

# QG series

QG65-KD-001..025H-ASN-CM

## Tilt switch programmable

2 axis horizontal mounting

Output  
NPN

Supply voltage  
8 - 30V dc

Measuring range  
Switch points  
up to  $\pm 25^\circ$



### QG65-KD-001..025H-ASN-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
Boot up time

### General specifications 11492, v20140320

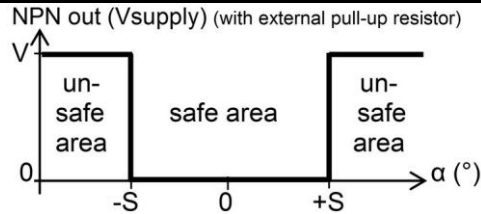
Plastic injection molded housing (Faradex DS, black, EMI shielded by stainless steel fiber in PC)
60x50x27 mm
4x M5x25 mm zinc plated steel pozidrive screws included (optional: 2x Ø4mm positioning pins)
IP67
0 - 95% non condensing
ca 110 gr
8 - 30V dc
Yes
$\leq 50$ mA
-40 .. +85°C
-40 .. +85°C
Switch points up to $\pm 25^\circ$
Yes (0°), range: $\pm 5^\circ$
0,5 Hz
$< \pm 0,09^\circ$
$< \pm 0,01^\circ$ (after zeroing)
not applicable
not applicable
0,01°
$\pm 0,005^\circ/\text{K}$ typ.
20.000g
dual NPN
100 mA cont., 250 mA max 10 sec., Resistive
No
$< 10$ ms

## QG65-KD-001..025H-ASN-CM

### NPN-output:

- Programmable switchpoints  $\pm S$  (opt. QG65 Configurator RS232)  
Factory default:  $S = \pm 15^\circ$
- at  $0^\circ$ : safe area, conducting
- outside  $\pm S$ : unsafe, non-conducting
- Unpowered sensor: non-conducting
- hysteresis :  $0,2^\circ$
- safe  $\blacktriangleright$  unsafe delay : 500 mS
- unsafe  $\blacktriangleright$  safe delay : 1000 mS

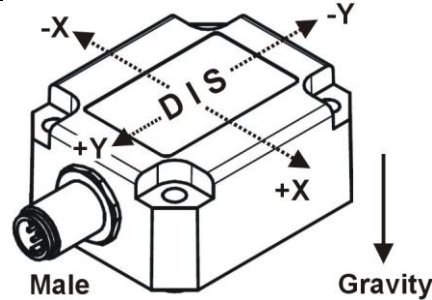
## Transfer characteristic



## QG65-KD-001..025H-ASN-CM

The default  $0^\circ$  position is when the sensor is mounted horizontally and no acceleration is applied.

## Measurement orientation



## QG65-KD-001..025H-ASN-CM

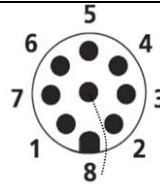
### Connection

Wire / pin coding

## Connectivity

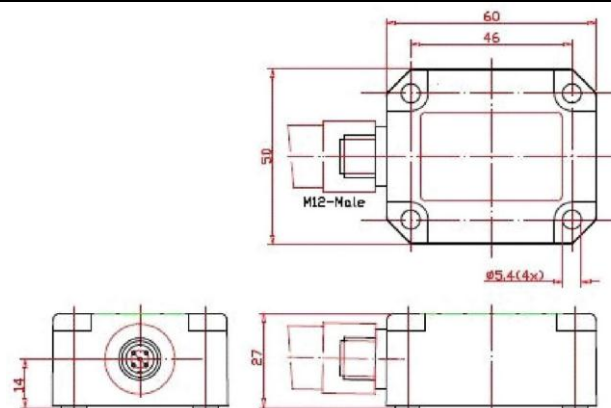
M12 male 8p connector

- |        |                                |
|--------|--------------------------------|
| Pin 1: | Output Y                       |
| Pin 2: | Supply voltage                 |
| Pin 3: | Programming interface RS232 Rx |
| Pin 4: | Programming interface RS232 Tx |
| Pin 5: | Gnd                            |
| Pin 6: | Zero input                     |
| Pin 7: | Output X                       |
| Pin 8: | Shield                         |



## QG65-KD-001..025H-ASN-CM

## Mechanical dimensions



## QG65-KD-001..025H-ASN-CM

## 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