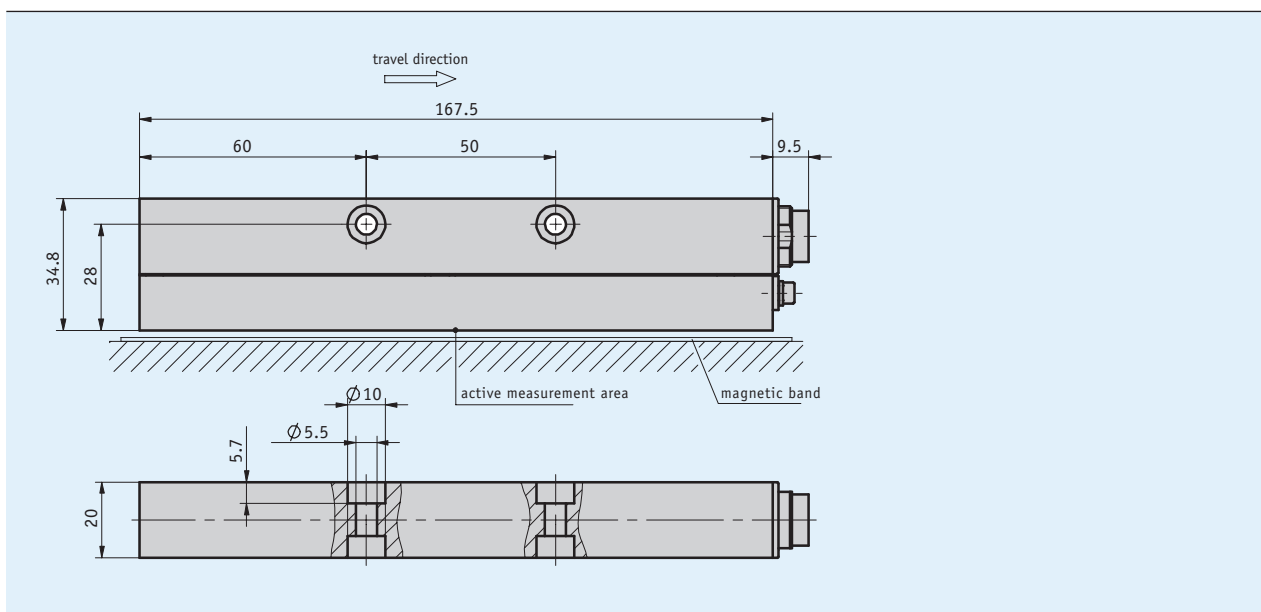


Profile

- Max. resolution 10 μm
- Repeat accuracy 0.01 mm
- SSI, RS485 output circuits
- Reading distance ≤ 2 mm
- Max. measuring length 20480 mm



Mechanical data

Feature	Technical data	Additional information
Housing	aluminum natural chromated	
Sensor/band reading distance	≤ 2 mm	

Electrical data

Feature	Technical data	Additional information
Operating voltage	24 V DC $\pm 20\%$	reverse polarity protected
Current consumption	<100 mA	
Power input	<2 VA	
SSI clock speed input	<500 kHz	depending on the cable length
Output signals	sine, cosine	
Output voltage	1 V _{pp} (± 100 mV)	
Period length of sin/cos output	5 mm	
Offset voltage	2.5 V (± 100 mV)	
Interface	SSI (RS422) RS485, service interface	
Cycle time	<2 ms	
Type of connection	plug connector	12-pole, 1x pin

System data

Feature	Technical data	Additional information
Resolution	10 μm	
System accuracy	$\pm(0.1 + 0.03 \times L)$ mm, L in m	at $T_U = 20^\circ\text{C}$
Repeat accuracy	± 0.01 mm	at $T_U = 20^\circ\text{C}$
Measuring range	≤ 20480 mm	
Travel speed	≤ 5 m/s	

Ambient conditions

Feature	Technical data	Additional information
Ambient temperature	-20 ... 60 $^\circ\text{C}$	
Storage temperature	-20 ... 70 $^\circ\text{C}$	
Relative humidity	100 %	condensation admissible
EMC	EN 61000-6-2 EN 61000-6-4	interference resistance / immission emitted interference / emission
Protection category	IP65	EN 60529, mating connector mounted
Shock resistance	500 m/s^2 , 11 ms	EN 60068-2-27
Vibration resistance	100 m/s^2 , 5 ... 150 Hz	EN 60068-2-6

Pin assignment

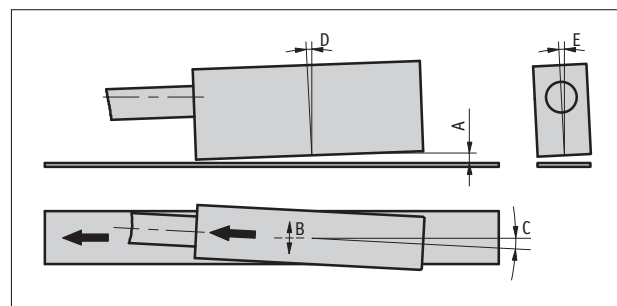
■ SSI (RS422)

Signal	PIN
SSI data	A
SSI data+	B
SSI clock	C
SSI clock+	D
+24 V DC	E
Sine	F
RS485 DÜA	G
RS485 DÜB	H
GND	J
nc	K
Zeroing input	L
Cosine	M

Hint for mounting

When mounting sensor and magnetic tape, please be careful to align both system components correctly. The arrow marks on the tape and sensor must point in the same direction when mounting the components.

A, Sensor/tape reading distance	≤ 2 mm
B, Lateral offset	± 1 mm
C, Alignment error	$\pm 1^\circ$
D, Longitudinal tilt	$\pm 0.5^\circ$
E, Lateral tilt	$\pm 3^\circ$



symbolic sensor representation

Order

■ Ordering information

one or more system components are required:

Magnetic band MBA511

www.siko-global.com

■ Order key

MSA511 - SSI

Scope of delivery: MSA511, User information

Accessories:

Cable extension KV1250

www.siko-global.com

Mating Connector Overview

www.siko-global.com

Mating connector, 12-pole, socket

Order key 76572

Mating connector, 12-pole, angle socket

Order key 79666