

# QG series

QG65-KIXv-360H-AV-CM

## Inclination sensor

1 axis vertical mounting

Output  
0,5 - 4,5 V

Supply voltage  
8 - 30V dc

Measuring range  
360°



### QG65-KIXv-360H-AV-CM

Housing
Dimensions
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
Offset error
Non linearity
Sensitivity error
Resolution
Temperature coefficient
Max mechanical shock
Output
Output load
Short circuit protection
Output refresh rate

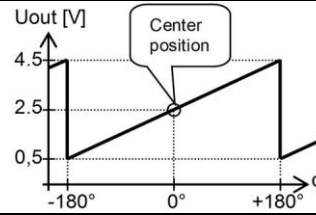
### General specifications v20140708

Plastic injection molded housing (Faradex DS, black, EMI shielded by stainless steel fiber in PC)
60x50x27 mm
4x M5x25 mm stainless steel pozidrive screws (optional: 2x Ø4mm positioning pins)
IP67
0 - 95% non condensing
ca 110 gr
8 - 30V dc
Yes
≤ 25 mA
-40 .. +85°C
-40 .. +85°C
360°
Yes (2,5 V = 0°), range 360°
10 Hz
overall 0,08° typ.
< ± 0,03° typ. (< ± 0,08° max.) after centering
< ± 0,06° typ. (< ± 0,15° max.)
< ± 0,01% typ. (< ± 0,03% max.)
0,01°
± 0,005°/K typ.
20.000g
0,5 - 4,5 V
Rload ≥20kΩ, Cload ≤20 nF
Yes (max 10 s)
20 ms

## QG65-KIXv-360H-AV-CM

$$V_{out} = 2,5 + 2 \cdot (\alpha / 180) [V]$$

## Transfer characteristic

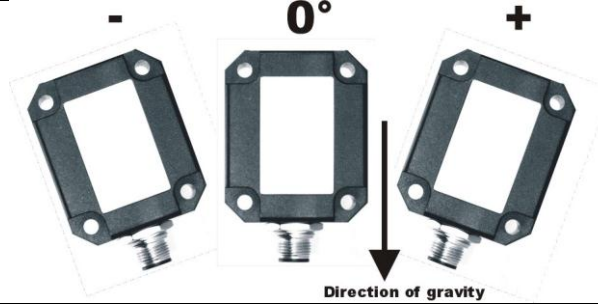


## QG65-KIXv-360H-AV-CM

Rotation in vertical plane.

Lateral tilt sensitivity error:  
 $< \pm 0,03^\circ$  lateral tilt (typ.)  
 Max. lateral tilt:  $45^\circ$

## Measurement orientation



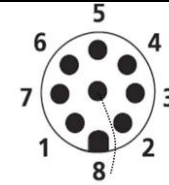
## QG65-KIXv-360H-AV-CM

Connection

Wire / pin coding

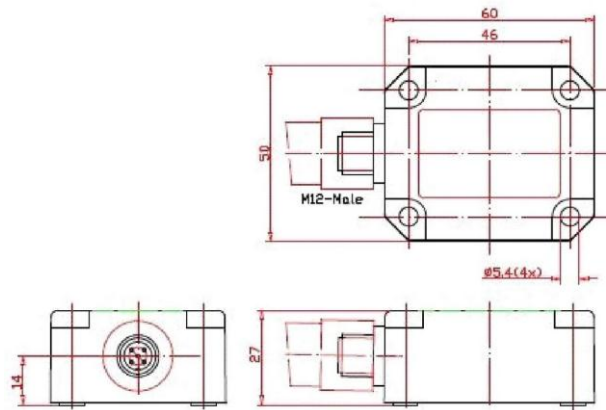
M12 male 8p connector

- Pin 1: Output for factory use only
- Pin 2: Supply voltage
- Pin 3: Programming interface RS232 Rx
- Pin 4: Programming interface RS232 Tx
- Pin 5: Gnd
- Pin 6: Centering input
- Pin 7: Output
- Pin 8: Shield



## QG65-KIXv-360H-AV-CM

## Mechanical dimensions



## QG65-KIXv-360H-AV-CM

## Center function

Centering can be done to eliminate mechanical offsets.  
 To execute centering connect center input to ground ( $>0,5\text{sec}$ ) within 1 min. after power up.  
 After centering you have 1 min. left for another centering.  
 Normally the center input should be left unconnected.