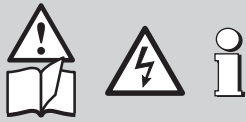


The following symbols indicate safety instructions which must be strictly observed:



The instruments and their components must be disposed of properly and according to the provisions of the respective country.

## Safety instructions

## KINAX HW730-Modbus/TCP with Power over Ethernet, absolute hollow-shaft transmitter for angular position



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## Read first, then ...



The unobjectionable and safe operation presupposes that these safety instructions as well as the operating instructions (on CD No. 156027) have been read and understood!

This instrument should only be handled by respectively trained staff members who know the instrument and are authorised to work on technical facilities.

The operation of the instrument must be stopped if its safe operation (e.g. in case of visible damage) is not possible any more. All connections are to be disconnected in this case. The instrument is to be forwarded to our plant or a service station authorised by us.

Any warranty claim lapses if the instrument is opened!

## Scope of delivery

- 1 KINAX HW730-Modbus/TCP with PoE programmable hollow-shaft transmitter for angular position
- 1 HW730 torque support set 169 749
- 1 Safety instructions 172 734
- 1 Software and documentation CD 156027

## Brief description

KINAX HW730-Modbus/TCP with PoE is a very robust, absolute hollow-shaft transmitter for angular position, which is particularly suited to applications in rough environments due to its high mechanical durability. It acquires the position of a shaft without contact and makes it available via Modbus/TCP.

## Technical data

### Measuring input

Angle measuring range: programmable between 0 ... 360°  
Hollow-shaft diameter: max. Ø 30 mm [1.181"], reducing the diameter of the hollow shaft by casing adapter  
Starting torque: max. 0.5 Nm [70.806 oz-in]  
Sense of rotation: Adjustable

### Measuring output

Power supply: Power over Ethernet (PoE), Class 0  
Interface: Modbus TCP/IP (IEC 61158)  
100BASE-TXI  
Transmission rate: 10 / 100 MBit

### Environmental conditions

Climatic rating: Temperature – 40 to + 85 °C [–40... +185°F]  
Rel. humidity ≤ 95% non-condensing

Vibration resistance: ≤ 100 m/s<sup>2</sup> / 10...500 Hz acc. EN 60068-2-6  
Shock resistance: 1000 m/s<sup>2</sup> / 11 ms acc. EN 60068-2-27  
Housing protection: IP 67 acc. EN 60529  
IP 69k acc. EN 40050-9

### Installation data

Material: Aluminium EN AW-6060 T6 anodized  
Dimensions: For exact dimensions see operating instructions  
Position of use: Devices may be installed in any position  
Installation: For exact dimensions see page 4



When determining the place of assembly (place of measurement), please observe that the operating temperature limits are not exceeded:  
– 40 und +85 °C [–40... +185°F]

## Electrical connections

The transmitter is connected via an M12/4-pole, d-coded connector or an M16x1.5 cable gland. During the version with a cable glands the connection via a spring-type terminal block made in accordance with diagram of connections. Use only Ethernet cables of CAT 5 or better.



Please make sure ...

... to observe the data on the type plate and the operating instructions.

... to adhere to county-specific provisions during installation and the selection of material for electric lines.



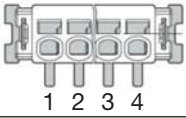
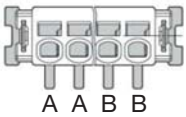
- Do not electricly modify the device nor carry out any wiring work when energised.
- Use only the connection types specified.

Connection allocation plug M12/4-pole d-coded

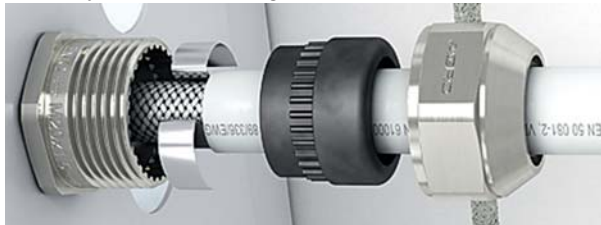
Pin	Signal
1	Rx+
2	Tx+
3	Rx-
4	Tx-



### Pin assignment spring-type terminal block

	Pin	Signal	EIA-568-A	EIA-568-B
	1	Rx-	green/white	orange/white
	2	Rx+	green	orange
	3	Tx-	orange/white	green/white
	4	Tx+	orange	green
	A		blue/white	blue/white
	A		blue	blue
	B		brown/white	brown/white
	B		brown	brown

### Assembly instruction cable gland



Push contact spring with sealing set into the lower part and tighten nut using a tool. Please ensure that the contact spring is in contact with the shield.

