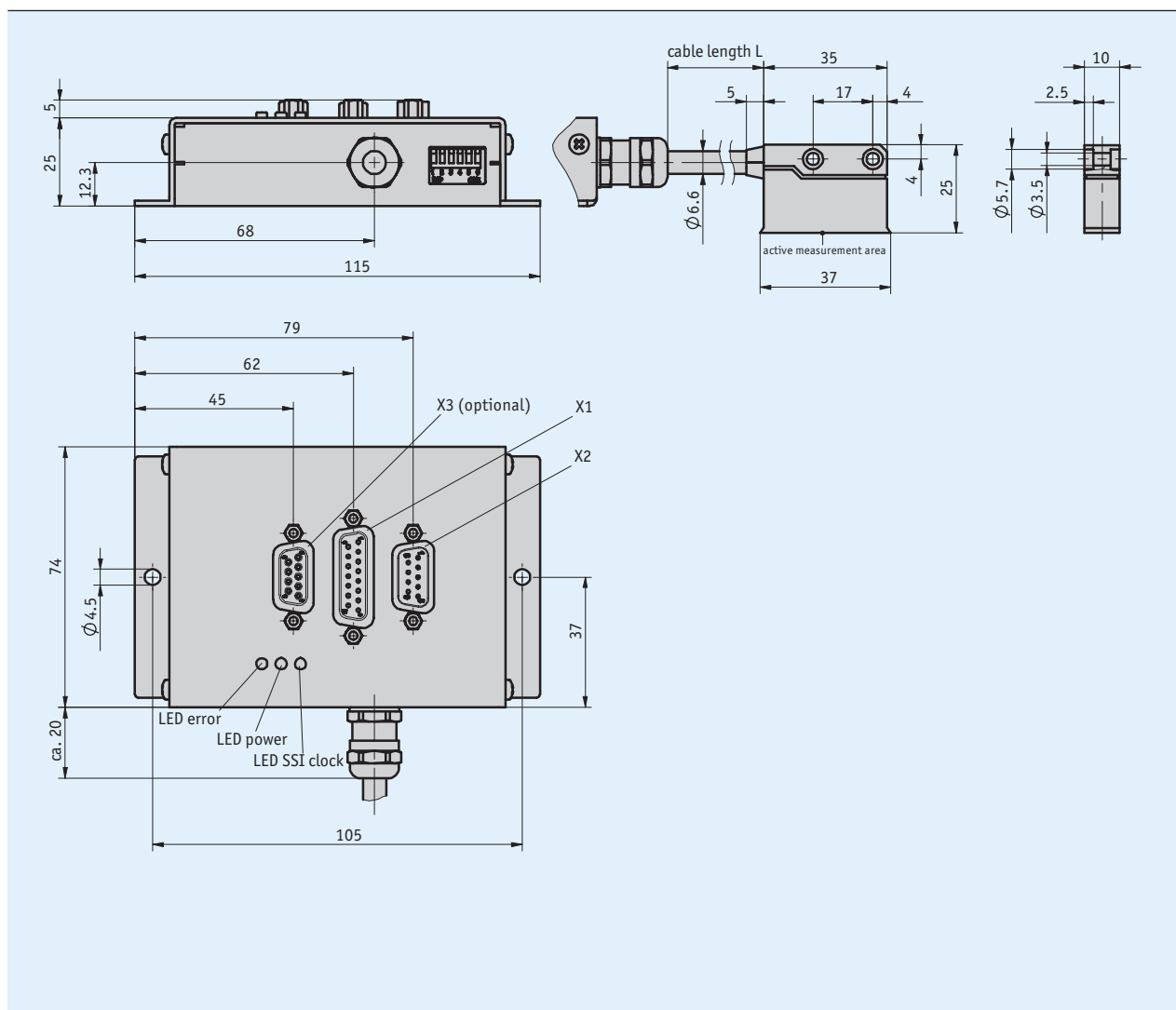
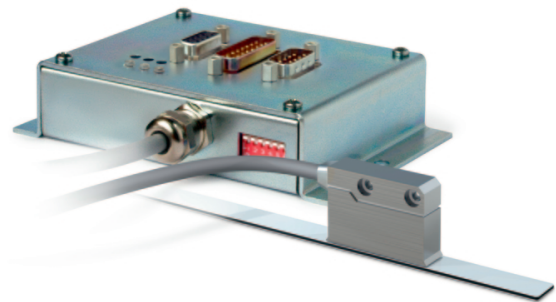


### Profile

- Max. resolution 0.2  $\mu\text{m}$  (LD)
- Repeat accuracy  $\pm 5 \mu\text{m}$
- SSI or RS485 interface
- Scale MBA110
- Reading distance  $\leq 0.4 \text{ mm}$
- Compact, absolutely measuring unit with hard-wired sensor
- Maintenance-free backup battery
- Option: digital LD interface
- Option: analog 1  $V_{SS}$  interface (period length 1 mm)



### Mechanical data

Feature	Technical data	Additional information
Housing	steel sheet	electrogalvanized
	zinc die-cast	sensor
Cable length	≤6 m	
Cable sheath	PVC suitable for drag-chain use	≥1.000.000 with bending radius = 8x cable diameter and 20 °C

