QG series

DIS sensors

QG40N-KIXh-040S-ASP1-CM

Tilt detector with permanent hold function (fall over detector)
1 axis horizontal mounting

Output
PNP

Supply voltage
8 - 30V dc

Measuring range
detection angle: ±40°

CE

QG40N-KIXh-040S-ASP1-CM	General specifications v20140625
Housing	Plastic injection molded housing (Quadro40, PBTP black)
Dimensions	40x40x25 mm
Mounting	2x steel zinc plated M3x25 mm Pozidrive screws
Ingress Protection (IEC 60529)	IP67
Relative humidity	0 - 95% non condensing
Weight	ca 50 gr
Supply voltage	8 - 30V dc
Polarity protection	Yes
Current consumption	≤ 25 mA
Operating temperature	-25 .. +85°C
Storage temperature	-25 .. +85°C
Measuring range	detection angle: ±40°
Centering function	Yes (0°), range: ±5°
Frequency response (-3dB)	0-0,1 Hz
Accuracy	±5°
Offset error	0° (after zeroing)
Non linearity	not applicable
Sensitivity error	not applicable
Resolution	0,09°
Temperature coefficient	± 0,04°/K typ
Max mechanical shock	10.000g
Output	PNP
Output load	1A DC max.
Short circuit protection	Yes
Boot up time	< 10 ms

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PNP-output:
- at 0°: safe area, conducting
- S = ±40°
- outside ±S: unsafe, non-conducting
- Unpowered sensor: non-conducting
- hysteresis : 2°
- safe ► unsafe delay : 1 sec
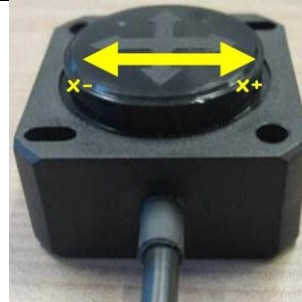- unsafe ► safe delay : infinite

Transfer characteristic

PNP out (Vsupply) (with external pull-down resistor)
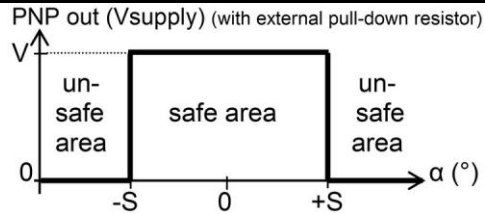
QG40N-KIXh-040S-ASP1-CM

The default 0° position is when the sensor is mounted horizontally and no acceleration is applied.
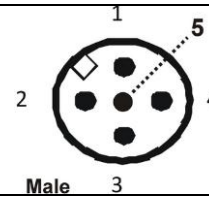
Measurement orientation

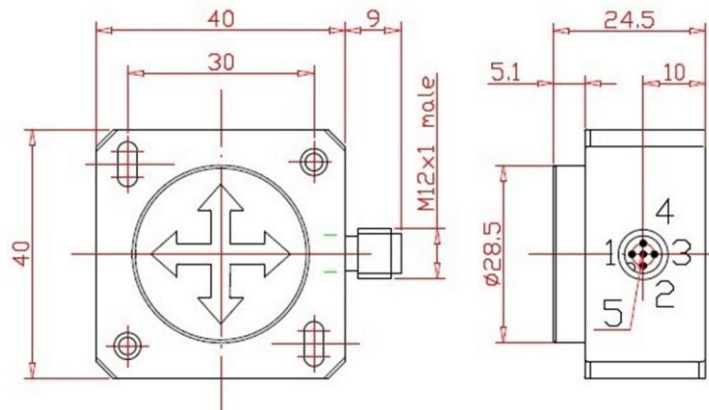## QG40N-KIXh-040S-ASP1-CM

Connection

Wire / pin coding

M12 5p male connector

Pin 1:	+ Supply Voltage
Pin 2:	For factory use only
Pin 3:	Gnd
Pin 4:	Output X
Pin 5:	Centering

Male

QG40N-KIXh-040S-ASP1-CM

Mechanical dimensions

QG40N-KIXh-040S-ASP1-CM

Zero function & hold 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

This device will hold the output to 0V permanent (with external pull down) as soon as the unsafe area conditions are met once.
After a power cycle the device will hold this output to 0V (single use device)