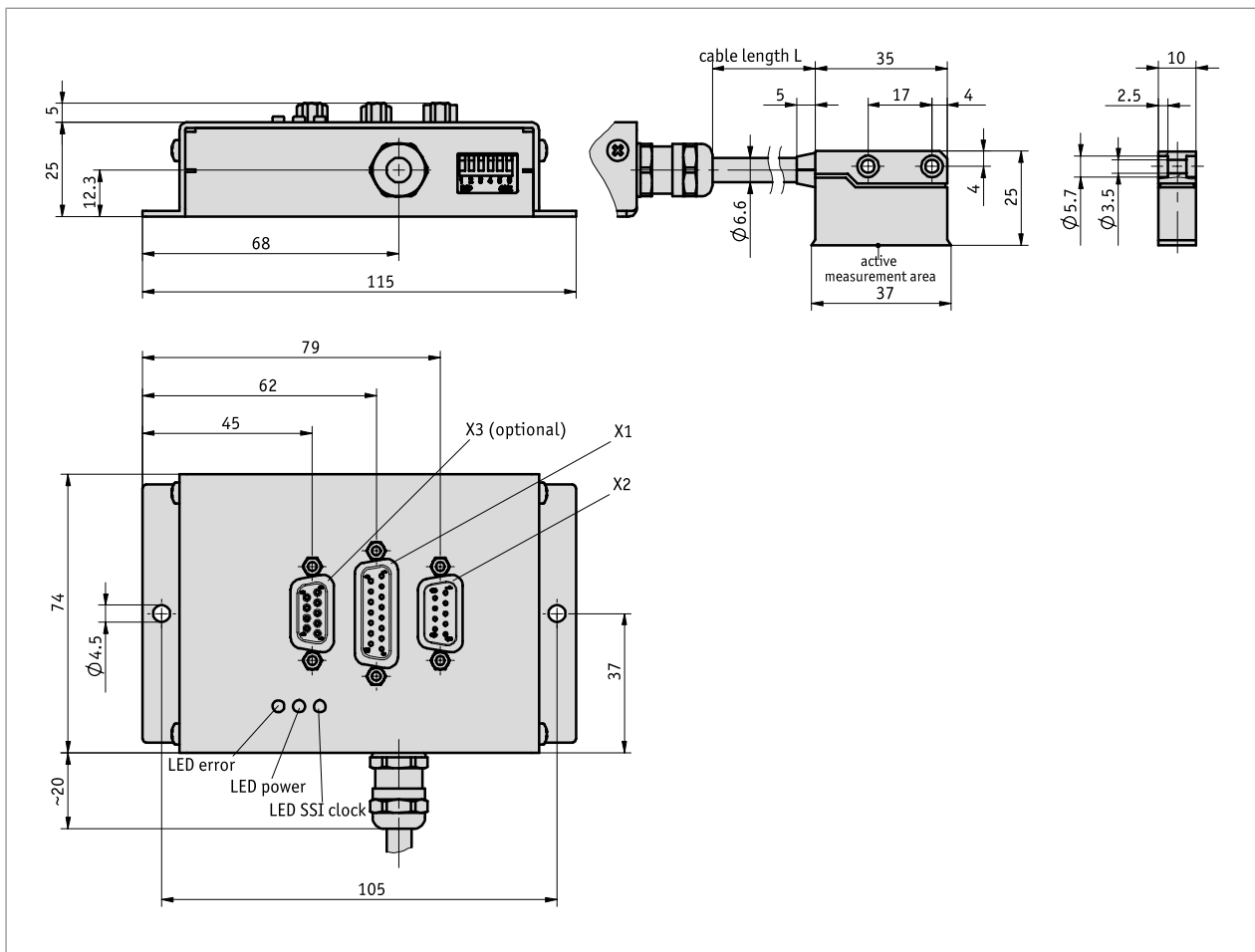
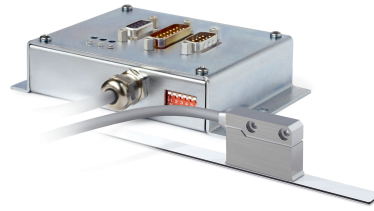


