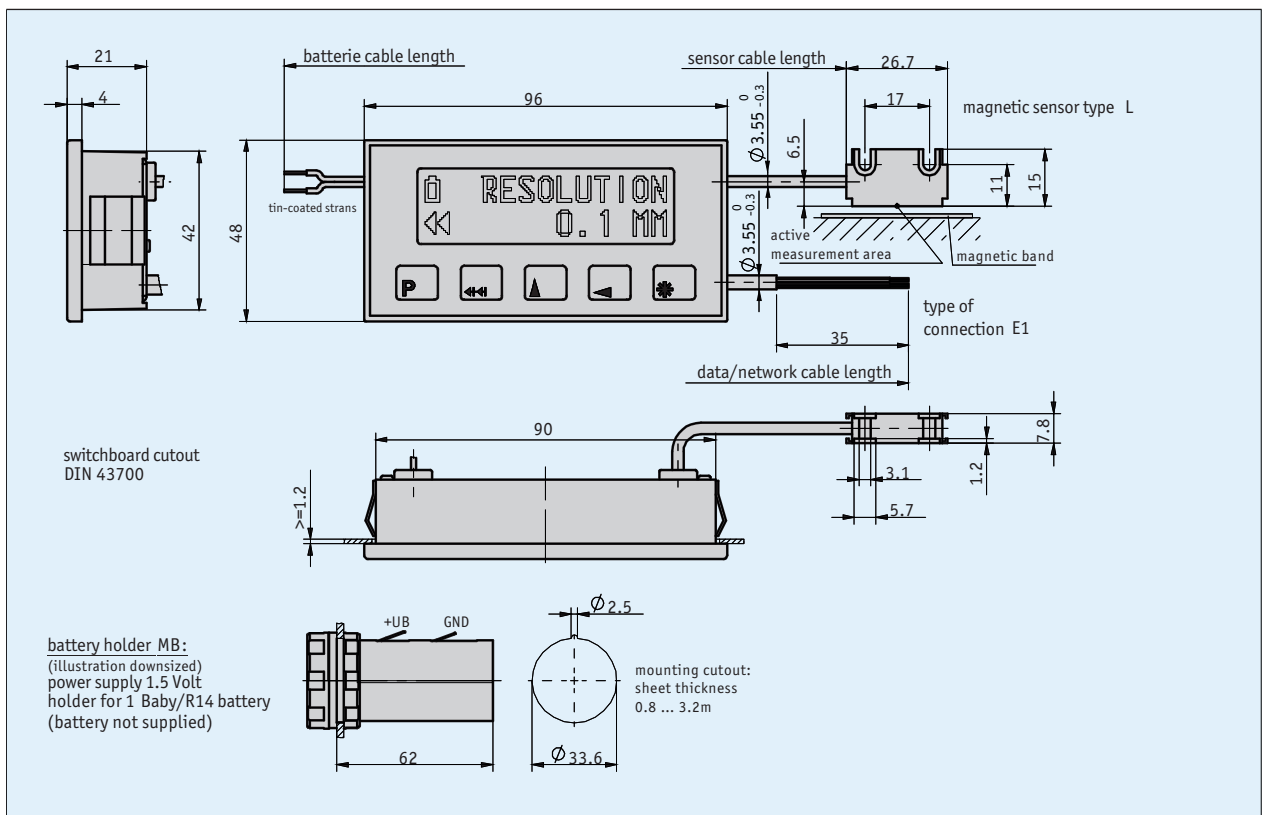
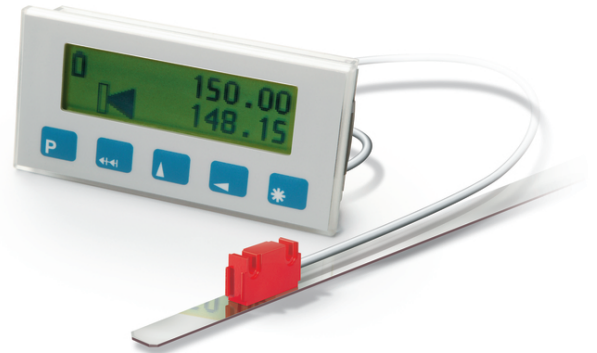


