CAMILLE BAUER

KINAX N702-CANopen
Absolute inclination transmitter

For robust industrial applications

The KINAX N702-CANopen is a robust absolute inclination transmitter. Thanks to its high mechanical strength and the compact design it is particularly suitable for use in industrial applications. It detects tilt and angular positions and provides them via CANopen.

The very simple assembly by the synchro flange or mounting plate, the sensor connection via M12x1/5 poles, the free on-site parameterization and the digital CANopen-Businterface offers maximum installation flexibility.



Your benefits

TOP QUALITY TESTED
- Compact industrial housing
- Splash and dust proof housing IP66
- Contact arm measuring principle
- Digital CANopen Businterface

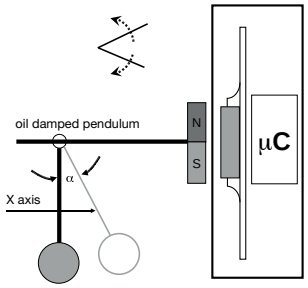
ACCURATE, SAFE, MAINTENANCE FREE
- High degree of absolute measuring accuracy (±0.2°)
- Resistant against high mechanical strains thanks to robust design and high quality materials
- Secure electrical connection through sensor connector M12x1

SIMPLE AND QUICK COMMISSIONING
- Standard synchro flange or mounting plate
- No shaft adaptation necessary
- 3-wire connection with sensor connector M12x1 / 5 poles
- Auto-configuration of the network
- Free parameterization over CANopen interface

Technical data

General

Measured quantity:	Tilt angle
Measuring principle:	Magnetic, one-dimensional inclination transmitter with hall sensor and oil-damped pendulum system, hermetically sealed, contact free, freely rotatable without stops



Pendulum damping:	by oil filling

Measuring input

Measuring range:	-180°…179.9° free programmable
Inclination angle:	Set to -180,0° … +179,9°
Sense of rotation:	Adjustable for rotation clockwise or counter-clockwise

Measuring output

Power supply:	9 … 33 VDC protection against wrong polarity
Output signal:	CAN-Bus Interface
Protocol:	CANopen
CANopen Draftstandards:	DS 401 Device-Profile inclinometers DS 301 Application-Layer and communication profile
Current consumption:	< 100 mA

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Accuracy

Basic accuracy:	± 0,2° (bei + 25 °C)
Resolution:	14 bit
Transient response:	by 25° tils < 1 sec.
Influence of temperature output current (–30°…+70°C): [-22 ... +158°F]	± 0.1° / 10K (>100°)

Installation data

Material:	Housing cap: (3.2382) Aluminium GD-AlSi10Mg coated Housing flange: (3.2315) Aluminium AlMgSiF30
Mounting position:	Perpendicular to the measurement object
Electrical connection:	Connector M12x1, 5 poles
Weight:	ca. 0,3 kg [9.645 oz]

