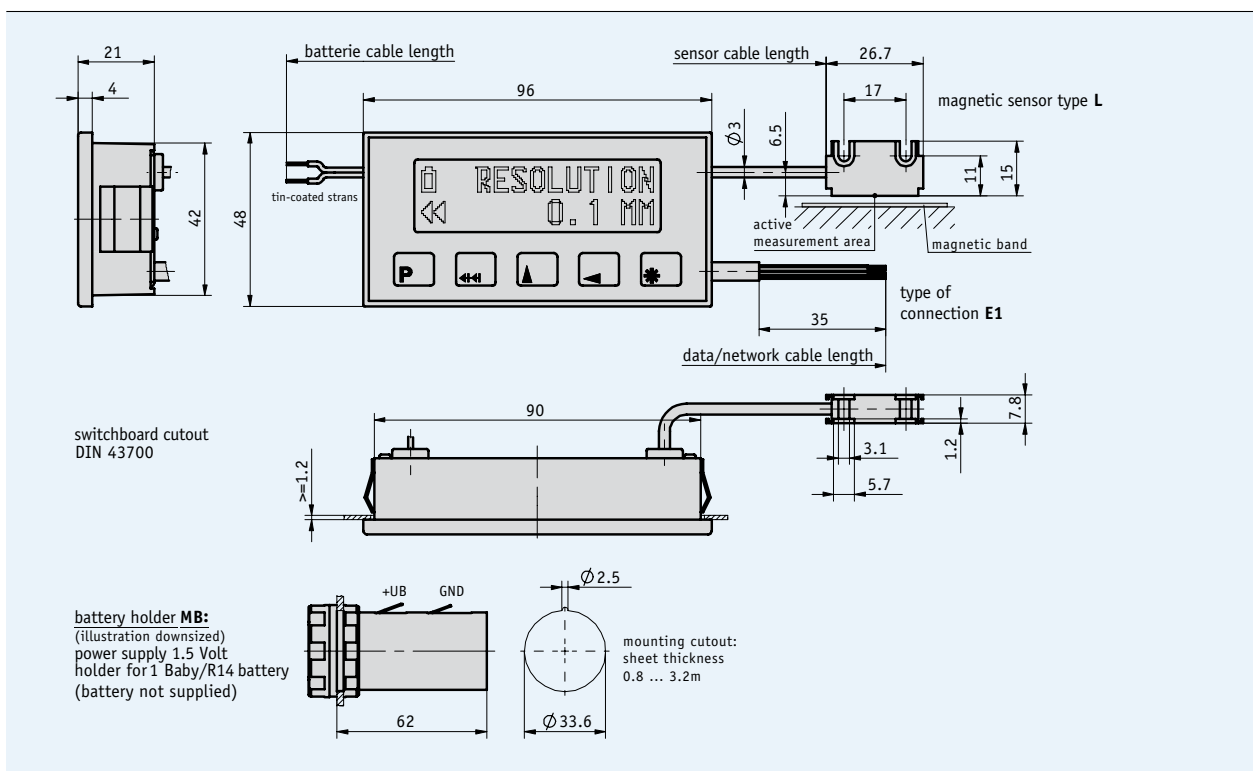


Profile

- Display accuracy max. 10 µm
- Repeat accuracy max. ±0.01 mm
- Freely programmable high-resolution LCD dot matrix display
- Battery-buffered memory
- Option: serial interface RS485



5.2

Mechanical data

Feature	Technical data	Additional information
System accuracy	$\pm(0.1 + 0.01 \times L)$, L in m	magnetic band MB500 at $T_U = 20^\circ\text{C}$
Repeat accuracy	max. ± 0.01 mm	± 1 digit
Magnetic sensor	rectangle with elongated hole	hard-wired
Supply connection	cable led to the outside	
Display/display range	2-line dot matrix	-999 999 ... +999 999
Design	panel-mount housing	
Housing	plastic (transparent)	
Protection category	IP54 front side, IP67 sensor	
Operating temperature	0 ... +70 °C	
Storage temperature	-30 ... +80 °C	
Humidity	max. 95 % rh	condensation permitted
Vibration (50 Hz ... 2000 Hz)	<200 m/s ²	
Shock	<300 m/s ²	
Weight	approx. 70 g	
Sensor travel speed	max. 5 m/s	with reading distance of 0.1 ... 2 mm

Electrical data

Feature	Technical data	Additional information
Operating voltage	24 V DC $\pm 20\%$	
Current consumption	8 mA with 24 V DC active, <0.1 mA with 1.5 V	display switched off DC measurement system active
Interfaces/protocol	RS485 with standard protocol	
Resolution	max. 10 μm	
Interference protection class	3	according to IEC 61000

Pin assignment

■ with common cable for interface and battery


Signal	E1
GND	black
10 ... 24 V DC/8 mA	brown
1.5 V DC	red
Supply backup	
Data GND	orange
Interface RS485	
Data B	yellow
Interface RS485-DÜB	
Data A	green
Interface RS485-DÜA	

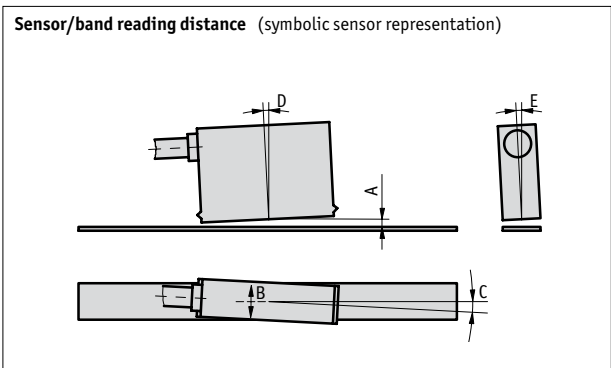
■ with separate cable for interface and battery

Signal	E1	Battery cable
10...24 V DC/8 mA	white	
Data GND	brown	
Data B	yellow	
Data A	green	
GND		black
1.5 V DC		red
24 V DC		
B		
A		
N.C.		

Mounting instruction

A, Sensor/band reading distance	max. 2 mm
B, Lateral offset	max. ± 2 mm
C, Misalignment	$< \pm 3^\circ$
D, Longitudinal tilt	$< \pm 1^\circ$
E, Lateral tilt	$< \pm 3^\circ$

 The connection must not be changed (e.g., different cable, cable length ...)



Order

Order table

Feature	Order data	Specifications	Additional information
Sensor cable length	... A	0.3 ... 2 m in steps of 0.1 m	
Data/mains cable length	... B	0.1 ... 2 m in steps of 0.1 m	
Battery cable length	... C	0.2 ... 2 m in steps of 0.1 m	
Interface/protocol	S3/00	RS485 with standard protocol	
	S3/06	RS485/SIKONETZ-3	
	XX/XX	without	
Battery holder	MB	with	provided in the accessories pack
	OB	without	

Order code

MA501 - EG10 - 4 - L - A - E1 - B - C - L - D - S - SF-82990 - E

Scope of delivery: MA501 with sensor, User information, Allen fastening screws M3 x 14 mm ISO 4762, lock washers M3 DIN 7980, strain relief for sensor cable, distance gage 0.8 mm

Additional information:
 Short Description, Technical Details Page 46 cont.
 Product Overview Page 4 cont.