

**NM2-IP2-2L****Dual axis tilt measuring system**

- Measuring range $\pm 3^\circ$ up to $\pm 45^\circ$ per axis
- Accuracy $\pm 0,1^\circ$ (up to $\pm 10^\circ$), $\pm 0,2^\circ$ (up to $\pm 30^\circ$), $\pm 0,25^\circ$ (up to $\pm 45^\circ$)
- Analogue output 4 ... 20 mA (2-wire-technology)
- Supply voltage 18 ... 28 VDC

**Description**

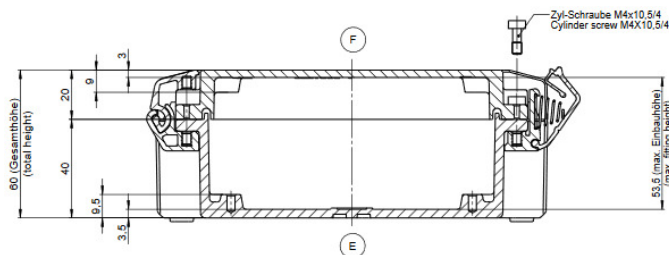
The dual axis industrial tilt measuring system NM2-IP2-2L is the combination of two non-contact inclination sensors and sensor adapted electronics. The measuring system is designed for precise tilt measurement in X- and Y-axis and intended for ground assembly. Available tilt measuring ranges are $\pm 3^\circ$ to $\pm 45^\circ$. The two analogue output signals of 4 ... 20mA in 2-wire-technology are standard signals and therefore a further analysis is easily feasible.

The tilt measuring system is built into a robust EMC-safe die-cast aluminium enclosure (IP66), which is well suited for applications in rough and industrial environments. Furthermore, the built-in electronics are protected against humidity and vibrations.

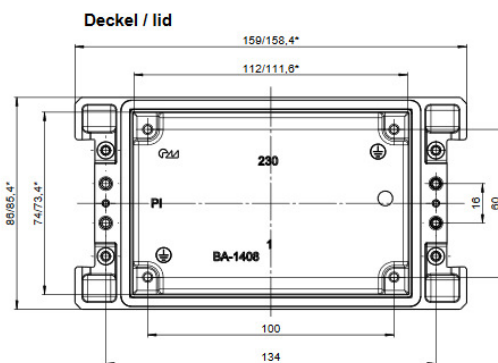
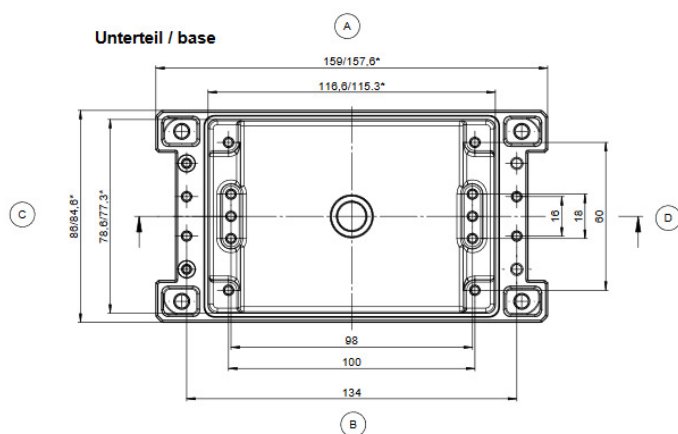
Specifications

Number of measuring axis:	2
Supply voltage:	18 ... 28 VDC
Power consumption:	ca. 2 W
Analogue output / burden:	4 ... 20 mA (2-wire), max burden depending on supply voltage
Frequency range (-3dB):	0,5 Hz
Preferred measuring range:	$\pm 3^\circ, \pm 5^\circ, \pm 10^\circ, \pm 15^\circ, \pm 20^\circ, \pm 30^\circ, \pm 45^\circ$ other measuring ranges for both axis as well as different measuring ranges for each axis (f.e. X: $\pm 30^\circ$ Y: $\pm 3^\circ$) on request possible
Accuracy at 23°C:	Up to $\pm 10^\circ$: $\pm 0,1^\circ$ Up to $\pm 30^\circ$: $\pm 0,2^\circ$ Up to $\pm 45^\circ$: $\pm 0,25^\circ$
Electrical connection:	M16 x 1,5 EMC cable glands on internal spring-cage terminal blocks
Cross-sensitivity:	< 1,5% at 30°
Enclosure:	EMC-safe aluminium die-cast enclosure
Protection class:	IP66
Dimensions (W x H x D):	Ca. 160 x 65 x 86 mm (without EMC cable gland)
Weight:	Ca. 1000 g
Temperature, storage:	-20 ... +60 °C
Temperature, operating:	-20 ... +60 °C

■ Dimensions of enclosure



* = Maß durch Formkonizität nach unten verringert
Freimaß-Toleranz nach GTA13/5 DIN 1688
* = Measure by draught down ward reduced
General tolerance acc. GTA13/5 DIN 1688



■ Terminal wiring

Electrical connections are made via the EMC cable glands to the internal spring-cage terminal blocks. The maximal connection cross section is 2,5 mm². Although this system is designed with a high degree of immunity to electromagnetic interferences (EMI), proper installation and wiring methods must be followed to ensure compatibility in each application.

Terminal	Description	Description
1	Supply voltage	X-axis
2	Signal / Current loop	X-axis
3	Supply voltage	Y-axis
4	Signal / Current loop	Y-axis

■ Ordering information

NM2-IP2-2L-420... Dual axis tilt measuring system in 2-wire-technology

...-Bxx Measuring range (see note below)

Note: When placing an order, please fill in placeholder „xx“ with the wanted tilt measuring range.

Beispiel: Measuring range $\pm 45^\circ \rightarrow$ NM2-IP2-2L-420-B45

■ Customized Requirements

Technical modifications according to customer requirements are available on request. Moreover, we deliver customized special solutions for a lot of measuring tasks in the section pressure, force, position and tilt measuring using our measuring transducers. Do not hesitate to contact us.

We reserve the right to do technical changes without prior notice.

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