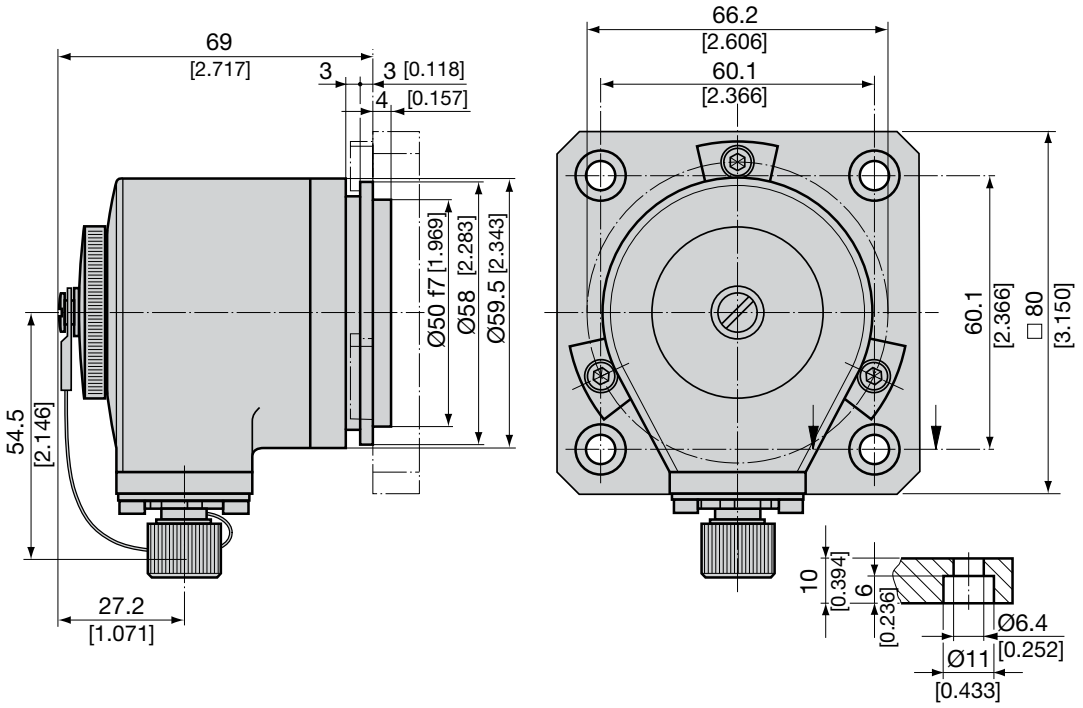
Regulations

Spurious radiation:	EN 61 000-6-3
Immunity:	EN 61 000-6-2
Test voltage:	500 Veff., 50 Hz, 1 Min.
Housing protection:	IP 66 acc. to EN 60 529

Environmental condition

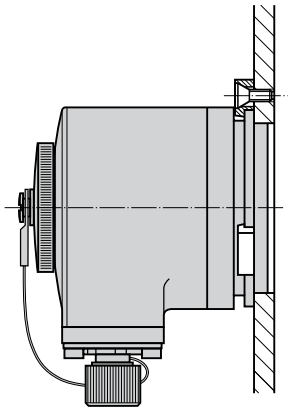
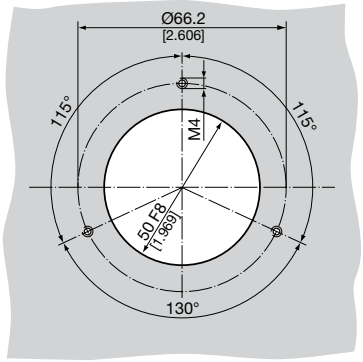
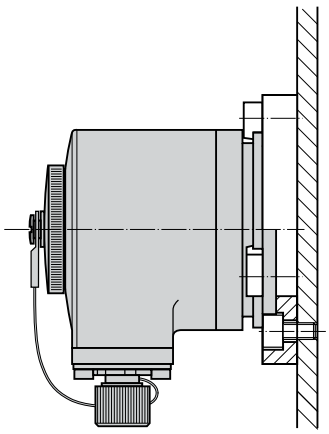
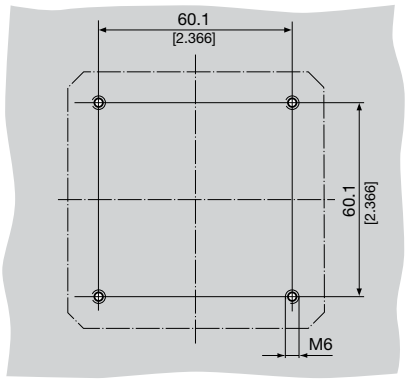
Climatic rating:	Temperature -30° to + 70° C [-22 ... +158 °F] Relative humidity < 95%
Vibration resistance:	≤ 40 m/s² / 5…100 Hz acc. EN 60068-2-6
Shock resistance:	300 m/s² / 18 ms acc. EN 60068-2-27
Transportation and storage temperature:	-30° … +70 °C [-22 ... +158 °F]

Dimensional drawings



Mounting

All inclination transmitter can be mounted either directly with 3 clamping brackets to the item being measured or with a mounting plate with 4 cheese head screws M6. Please take care that the installation position of the inclination transmitter is perpendicular to the gravity of the earth. The inclination transmitter are supplied standard with mounting plate but without cheese head screws M6.

Mounting versions		Drilling aund cut-out diagrams (for mounting transmitters)
directly with clamps		
with mounting plate		

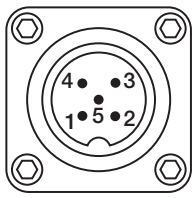
Electric connections

To connect the electrical lines, the inclination transmitter has a sensor connector M12x1 / 5 poles.

PIN configuration

Pin assignments:

1 = CAN Shld
2 = + 24 V DC
3 = GND
4 = CAN High
5 = CAN Low



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Programming

A parameterization is performed by means of the CANopen interface. All parameters are stored in the object directory.

Ordering information of variants

Description	Article No.
KINAX N702-CANopen	157 554

Scope of delivery

1 Inclination transmitter KINAX N702-CANopen (157 554)
1 Mounting plate with 3 clamps (168 379, 168 353)
1 Connector M12x1, 5 poles (168 105)
1 Operating instructions German, English, French (157 637)

Accessories

Description	Article no.
Connector M12x1 / 5 poles	168 105
Kit mounting clamp N7xx	168 353
Mounting plate N7xx	168 379

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