### Travel speed

Resolution [μm]	Travel speed Vmax [m/s]					
	0.5	0.80	0.32	0.15	0.06	0.02
1	4.00	1.60	0.72	0.32	0.12	
	8.00	8.00	7.20	3.20	1.25	
	8.00	8.00	8.00	4.00	1.60	
Pulse interval [μs]	0.2	0.5	1.1	2.5	6.3	
Counting frequency [kHz]	1250.00	500.00	230.00	100.00	40.00	



*L'électronique interne d'évaluation est capable de générer des impulsions de comptage dont la longueur est limitée par l'intervalle d'impulsions. L'électronique en aval doit être réglée en conséquence. Le cas échéant, sélectionner d'abord l'intervalle d'i*

### Electrical data

Feature	Technical data	Additional information
Operating voltage	24 V DC ±20 %	reverse polarity protected
Current consumption	<150 mA	
Battery service life	10 year(s)	at T <sub>U</sub> = 20 °C, according to manufacturer specification

### System data

Feature	Technical data	Additional information
Resolution	1 μm fix	SSI
	≤0.2 μm	LD
	1 mm period length	1 V <sub>SS</sub>
System accuracy	±(0.025 + 0.01 x L) mm, L in m	at T <sub>U</sub> = 20 °C (L = length per meter or part thereof)
Repeat accuracy	±5 μm	
Measuring range	4000 mm	others on request
Travel speed	≤0.5 m/s	SSI absolute value
	≤8 m/s	

### Ambient conditions

Feature	Technical data	Additional information
Ambient temperature	0 ... 60 °C	
Storage temperature	-20 ... 70 °C	
Relative humidity	≤95 %	translation module, condensation inadmissible
	≤100 %	sensor, condensation admissible
EMC	EN 61000-6-2	interference resistance / immission
	EN 61000-6-4	emitted interference / emission
Protection category	IP20	EN 60529 (translation module)
	IP67	EN 60529 (sensor)

## Pin assignment

### ■ Connector X1

SSI	SSI + 2xLD	PIN
nc	A	1
nc	/A	2
+24 V DC	+24 V DC	3
0 V	0 V	4
nc	nc	5
nc	nc	6
SSI_DATA	SSI_DATA	7
/SSI_DATA	/SSI_DATA	8
nc	B	9
nc	/B	10
nc	nc	11
SSI_GND	SSI_GND	12
nc	nc	13
SSI_CLK	SSI_CLK	14
/SSI_CLK	/SSI_CLK	15

### ■ Connector X3

1 V <sub>SS</sub>	PIN
sin	1
/sin	2
cos	3
nc	4
nc	5
nc	6
ANA_GND	7
/cos	8
nc	9

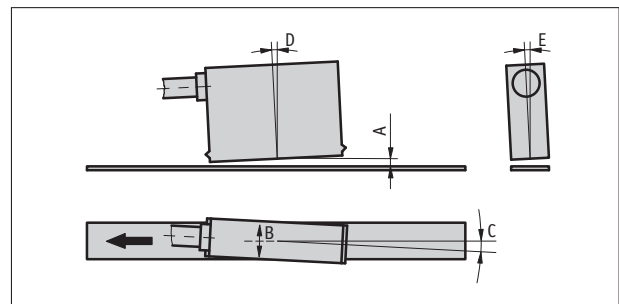
### ■ Connector X2

RS485	RS485 + LD	PIN
nc	A	1
nc	B	2
nc	nc	3
+24 V DC	+24 V DC	4
0 V	0 V	5
nc	/A	6
nc	/B	7
DÜA	DÜA	8
DÜB	DÜB	9

## Hint for mounting

When installing the sensor and magnetic tape, always ensure that both system components are correctly aligned. When mounting, the arrow mark on the tape must point to the same direction as the cable outlet.

A, Sensor/tape reading distance	≤0.4 mm
B, Lateral offset	±0.5 mm
C, Alignment error	±1°
D, Longitudinal inclination	±1°
E, Lateral inclination	±2°



Symbolic representation

**Order**

■ **Ordering information**

One or more system components are required:

Magnetic band MBA110/1

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

■ **Ordering table**

Feature	Ordering data	Specification	Additional information
Cable length	... A	01.0 ... 06.0 m, in intervals of 1 m	
Digital interface	LD	Line Driver (RS422)	
	2xLD	2x Line Driver (RS422)	
	0	without	
Digital resolution	... C	0.2, 1, 10, 12.5 in $\mu\text{m}$	
Pulse interval	... D	0.2, 0.5, 1.1, 2.5, 6.3 in $\mu\text{s}$	
Analog interface	1V <sub>SS</sub>	1 V <sub>SS</sub>	
	0	without	

■ **Order key**



**Scope of delivery:** ASA110H, Mounting instructions, Sensor fastening set

**Accessories:**

Mating Connector Overview

Mating connector, X3, 9-pole, pin+shell

Mating connector, X2, 9-pole, socket+shell

Mating connector, X1, 15-pole, socket+shell

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

Order key 71364+71365

Order key 71366+71365

Order key 73947+73946