

Quadro-G

sensors



QG30-KAX-3.0-AI-K
Acceleration sensor 1 axis
Output 4 - 20 mA
Operating voltage 10 - 30 Vdc
Measuring range X axis: $\pm 3.0\text{ G}$



Application	
Housing	Quadro30: PBTP black
Dimensions	30 x 30 x 15 mm
Mounting	2 x stainless M3x16 screws
Protection	IP67
Humidity	0 - 100%
Weight	ca 15 gram (excl. cable)
Supply voltage	10 - 30 Vdc
Polarity protection	Yes
Current consumption	$\leq 30\text{ mA}$
Operating temperature	-25...+85°C
Storage temperature	-25...+85°C
Measuring range	X-axis: $\pm 3.0\text{ g}$ ($1\text{ g} = 9,81\text{ m/s}^2$)
Frequency response (-3 dB)	0 - 115 Hz ($\pm 55\text{ Hz}$)
Output signal	4 - 20 mA
Output load	$R_{load} \leq 50 \cdot V_{op} - 125\ (\Omega)$ (Eg: $V_{op} = 24\text{ V}$: $R_{load} \leq 1075\ \Omega$)
Short circuit protection	Yes (max 10 s)
Response time	$< 10\text{ ms}$
Accuracy	
Resolution	11-bit
Non linearity	$\pm 60\text{ mg}$
Absolute accuracy	$\pm 5\%$
Max mechanical shock	20.000 g
Status LED	Optional
Connector	Optional
Cable	2 m PVC, black $\varnothing 4,6\text{ mm}$, wires: 3x0,34 mm ²
Wire coding	Brown + Supply voltage Black Analog output Blue Gnd

1-axis acceleration monitoring	
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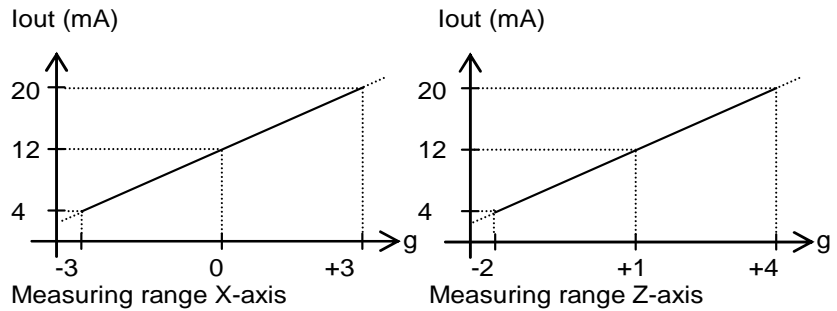
Mounted vertical:

X-axis: cable is pointing to the earth.

Z-axis: cable is pointing to the right.

Note: the vertical plane should be within 3° parallel to the gravity direction.

Transfer characteristic



QG30-KAX-3.0-AI-K

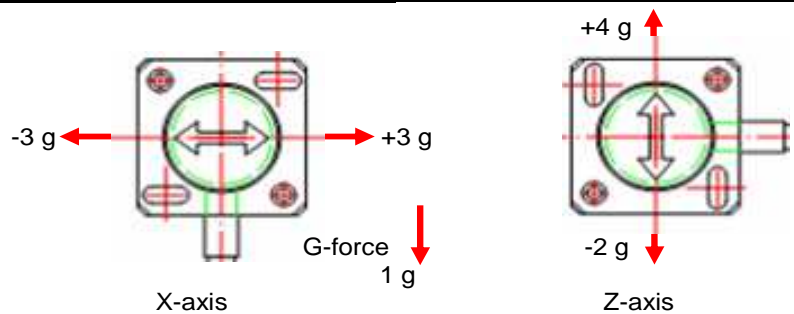
X-axis:

When mounted vertical with the cable pointing to the earth, the range is: ± 3 g.

Z-axis:

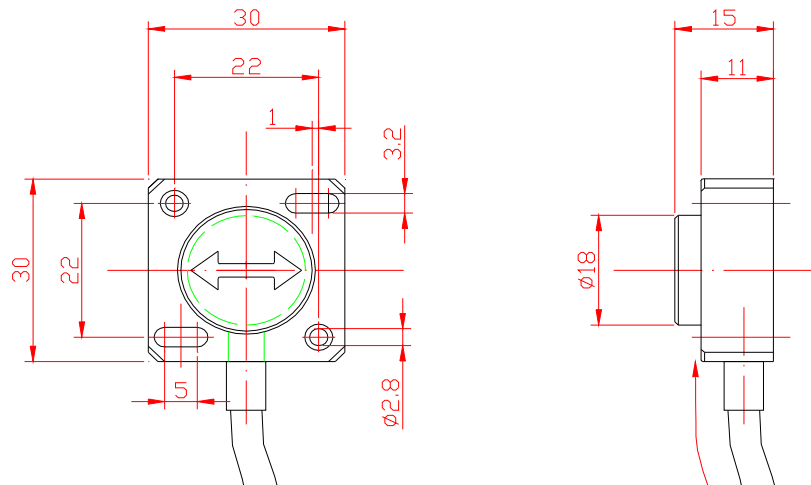
When mounted vertical with the cable pointing to the right, the offset of the G-force shifts the range to: -2 to +4 g.

Measurement orientation



QG30-KAX-3.0-AI-K

Mechanical dimensions



Product conformity

CE conformity

Test standards and regulations

The model QG30 complies with the requirements of the standards EN50081-1 and EN50082-1.