

# Operating Manual

## EASYbus temperature sensor module

# EBT – IF...

as of V1.4



### Specification:

<b>Measuring range:</b>	please refer to type plate
EBT – IF1 (standard):	-30,0 ... +100,0 °C
EBT – IF2 (standard):	-30,0 ... +100,0 °C
EBT – IF3 (standard):	-70,0 ... +400,0 °C
<b>Measuring probe:</b>	internal Pt1000-sensor
<b>Accuracy:</b> (at nominal temperature)	±0,2% of meas. value ±0,2°C (EBT-IF1, EBT-IF2) ±0,3% of meas. value ±0,2°C (EBT-IF3)
<b>Min-/Max-value memory:</b>	min- and max measured value are stored
<b>Output signal:</b>	<b>EASYbus</b> -protocol
<b>Connection:</b>	2-wire <b>EASYbus</b> , polarity free
<b>Busload:</b>	1.5 <b>EASYbus</b> -devices
<b>Adjusting:</b>	via interface by input of offset and scale value
<b>Ambient conditions for electronic</b> (in sleeve):	
<b>Nominal temperature:</b>	25°C
<b>Operating temperature:</b>	-25 to 70°C <i>During operation please take care, that even at higher temperatures at the sensor tube (&gt;70°C) the allowable temperature range of the electronics, placed in the sleeve, may not exceed!</i>
<b>Relative humidity:</b>	0 to 100 %RH
<b>Storage temperature:</b>	-25 to 70°C
<b>Housing:</b>	stainless steel housing
<b>Dimensions:</b>	<i>depending on sensor construction</i>
Sleeve:	Ø 15 x 35 mm (without screwing)
Tube length FL:	100 mm or 50 mm <i>or on customer requirement</i>
Tube diameter D:	Ø 6 mm <i>or on customer requirement</i> (available Ø: 4, 5, 6 and 8 mm)
Collar tube length HL:	100 mm <i>or on customer requirement</i>
Thread:	G1/2" <i>or on customer requirement</i> (available threads M8x1, M10x1, M14x1.5, G1/8", G1/4", G3/8", G3/4")
IP rating:	IP67
<b>Electrical connection:</b>	polarity free connection via 2-pol connection cable Cable length: 1m <i>or on customer requirement</i>
<b>EMC:</b>	The device corresponds to the essential protection ratings established in the Regulations of the Council for the Approximation of Legislation for the member countries regarding electromagnetic compatibility (2004/108/EG). In accordance with EN61326 +A1 +A2 (appendix A, class B), additional errors: < 1% FS. The tube have to be protected sufficiently against ESD pulses, if the device is used in areas with risk of ESD. When connecting long leads adequate measures against voltage surges have to be taken.

### Disposal instructions:

The device must not be disposed in the regular domestic waste.

Send the device directly to us (sufficiently stamped), if it should be disposed. We will dispose the device appropriate and environmentally sound.



# GREISINGER electronic GmbH

D - 93128 Regenstauf, Hans-Sachs-Straße 26

Tel.: +49 9402/9383-0, Fax: +49 9402/9383-33, eMail: info@greisinger.de

## **Safety instructions:**

This device has been designed and tested in accordance with the safety regulations for electronic devices. However, its trouble-free operation and reliability cannot be guaranteed unless the standard safety measures and special safety advises given in this manual will be adhered to when using the device.

1. Trouble-free operation and reliability of the device can only be guaranteed if the device is not subjected to any other climatic conditions than those stated under "Specification".
2. General instructions and safety regulations for electric, light and heavy current plants, including domestic safety regulations (e.g. VDE), have to be observed.
3. If device is to be connected to other devices (e.g. via PC) the circuitry has to be designed most carefully. Internal connection in third party devices (e.g. connection GND and earth) may result in not-permissible voltages impairing or destroying the device or another device connected.
4. If there is a risk whatsoever involved in running it, the device has to be switched off immediately and to be marked accordingly to avoid re-starting.

Operator safety may be a risk if:

- there is visible damage to the device
- the device is not working as specified
- the device has been stored under unsuitable conditions for a longer time

In case of doubt, please return device to manufacturer for repair or maintenance.

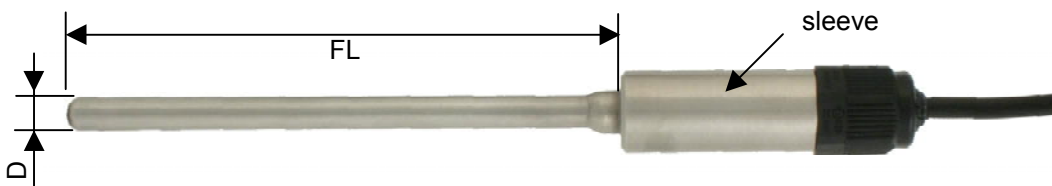
### 5. **Warning:**

Do not use this product as safety or emergency stop devices, or in any other application where failure of the product could result in personal injury or material damage.

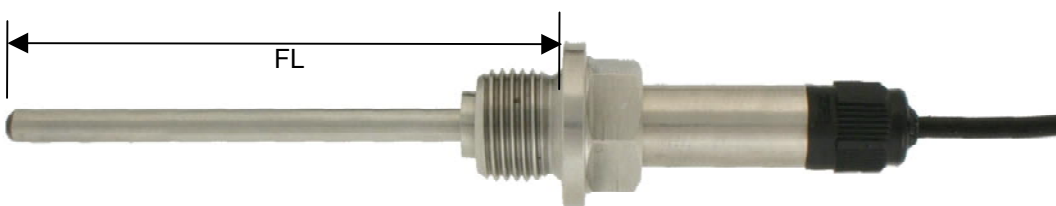
Failure to comply with these instructions could result in death or serious injury and material damage.

## **Available design types:**

**Design type 1:** standard: FL = 100mm, D = 6 mm



**Design type 2:** standard: FL = 100mm, D = 6 mm, thread = G1/2"



**Design type 3:** standard: FL = 50 mm, HL = 100 mm, D = 6 mm, thread = G1/2"

