CAMILLE BAUER

KINAX N702
Absolute inclination transmitter

For robust industrial applications

The KINAX N702 is a very robust absolute inclination transmitter. Thanks to its high mechanical strength and the compact design it is particularly suitable for use in industrial applications. It serves the acquisition of inclination and angular position, processing and the provision of measured values for the downstream device.

The very simple assembly by the synchro flange or mounting plate, the sensor connection via M12x1 / 4 poles the free on-site parameterization offers maximum installation flexibility.



Your benefits

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

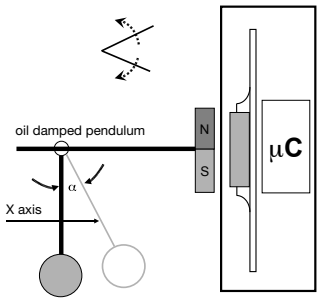
ACCURATE, SAFE, MAINTENANCE FREE
- High degree of absolute measuring accuracy (±0.2°)
- Resistant against high mechanical strains thanks to robust design and high quality materials
- Secure electrical connection through sensor connector M12x1

SIMPLE AND QUICK COMMISSIONING
- Standard synchro flange or mounting plate
- No shaft adaptation necessary
- 3-wire connection with sensor connector M12x1 / 4 poles
- Free on-site parameterization

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 ± 135°
Sense of rotation:	Adjustable for rotation clockwise or counter-clockwise

Measuring output

Power supply:	18 … 36 VDC (burden 600 Ω) 9 … 36 VDC (burden 200 Ω)
Output signal IA:	Load-independent DC current, proportional to the inclination
Current consumption:	< 80 mA
Standard range:	4…20 mA, 3-wire connection protection against wrong polarity

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Accuracy

Basic accuracy:	± 0.2 ° (at +25 °C)
Resolution:	12 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, 4 poles
Weight:	0.3 kg [9.645 oz]

