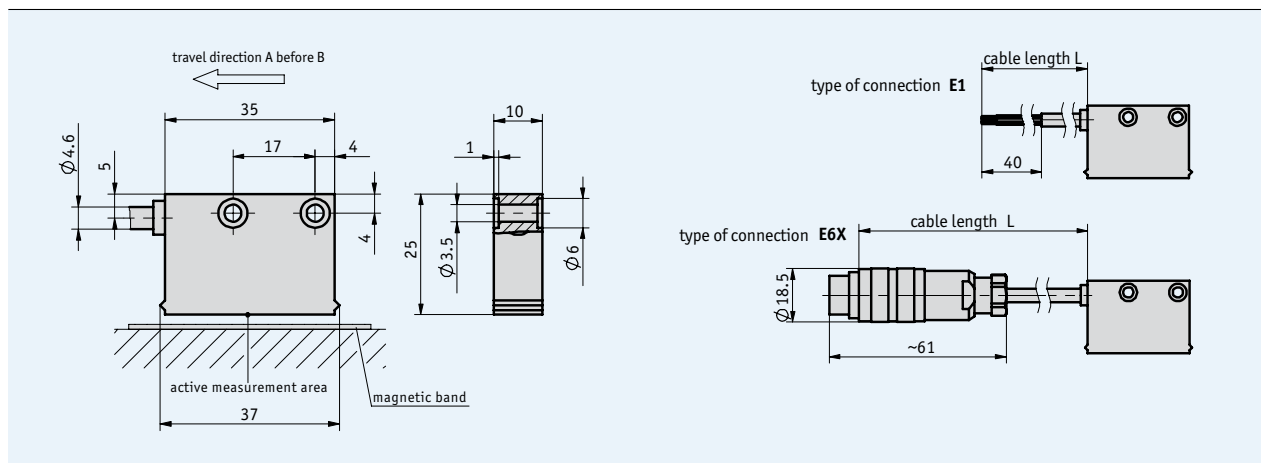


Profile

- Linear resolution 0.25 mm
- Repeat accuracy ± 1 increment, max. ± 0.25 mm
- Operating voltage 5 or 24 V
- Max. sensor/band reading distance 10 mm



5.3

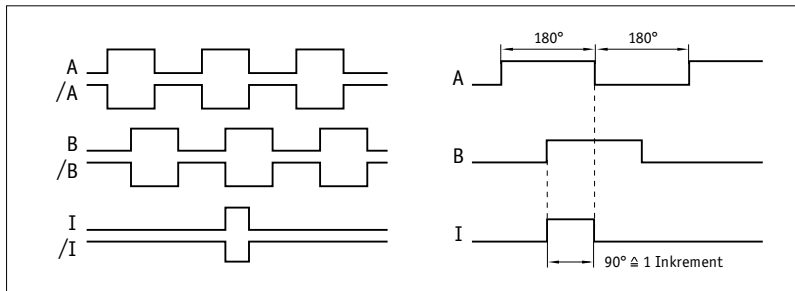
Mechanical data

Feature	Technical data	Additional information
Scale embodiment	MB2000	
System accuracy	$\pm (1 + 0.03 \times L)$ mm	L = magnetic band length in m (at 20 °C)
Repeat accuracy	± 1 increment	max. ± 0.25 mm
Sensor/band reading distance	max. 10 mm	
Travel speed	<10 m/s	
Housing	plastic, light-green	
Sensor cable	PUR, oil-resistant	drag chain-compatible
Operating temperature	-10 ... +70 °C	
Storage temperature	-30 ... +80 °C	
Humidity	100 % rh	condensation permitted
Protection category	IP67	according to DIN 40050 (Housing)
Vibration resistance	10 g/50 Hz	
Max. measuring length	infinite	

Electrical data

Feature	Technical data	Additional information
Operating voltage	24 V DC \pm 20 % 5 V DC \pm 5 %	reverse-polarity protection on UB no reverse-polarity protection on UB
Current consumption	<50 mA (PP), <25 mA (LD)	without load
Type of connection	flying leads round connector	
Output circuit	PP LD (RS422)	
Output signals	A, B, option: /A, /B, I, /I	90° phase-shifted
Length of reference signal	1 increment	
Resolution	0.25, 1 mm	
Interference protection class	3	according to IEC 801
Real-time requirement	real-time signal processing	
Signal level high	UB – 2.5 V PP	LD according to RS422 specific
Signal level low	<0.8 V PP	LD according to RS422 specific

Signal forms



! The logical condition of signals A and B is not defined in reference to the index signal I or the reference signal R. It can deviate from the signal form.

Pin assignment

non-inverted

Signal	E1	E6X
A	red	3
B	orange	4
+UB	brown	2
GND	black	1
N.C.		5,6,7

inverted

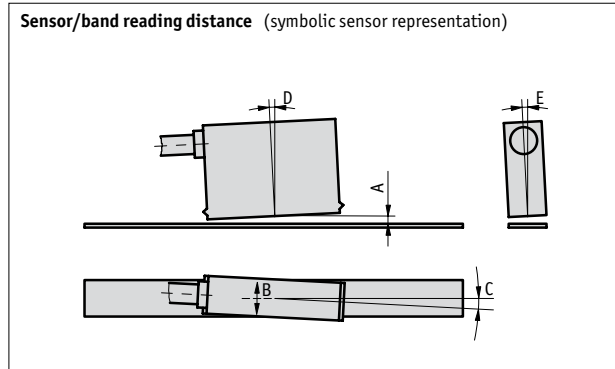
Signal	E1	E6X
A	red	1
B	orange	2
+UB	brown	4
GND	black	5
A/	yellow	6
B/	green	7
N.C.		3

inverted with reference signal

Signal	E1	E6X
A	red	1
B	orange	2
I	blue	3
+UB	brown	4
GND	black	5
A/	yellow	6
B/	green	7
I/	violet	8

Mounting instruction

A , Sensor/band reading distance	max. 10 mm
B , Lateral offset	max. ±2 mm (10 mm band) max. ±5 mm (20 mm band)
C , Misalignment	<±3°
D , Longitudinal tilt	<±3°
E , Lateral tilt	<±3°



Order

Order table

Feature	Order data	Specifications	Additional information
Operating voltage	4	24 V DC ±20 %	reverse-polarity protection
	5	5 V DC ±5 %	no reverse-polarity protection
Type of connection	E1	flying leads, 2 m cable	
	E6X	round connector without mating connectors	
		cable extensions on request	
Cable length L	...	1 ... 20 m, in steps of 1 m	
		others on request	
Output circuit	PP	push-pull	only with operating voltage 4
	LD	line driver	
Output signal	NI	non-inverted	
	I	inverted	
Reference signal	0	without	
	I	index periodic	only with output signal I
Resolution	...	0.25, 1	

Order code

MSK2000 - - - - - - -

A B C D E F G

Scope of delivery: MSK2000, User information, Allen fastening screws M3 x 14 mm ISO 4762, lock washers M3 DIN 7980, strain relief for sensor cable

Additional information:

Short Description, Technical Details
Product Overview

Page 118 cont.
Page 4 cont.