Quadro-G
sensors

QG65-MI-360H-AI-CM

Inclination sensor
1 axis vertical

Output
4 - 20 mA

Supply voltage
10 - 30 Vdc

Measuring range
0 - 360° (vertical plane)

CE

QG65-MI-360H-AI-CM	**General specifications** (v20101206)
Housing	Aluminium diecast
Dimensions	60x50x24 mm
Mounting	2x stainless M4x25 screws + 2x Ø 4 mm positioning pins (optional)
Protection	IP67
Humidity	0 - 100%
Weigth	ca 220 gr
Supply voltage	10 - 30 Vdc
Polarity protection	IP67
Current consumption	≤ 50 mA
Operating temperature	-25 .. +85°C
Storage temperature	-25 .. +85°C
Measuring range	0 - 360° (vertical plane)
Center position	Yes (12 mA / 0°), range: 0 - 360°
Frequency response (-3dB)	0 - 18 Hz (±10 Hz)
Accuracy	
Max offset error	0,3°
Non linearity	± 0,3°
Sensitivity error	< 0,01%
Resolution at zero	0,07°
Temperature effect	± 0,2°
Max mechanical shock	20.000g
Output	4 - 20 mA
Output load	Rload ≤ 50*Vs -300 (Ω) (Eg: Vs = 24 V: Rload ≤ 900 Ω)
Short circuit protection	Yes (max 10 s)
Response time	< 20 ms

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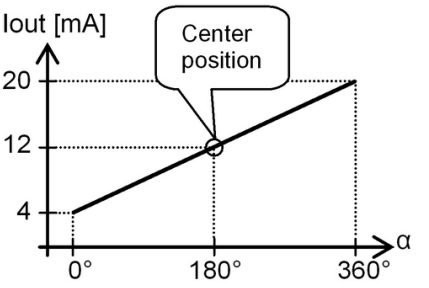
Iout = 12 + 0,022*a [mA]

Transfer characteristic:



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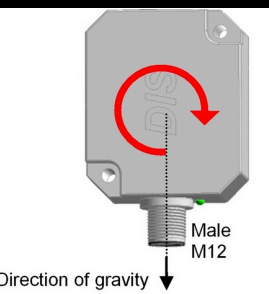
The sensor should be rotated in the vertical plane. Note: vertical plane should be within 3° parallel to the gravity direction. Drawn in the default 0° position.

Measurement orientation:



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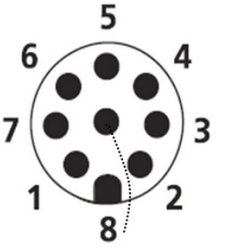
Connection

Wire pin coding

Connection details:

M12 male 8p connector

Pin 1: Output Y
Pin 2: Supply voltage
Pin 3: Leave open: factory use only
Pin 4: Leave open: factory use only
Pin 5: Gnd
Pin 6: Zero input
Pin 7: Output X
Pin 8: Shield



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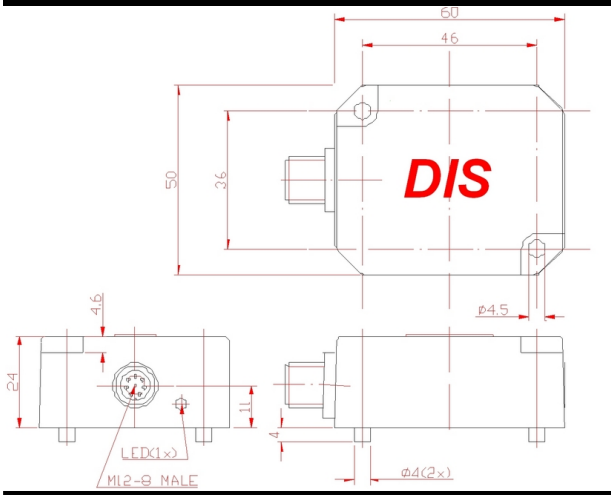
Mechanical dimensions:



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Center function:

Centering should be done within 1 min. after power up. After centering you've 1 min. lef another centering. Normally the Center input should be left unconnected. Connect center input to ground for more than 0,5s