

QG series

QG40N-KAXYZh-4,0-AV-PT

Acceleration sensor 3 axis horizontal mounting

Output
0,5 - 4,5 V

Supply voltage
10 - 30V dc

Measuring range
 ± 4 G



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Housing
Dimensions (indicative)
Mounting
Ingress Protection (IEC 60529)
Relative humidity
Weight
Supply voltage
Polarity protection
Current consumption
Operating temperature
Storage temperature
Measuring range
Centering function
Frequency response (-3dB)
Accuracy (2 σ)
Offset error
Non linearity
Sensitivity error
Resolution
Temperature coefficient
Max mechanical shock
Output
Output load
Short circuit protection
Output refresh rate

General specifications v20130917

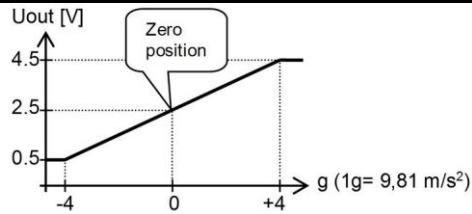
Plastic injection molded housing (Quadro40, PBTP black)
40x40x25 mm
2x M3x25 mm zinc plated steel pozidrive screws included
IP67
0 - 100%
ca 45 gr (excl cable)
10 - 30V dc
Yes
≤ 15 mA
-25 .. +85°C
-25 .. +85°C
± 4 G
Yes (2,5 V = 0 G), range $\pm 5^\circ$
0 - 120 Hz
overall 0,08g typ.
$< \pm 0,3\%$ F.S. (after zeroing)
$< \pm 0,4\%$ F.S.
$< \pm 1\%$
0,004 g
± 1 mg/K
10.000g
0,5 - 4,5 V
Rload $\geq 20k\Omega$, Cload ≤ 20 nF
Yes (max 10 s)
$< 1,3$ ms

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$$V_{out} = 2,5 + g/2 \text{ [V]}$$

Clipping outside measuring range

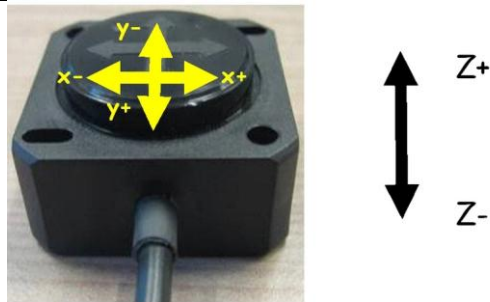
Transfer characteristic



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The default zero position is when the sensor is mounted horizontally and no acceleration is applied. Z-axis compensated for 1g gravity.

Measurement orientation



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Connection

Wire / pin coding

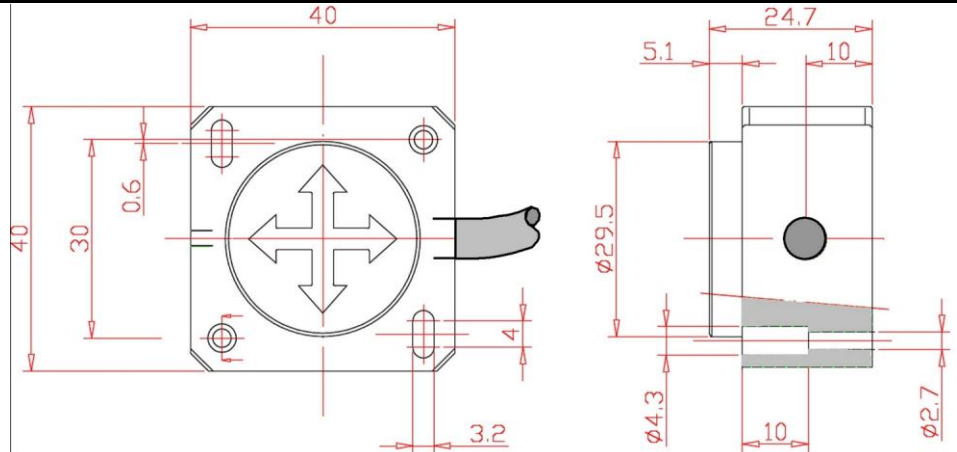
Connectivity (length $\pm 10\%$)

2 m PUR/TPE Li12y11y, black \varnothing 5,4 mm, wires: 6x0,34 mm² DIN colors

White	Zeroing
Brown	+ Supply Voltage
Green	GND
Yellow	Output X
Grey	Output Y
Pink	Output Z
(Blue)	(nc)
(Red)	(nc)

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Mechanical dimensions (indicative only)



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Zero function

Zeroing should be done within 1 min. after power up. After zeroing you've 1 min. left for another centering. Normally the zero input should be left unconnected. Connect zero input to ground for more than 0,5s