### Profile

- Repeat accuracy  $\pm 0.005$  mm
- SSI or RS485 interface
- Scale MB500/1
- Reading distance  $\leq 2$  mm
- Compact, absolutely measuring unit with hard-wired sensor
- Max. measuring length  $\pm 655$  m (RS485)
- Maintenance-free backup battery
- Option: digital LD interface
- Option: analog  $1 V_{pp}$  or  $2.2 V_{pp}$  interfaces (5 mm period length)



### Mechanical data

Feature	Technical data	Additional information
Housing	steel sheet zinc die-cast	electrogalvanized sensor
Cable length	$\leq 6$ m	
Cable sheath	PVC suitable for drag-chain use	$\geq 1.000.000$ with bending radius = $8 \times$ cable diameter and $20^\circ\text{C}$

### Travel speed

	Travel speed Vmax [m/s]					
Resolution [μm]	1	4.00	1.60	0.72	0.32	0.12
	5	8.00	8.00	3.60	1.60	0.62
	10	8.00	8.00	7.20	3.20	1.25
	12.5	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	



The internal translation module can generate fast counting pulses, the lengths of which are limited by the pulse interval. The downstream electronics must be adjusted accordingly. Select the pulse interval in advance, if necessary.

### Electrical data

Feature	Technical data	Additional information
Operating voltage	24 V DC ±20 %	reverse polarity protection
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	5, 10 μm	SSI, selectable via DIP switch
	≤1 μm	LD
	5 mm, period length	≤ 1 V <sub>SS</sub>
System accuracy	±(0.025 + 0.01 × L) mm, L in m at T <sub>U</sub> = 20° C	L = length per meter or part thereof
Repeat accuracy	±1 Increment(s)	(5 μm / 10 μm)
Measuring range	±655000 mm	
Travel speed	≤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

#### ■ X1 plug

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

#### ■ X3 plug

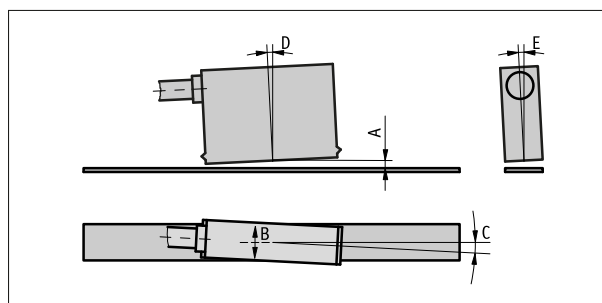
$\leq 1 V_{SS}$	PIN
sin	1
/sin	2
cos	3
nc	4
nc	5
nc	6
ANA_GND	7
/cos	8
nc	9

#### ■ X2 plug

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

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



Symbolic representation

### Order

#### ■ Ordering information

One or more system components are required:

Magnetic tape MB500/1

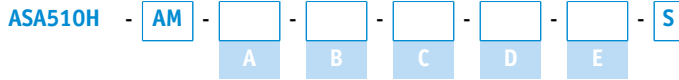
[www.siko-global.com](http://www.siko-global.com)


#### ■ Ordering table

Feature	Ordering data	Spezifikation	Additional information
Cable length	A ...	01.0 ... 06.0 m, in intervals of 1 m	
digital interface	B LD 0	Line Driver (RS422) without	
digital resolution	C ...	1, 10, 12.5, 5 $\mu$ m	


Feature	Ordering data	Spezifikation	Additional information						
Pulse interval	D ...	0.2, 0.5, 1.1, 2.5, 6.3 in $\mu\text{s}$							
Analog interface	E	<table border="1"> <tr> <td>1V<sub>SS</sub></td> <td>1 V<sub>PP</sub></td> </tr> <tr> <td>2.2V<sub>SS</sub></td> <td>2.2 V<sub>PP</sub></td> </tr> <tr> <td>0</td> <td>without</td> </tr> </table>	1V <sub>SS</sub>	1 V <sub>PP</sub>	2.2V <sub>SS</sub>	2.2 V <sub>PP</sub>	0	without	
1V <sub>SS</sub>	1 V <sub>PP</sub>								
2.2V <sub>SS</sub>	2.2 V <sub>PP</sub>								
0	without								

■ Order key





**Scope of delivery:**  
ASA510H, Grounding material, User information, Sensor fastening set



**Accessories you can find:**  
Overview, Mating connector [www.siko-global.com](http://www.siko-global.com)

Subject to technical alterations and errors | 2024/04/29 | 11:39