

Electrical data

Feature	Technical data	Additional information
Operating voltage	24 V DC $\pm 20\%$, (10 ... 30 V)	reverse polarity protection
	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	$\pm(0.1 + 0.01 \times L)$ mm, L in m at $T_U = 20^\circ\text{C}$	MB500 magnetic strip
Repeat accuracy	± 1 Increment(s)	
Travel speed	≤ 5 m/s	0.1 ... 2 mm reading distance

Ambient conditions

Feature	Technical data	Additional information
Ambient temperature	0 ... 70 °C	
Storage temperature	-30 ... 80 °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 m/s ² , 11 ms	EN 60068-2-27
Vibration resistance	200 m/s ² , 50 ... 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-DÜB interface)	yellow
Data A (RS485-DÜA interface)	green

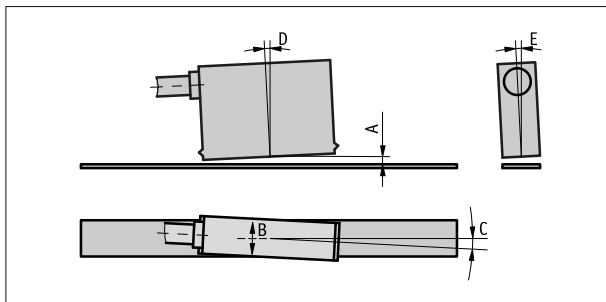
■ With separate cable for interface and battery

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	≤2 mm
B, Lateral offset	±2 mm
C, Alignment error	±3°
D, Longitudinal inclination	±1°
E, Lateral inclination	±3°

 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 tape MB500/1

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■ Ordering table

Feature	Ordering data	Spezifikation	Additional information
sensor cable length	A ...	0.3 ... 2.0 m, in intervals of 0.1 m	
data/network cable length	B ...	0.1 ... 2.0 m, in intervals of 0.1 m	
battery cable length	C ...	0.2 ... 2.0 m, in intervals of 0.1 m	
interface/protocol	D S3/00 S3/06 XX/XX	RS485 with standard protocol RS485/SIKO NETWORK-3 without	
Software	E S SW03	Standard software display backlit in two colors	
battery holder	F MB OB	with without	included in the delivery

■ Order key

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



Scope of delivery:

MA501, Fastening set, Installation Instructions, Distance gage, User information, Sensor fastening set