### Profile

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



### Mechanical data

Feature	Technical data	Additional information
Housing design	built-in housing, plastic (transparent)	switchboard cutout 93 <sup>+0.8</sup> x 45 <sup>+0.6</sup> IEC 61554
Sensor/band reading distance	≤2 mm	
Cable sheath	PVC	4-wire ø3.15 <sub>-0.3</sub> mm (data/network)
	PVC	6-wire ø3.55 <sub>-0.3</sub> mm (sensor)
Weight	~0.07 kg	

### Electrical data

Feature	Technical data	Additional information
Operating voltage	24 V DC $\pm 20\%$ (10 ... 30 V)	reverse polarity protected
	1.5 V DC (1.2 ... 1.6 V)	backup
Current consumption	8 mA	active at 24 V DC
	<0.1 mA	at 1.5 V DC active measuring system; display switched off
Display/display range	2-row, DOT matrix	-999999 ... 999999
Status display	two-color backlit LCD display (green/red)	only with SW03 software
Interface	RS485 (LAN interface)	
Type of connection	cable led outward	supply

### System data

Feature	Technical data	Additional information
Resolution	$\leq 10 \mu\text{m}$	
System accuracy	$\pm(0.1 + 0.01 \times L)$ L in m	MB500 magnetic strip at $T_U = 20 \text{ }^\circ\text{C}$
Repeat accuracy	$\pm 1$ increment(s)	
Travel speed	$\leq 5 \text{ m/s}$	at 0.1 ... 2 mm reading distance

### Ambient conditions

Feature	Technical data	Additional information
Ambient temperature	0 ... 70 $^\circ\text{C}$	
Storage temperature	-30 ... 80 $^\circ\text{C}$	
Relative humidity	$\leq 95\%$	condensation inadmissible
EMC	EN 61000-6-2	interference resistance / immission
	EN 61000-6-4	emitted interference / emission
Protection category	IP54 at the front	EN 60529
	IP67 sensor	EN 60529
Shock resistance	$< 300 \text{ m/s}^2$ , 11 ms	EN 60068-2-27
Vibration resistance	200 $\text{m/s}^2$ , 50 Hz ... 2 kHz	EN 60068-2-6

### Pin assignment

#### With common cable for interface and battery


Signal	Color E1
GND	black
10 ... 24 V DC/8 mA	brown
1.5 V DC (supply backup)	red
Data GND (RS485 interface)	orange
Data B (RS485-DUB interface)	yellow
Data A (RS485-DUA interface)	green

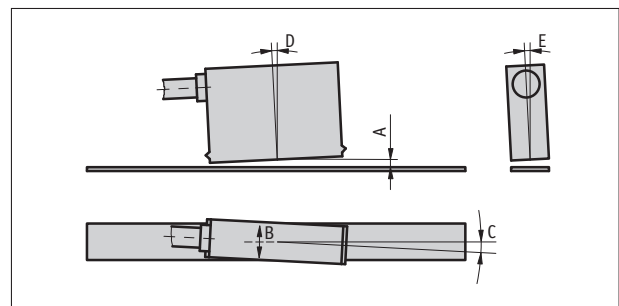
#### With separate cable for interface and battery

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

### Hint for mounting

A, Sensor/tape reading distance	$\leq 2 \text{ mm}$
B, Lateral offset	$\pm 2 \text{ mm}$
C, Alignment error	$\pm 3^\circ$
D, Longitudinal inclination	$\pm 1^\circ$
E, Lateral inclination	$\pm 3^\circ$

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



Symbolic representation

## Order

### Ordering information

One or more system components are required:

Magnetic band MB500/1

[www.siko-global.com](http://www.siko-global.com)

### Ordering table

Feature	Ordering data	Specification	Additional information
Sensor cable length	... <b>A</b>	0.3 ... 2.0 m, in intervals of 0.1 m	
data/network cable length	... <b>B</b>	0.1 ... 2.0 m, in intervals of 0.1 m	
Battery cable length	... <b>C</b>	0.2 ... 2.0 ... m, in intervals of 0.1 m	
Interface/protocol	S3/00 <b>D</b>	RS485 with standard protocol	
	S3/06	RS485/SIKO NETWORK-3	
	XX/XX	without	
Software	S <b>E</b>	Standard software	
	SW03	display backlit in two colors	
Battery holder	MB <b>F</b>	with	In a supplementary pack
	OB	without	

### Order key



*Scope of delivery: MA501, User information, Sensor fastening set, Mounting instructions, Fastening set, distance gage*