

QG series



QG40-KD-090ES-AI-P10S

Inclination sensor
2 axis horizontal mounting

Output
4 - 20 mA

Supply voltage
10 - 30V dc

Measuring range
 $\pm 90^\circ$



QG40-KD-090ES-AI-P10S

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

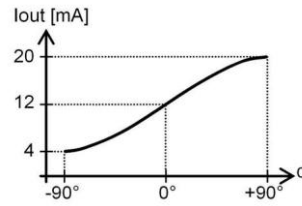
General specifications 11610, v20140123

Plastic diecast (Quadro40, PBTP black)
40x40x25 mm
2x steel zinc plated M3x25 mm pozidrive screws
IP67
0 - 100% RH
ca 45 gr (excl cable)
10 - 30V dc
Yes
≤ 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, $\pm 2,5^\circ$ max.
$< \pm 0,7^\circ$ (-45°...+45°)
$< \pm 2,5\%$
0,03°
$\pm 0,01^\circ/\text{K}$
3.500g
4 - 20 mA
Rload $\leq (50 \cdot V_s - 300)$ [Ω] (Eg: $V_s = 24$ V: Rload $\leq 900 \Omega$)
Yes (max 10 s)
< 16 ms

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

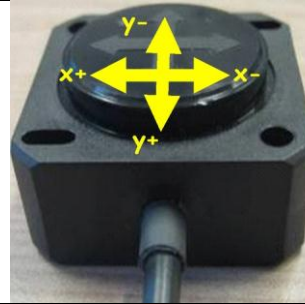
Transfer characteristic



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The default 0° position is when the sensor is mounted horizontally and no acceleration is applied.

Measurement orientation



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Connection

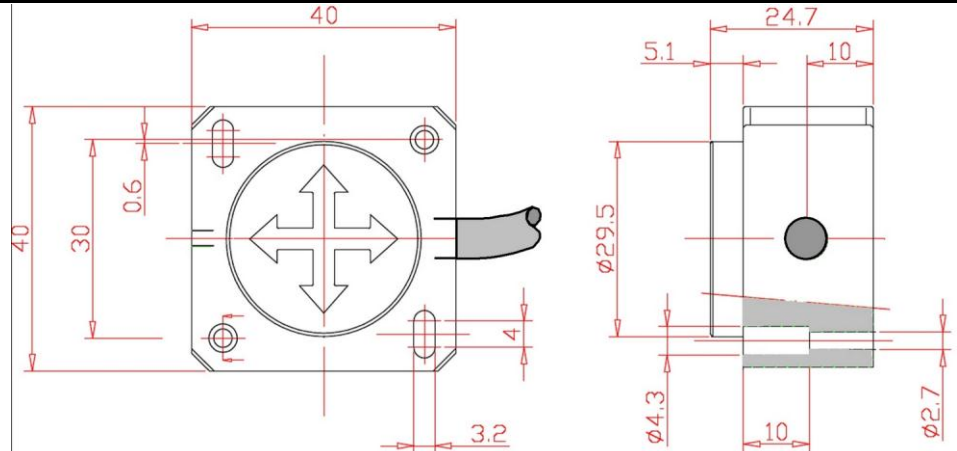
10 m TPE/TPE Li12y12y, black Ø 5,9 mm, wires: 4x0,5 mm²

Wire / pin coding

Black1	+ Supply Voltage
Black2	Gnd
Black3	Output Y
Black4	Output X

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Mechanical dimensions



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