### Commissioning

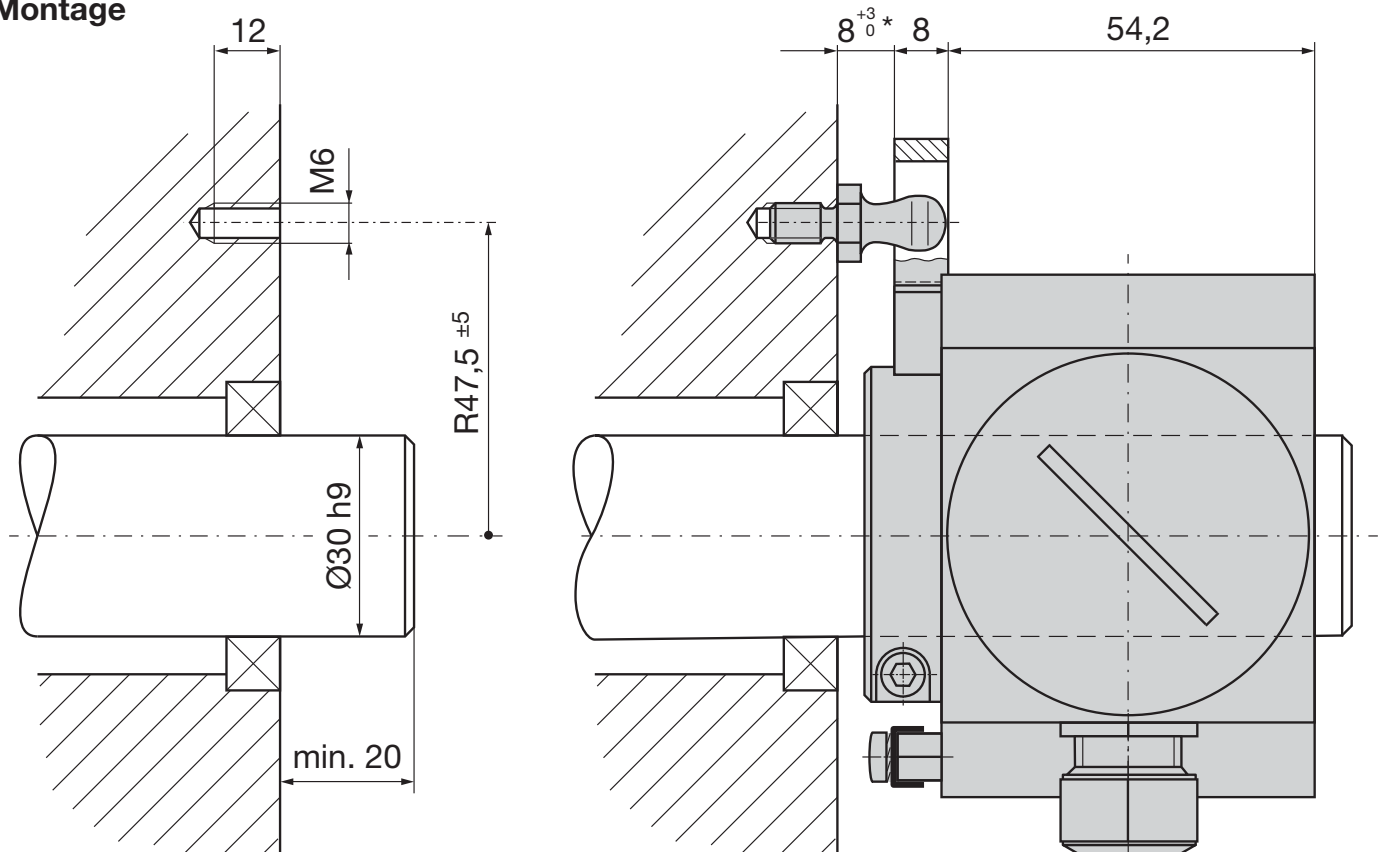


Prior to commissioning, check whether the connection data of the angular position transmitter agrees with the parameters of the plant.

Install the entire plant in an EMC-compatible manner. Installation environment and wiring can affect the EMC of the device.

Die genaue Vorgehensweise zur Inbetriebnahme entnehmen Sie bitte aus der Betriebsanleitung.

### Montage



\* With spacers, this measure will be increased.

### Maintenance

The device is free of maintenance. Repairs may only be carried out by authorized authorities.

### Terms of warranty

Camille Bauer Metrawatt AG warrants the flawless condition of the product with respect to material, manufacturing and function and offers a standard warranty of 36 months. Such warranty becomes effective upon delivery of the product to the customer. Camille Bauer Metrawatt AG reserves the right to amend the terms of warranty any time with future effect.

Any defects shall be communicated by the buyer immediately after discovery. The rejected products shall be sent in proper packaging and with sufficient transport protection to one of our authorised service centres. The sender shall bear the shipping risk.

Any defects arising due to improper treatment, faulty installation, mechanical damage, failure to perform maintenance work, inappropriate use and connection to improper power supply shall be excluded from any kind of warranty.

In case of repair work, alterations or tampering on the part of the buyer or any unauthorised third parties, any warranty claim shall lapse.

### Programming

The complete parameterisation of all functions of KINAX HW730-Modbus/TCP with PoE is only possible with the CB-Manager software. For the exact description of the configuration and parameterisation of the device, see the operating instructions.