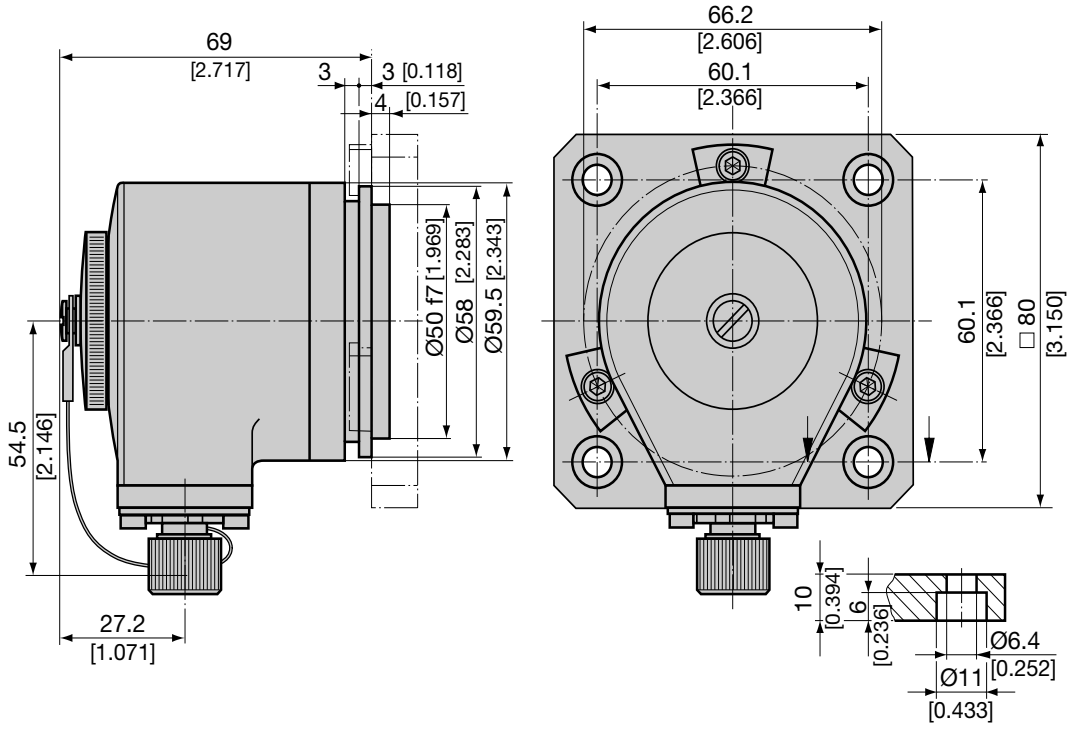
Regulations

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

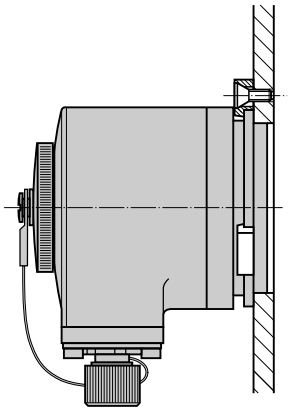
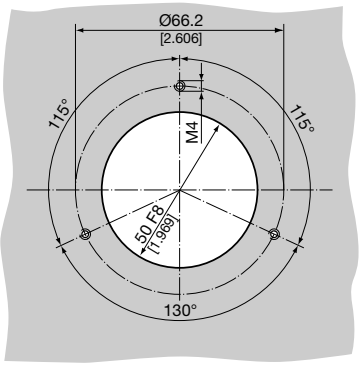
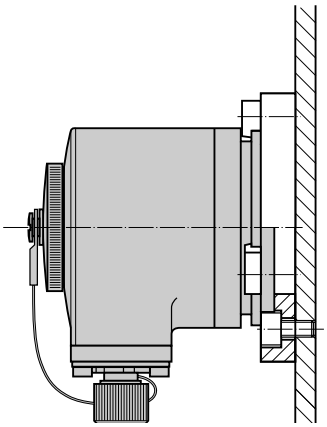
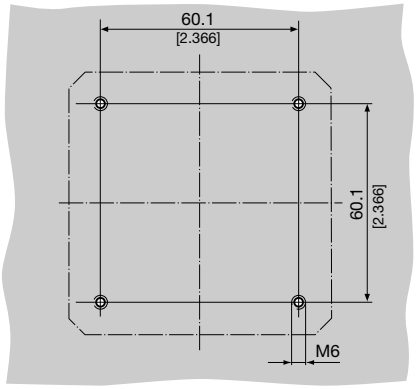
Climatic rating:	Temperature – 30° to + 70° C [-22 ... +158 °F] Relative humidity < 95%
Vibration resistance:	≤ 40 m/s2 / 5 … 100 Hz acc. EN 60068-2-6
Shock resistance:	300 m/s2 / 18 ms acc. EN 60068-2-27
Transportation and storage temperature:	– 30° to + 70° C [-22 ... +158 °F]

Abmessungen



Mounting

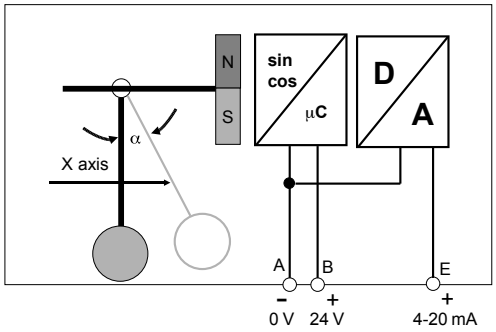
All inclination transmitter can be mounted either directly with 3 clamping brackets to the item being measured or with a mounting plate with 4 cheese head screws M6. Please take care that the installation position of the inclination transmitter is perpendicular to the gravity of the earth. The inclination 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 / 4 poles.

Wiring connection



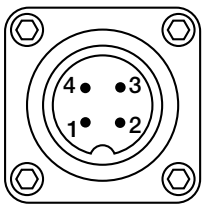
PIN configuration

Pin assignments:

1 = 0 V

2 = + 24 V DC

4 = 4 ... 20 mA



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Programming

The parameters can be made using the keypad on the device itself. Touch a button to make initial and final values or parameters for the zero position for a symmetrical arrangement.

In case of incorrect operation the factory settings can always be restored.



Ordering information of variants

Description	Article No.
KINAX N702	157 083

Scope of delivery

1 Inclination transmitter KINAX N702 (157 083)
1 Mounting plate with 3 clamps (168 379, 168 353)
1 Connector M12 x 1, 5 poles (168 105)
1 Operating instructions German, English, French (157 265)

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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