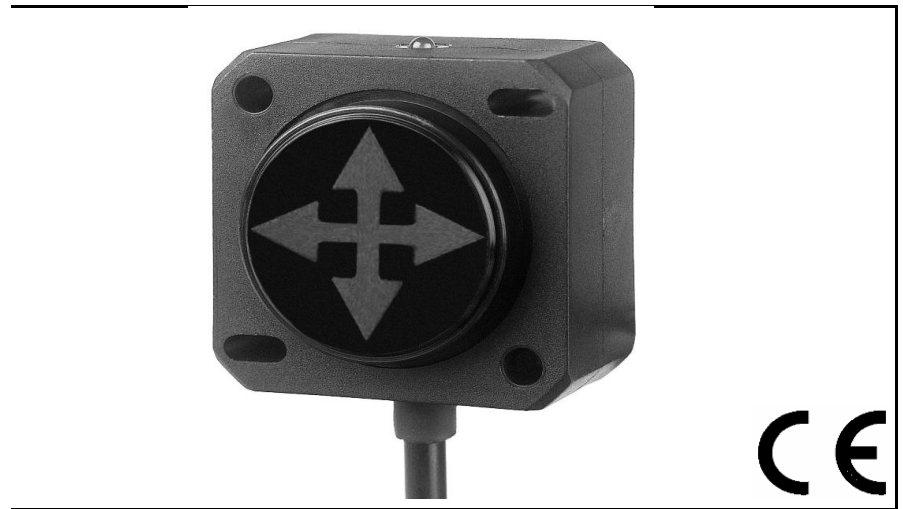


Quadro-G

sensors



QG40-KD-030H-AV-K
Inclination sensor 2 axis: X and Y
Output 0,5 - 4,5 V
Supply voltage 10 - 30 Vdc
Measuring range $\pm 30^\circ$



Application	2-axis inclination monitoring and zero levelling
Housing	Quadro40, black PBTP
Dimensions	40 x 40 x 25 mm
Mounting	2x stainless M3 x 25 mm screws
Protection	IP67
Humidity	0 - 100%
Weight	ca 45 gram (excl cable)
Supply voltage	10 - 30 Vdc
Polarity protection	Yes
Current consumption	≤ 15 mA
Operating temperature	-20...+85 °C
Storage temperature	-25...+85 °C
Measuring range	X and Y axis: $\pm 30^\circ$
Output signals	0,5 - 4,5 V
Short circuit protection	Yes (max 10 s)
Output load resistor	$\geq 20k\Omega$
Frequency response	0 - 18 Hz (± 10 Hz)
Response time	< 10 ms
Accuracy	
Accuracy (excl. cross axis)	0,5°
Cross axis sensitivity	3,5%
Resolution	11 bit
Max mechanical shock	20.000 g
Status LED	Optional
Cable	2 m, black, PVC, 4x0,25 mm ²
Wire coding	Brown : Vcc Blue : Gnd Black : X axis output White : Y axis output
Connector	Optional

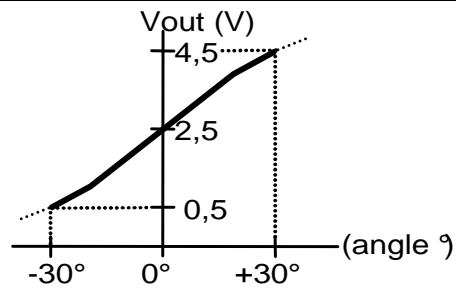
QG40-KD-030H-AV-K

$$V_{out} = 2,5 + 4 * \sin \alpha \text{ [V]}$$

V_{out} can be approximated by a straight line:

$$V_{out} = 2,5 + a / 15 \text{ [V]}$$

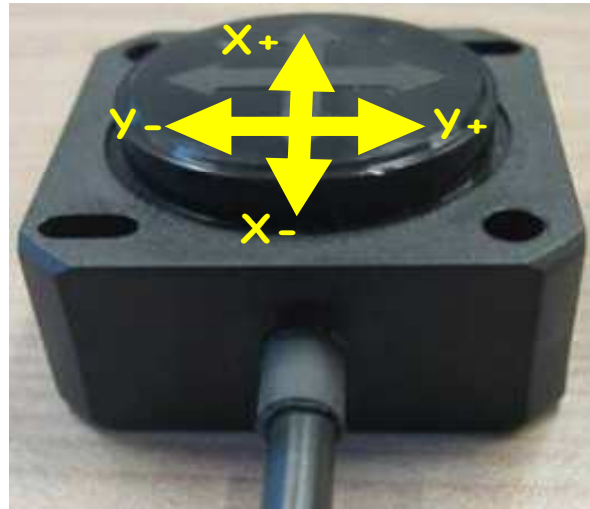
Transfer characteristic for X and Y output



QG40-KD-030H-AV-K

The zero position ($X = 2,5 \text{ V}$ and $Y = 2,5 \text{ V}$) is when the sensor is mounted horizontally and no acceleration is applied.

Measurement orientation



QG40-KD-030H-AV-K

Mechanical dimensions

