mm, wires: 3x0,34 mm<sup>2</sup> Sensor colors (static usage)

### Wire / pin coding

Brown + Supply Voltage  
 Black Output  
 Blue Gnd

## QG30-KI-090E-AI-K

## Mechanical dimensions



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