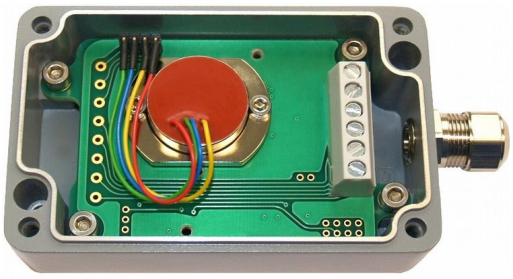

Sensor box containing one inclinometer with RS485 bus interface

Features

- **Modbus RTU compatible RS485 output signal**
- **individually temperature compensated**
- **up to 128 units on one RS485 data bus**
- **optional chain inclinometer housing with two opposite cable glands**
- **transfer rate of 115200 baud; cable lengths of up to 1000m possible**
- **integrated inclinometer can be mounted in either one (NG) or three (NB, N) different axes**
- **Sensor electronics electrically isolated from housing**
- **9...16V operating voltage**
- **Robust pressure die cast aluminium housing (IP67) with salt water proof coating**
- **Twist free 4-point fastening of rigid, 3.2mm thick base PCB**

Description

The sensor box SB1M is a pressure die cast aluminium housing (IP67) with integrated digital sensor electronics containing one robust N or NG or one highly accurate NB inclinometer for uniaxial inclination measurement. The last unit on the RS485-bus can be fitted with a terminator resistor.

Its individual temperature compensation, its simple and well-documented master-slave protocol interface and its bus-capability make it a versatile device for all applications where a RS485 or (in conjunction with a standard industrial converter) a RS232 or USB sensor output is required.

Application

The SB1M inclinometer is suitable for applications requiring the measurement of inclination for further processing on a PC or PLC.

Typical areas of application include construction, mining, agricultural machinery, transportation and conveyor systems, ships, automation technology as well as general mechanical engineering.

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Recommended integrated inclinometer:

1) Especially shock-proof.
2) Best linearity. Lowest temperature drift.
3) Good linearity. Large measuring range.

MR Type	NB3	N2	NG2	N3	NG3	N4	NG4
±2 or ±10°	2)	1)	3)				
±10°…±30°				1)	3)		
±30…±70°						1)	
±30°…±80°							3)

Technical Specification

Terminal	6 x 1.5mm^2
Cable gland	M12x1.5
Measuring range, resolution, ...	depends on integrated SEIKA sensor
Degree of protection	IP67
Measuring axes (N- and NB-sensor)	three orthogonal axes
Measuring axes (NG.sensor)	one axis
Optional signal terminator resistor	100 Ohm
Operating temperature	-40... +85°C
Operating voltage	9V...16V
Current consumption	approx. 45 mA

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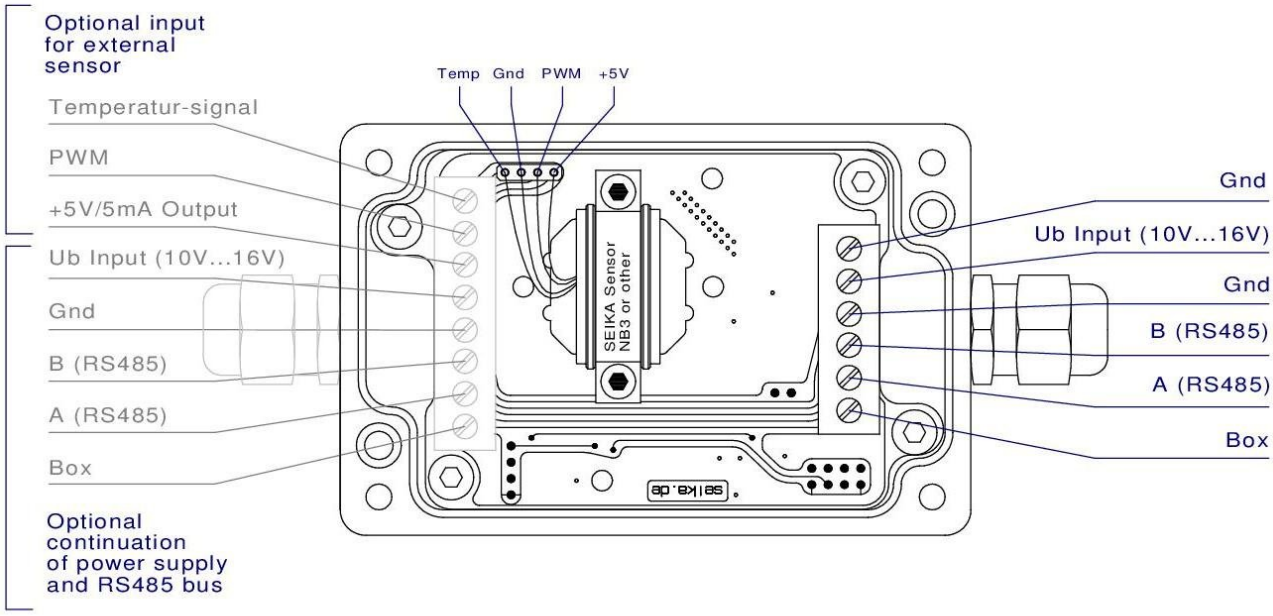
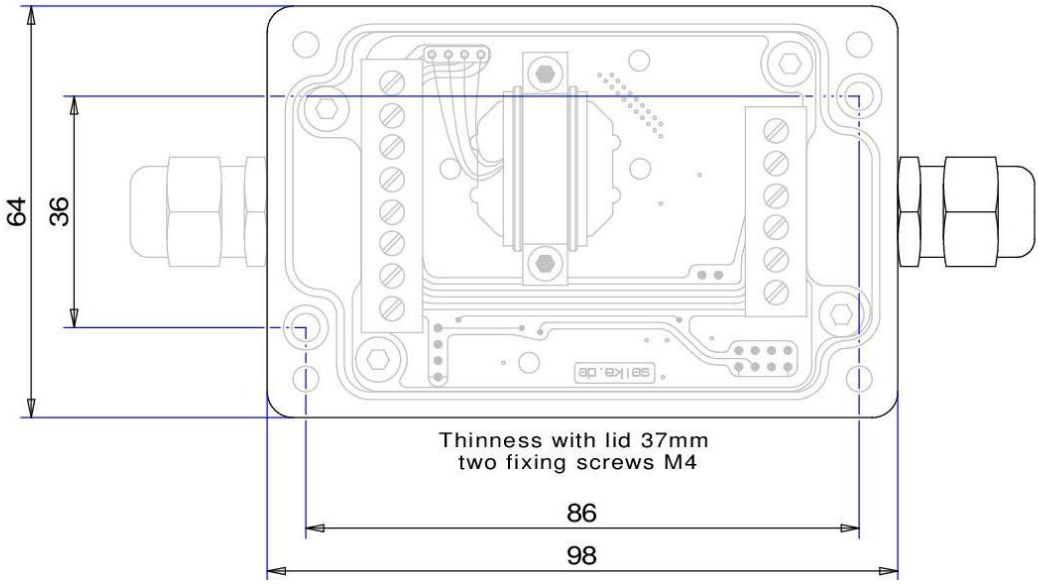
Dimensions (in mm) and connections





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