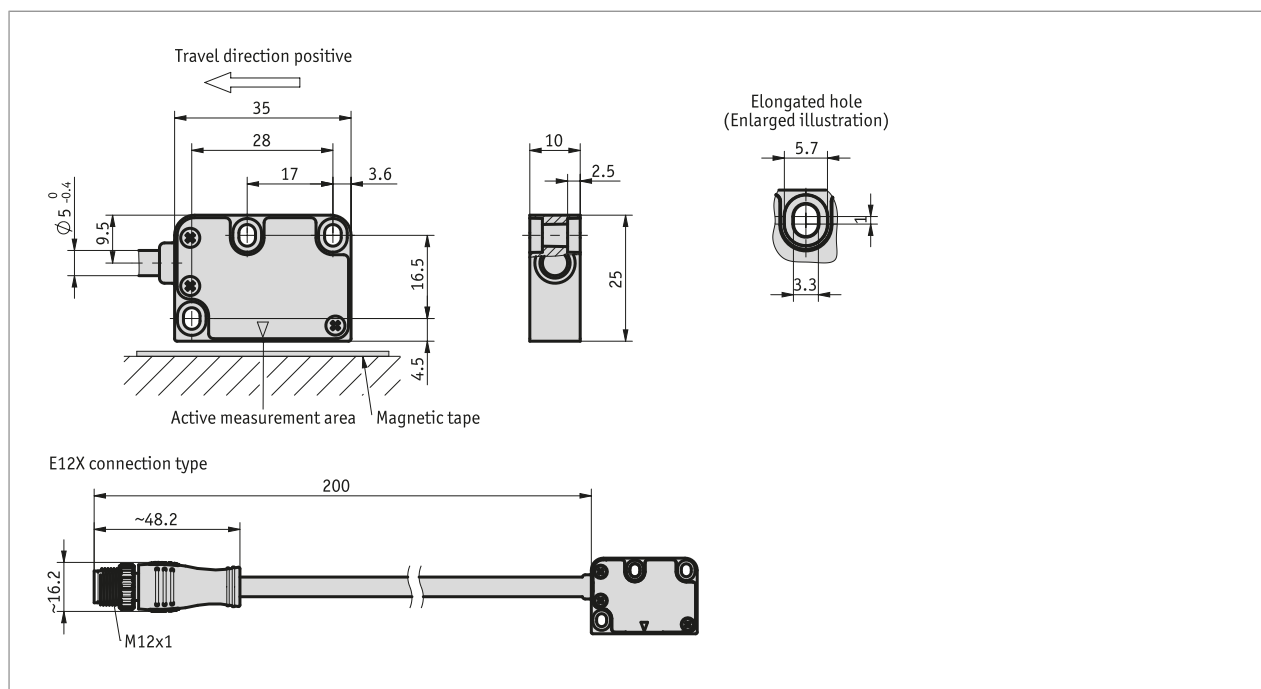
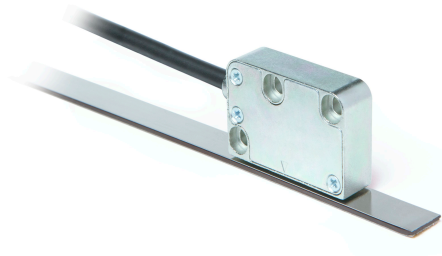


Profile

CANopen

- Max. resolution 12.5 μm
- Repeat accuracy $\pm 40 \mu\text{m}$
- Works with MB320/1 magnetic tape, MRI01 or MR320 magnetic ring, MBR320 magnetic tape ring
- Reading distance $\leq 2 \text{ mm}$
- Easy connection to existing bus system
- Price advantage compared to absolute system
- Cable length 0.2 m with 5-pole connection



Mechanical data

Feature	Technical data	Additional information
Housing	zinc die-cast	ZM design
Sensor/band reading distance	0.1 ... 2 mm	
Sensor/ring reading distance	0.1 ... 2 mm	
Cable sheath	PUR, suitable for drag-chain use	5-core, $\varnothing 5.2 \pm 0.3 \text{ mm}$
Cable bending radius	5x cable diameter	static
	7.5x cable diameter	dynamic

Electrical data

Feature	Technical data	Additional information
Operating voltage	5 ... 30 V DC	reverse polarity protection
Current consumption	<25 mA at 24 V DC	unloaded
	<75 mA	loaded
Interface	CANopen	spec. 2.0A, DS 301, DS 406, ISO 11898
Address	1 ... 127	Node ID, via SDO
Baud rate	50 kbit/s	
	100 kbit/s	
	125 kbit/s	
	250 kbit/s	
	500 kbit/s	
	1 Mbit/s	
Cycle time	1.5 ms	typical
Starting time	<150 ms	
Type of connection	M12 plug connector (A-coded)	5-pole, 1x pin

System data

Feature	Technical data	Additional information
Resolution	0.0125 mm	
	0.025 mm	
	0.04 mm	
	0.05 mm	
	0.1 mm	
	0.2 mm	
Linearity deviation	±30 µm at T _U = 20° C	1 mm reading distance
Repeat accuracy	±1 Increment(s)	
Measuring range	±2147783647	4 bytes position value range
Travel speed	≤4 m/s	

Ambient conditions

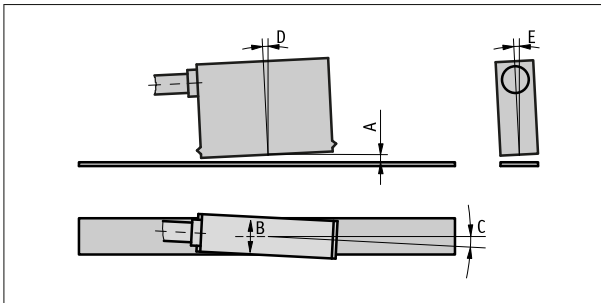
Feature	Technical data	Additional information
Ambient temperature	-25 ... 80 °C	
Storage temperature	-30 ... 80 °C	
Relative humidity	100 %	condensation admissible
EMC	EN 61000-6-2	interference resistance / immission
	EN 61000-6-3	emitted interference / emission
	EN 61000-6-4	emitted interference / emission
Protection category	IP67	EN 60529
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

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 length of the cable between the sensor and connector cannot be subsequently increased or decreased.



Symbolic representation

pin assignment

Signal	PIN
CAN_GND*	1
+UB	2
GND*	3
CAN_H	4
CAN_L	5

* CAN_GND internally connected to GND

Order

■ Ordering information

One or more system components are required:

Magnetic tape MB320/1	www.siko-global.com
Magnetic ring MR320	www.siko-global.com
Magnetic ring MRI01	www.siko-global.com
Magnetic band ring MBR320	www.siko-global.com

■ Ordering table

Feature	Ordering data	Specification	Additional information
Linear resolution/radial scaling factor	A 0.0125/64		
	0.025/32		
	0.04/20		
	0.05/16		
	0.1/8		
	0.2/4		
Bus termination	B OBA	without resistance	
	MBA	with resistance 120 Ω	

■ Order key

MSK320CAN

-

E12X

-

00,2

-

CAN

-

A

-

S

-

B



Scope of delivery:

MSK320CAN, Quick Start Guide