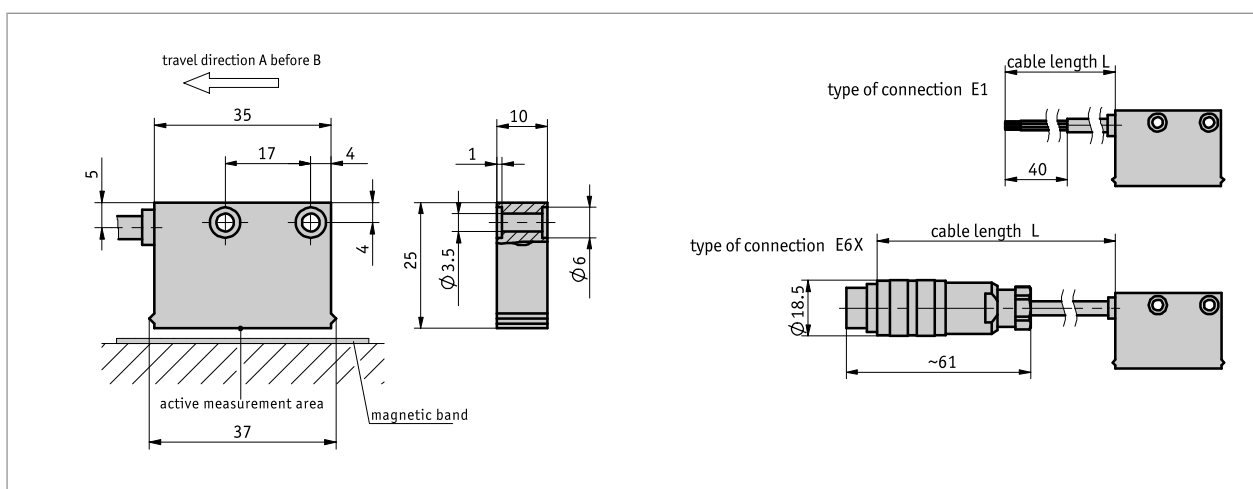
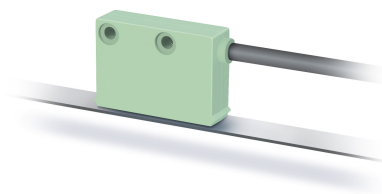


Profile

- Linear resolution 0.25 mm
- Repeat accuracy ± 1 increment
- Operating voltage 5 or 24 V
- Works with magnetic tape MB2000
- Reading distance ≤ 10 mm



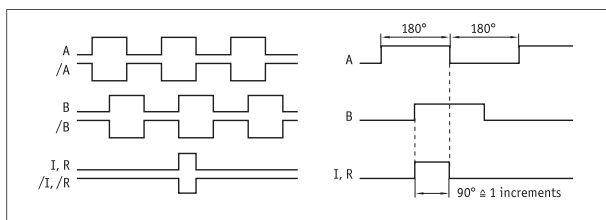
Mechanical data

| Feature | Technical data | Additional information |
|------------------------------|----------------------------------|--|
| Housing | light green plastic | |
| Sensor/band reading distance | 1 ... 10 mm | |
| Cable sheath | PUR, suitable for drag-chain use | 4-core $\varnothing 4.4_{-0.4}$ mm; 6, 8-core $\varnothing 5.0_{-0.4}$ mm |
| Cable bending radius | 5x cable diameter | static |
| | 7.5x cable diameter | dynamic |
| Service life of cable | >5 Million cycles | Under the following test conditions: travel 4.5 m travel speed 3 m/s acceleration 5 m/s ² ambient temperature 20 °C ± 5 °C. |

Electrical data

| Feature | Technical data | Additional information |
|---------------------------------|----------------------------------|--------------------------------|
| Operating voltage | 10 ... 30 V DC | reverse polarity protection |
| | 5 V DC $\pm 5\%$ | no reverse polarity protection |
| Current consumption | <50 mA | PP, unloaded |
| | <25 mA | LD |
| Output circuit | PP, LD (RS422) | |
| Output signals | A, /A, B, /B, I, /I | 90° off-phase |
| Output signal level high | UB - 2.5 V | PP |
| | RS422 specific | LD |
| Output signal level low | <0.8 V | PP |
| | RS422 specific | LD |
| Latency | 1.5 μ s | |
| Pulse width of reference signal | 1 Increment(s) | |
| Real-time requirement | speed-proportional signal output | |
| Type of connection | open cable end | |
| | plug connector | 7/8-pole |

■ Signal patterns



! 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.

System data

| Feature | Technical data | Additional information |
|-----------------|--|------------------------|
| Resolution | 0.25, 1 mm | |
| System accuracy | $\pm(1 + 0.03 \times L)$ mm, L in m at $T_U = 20^\circ \text{C}$ | |
| Repeat accuracy | ± 1 Increment(s) | |
| Measuring range | ∞ | |
| Travel speed | ≤ 25 m/s | |

Ambient conditions

| Feature | Technical data | Additional information |
|----------------------|--------------------------------------|-------------------------------------|
| Ambient temperature | -10 ... 70 °C | |
| Storage temperature | -30 ... 80 °C | |
| Relative humidity | 100 % | condensation admissible |
| EMC | EN 61000-6-2 | interference resistance / immission |
| | 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 |

pin assignment

■ not inverted

| Signal | E1 | E6X |
|--------|--------|-----|
| GND | black | 1 |
| +UB | brown | 2 |
| A | red | 3 |
| B | orange | 4 |
| nc | | 5 |
| nc | | 6 |
| nc | | 7 |

■ inverted

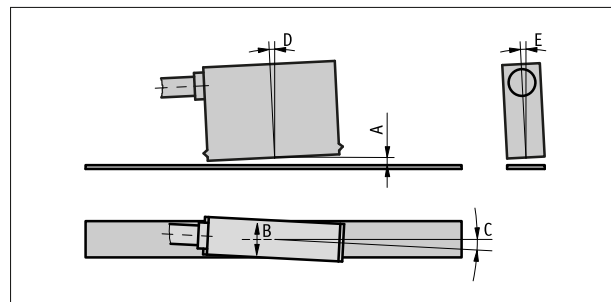
| Signal | E1 | E6X |
|--------|--------|-----|
| A | red | 1 |
| B | orange | 2 |
| nc | | 3 |
| +UB | brown | 4 |
| GND | black | 5 |
| /A | yellow | 6 |
| /B | green | 7 |

■ 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 |

Hint for mounting

| | |
|---------------------------------|---------------------------------------|
| A, Sensor/tape reading distance | ≤10 mm |
| B, Lateral offset | ±2 mm (10 mm tape) ±5 mm (20 mm tape) |
| C, Alignment error | ±3° |
| D, Longitudinal inclination | ±3° |
| E, Lateral inclination | ±3° |



Symbolic representation

Order

■ Ordering information

One or more system components are required:

Magnetic tape MB2000

www.siko-global.com

■ Ordering table

| Feature | Ordering data | Spezifikation | Additional information |
|--------------------|---------------|---|--|
| Operating voltage | A 4 5 | 24 V DC 5 V DC | A voltage drop is to be expected with increasing cable length. This must be taken into account in the electrical design. |
| Type of connection | B E1 E6X | open cable ends bullet connector without mating connector extension cables on request | |
| Cable length | C ... | 01.0 ... 20 m, in intervals of 1 m others on request | |
| Output circuit | D PP LD | push-pull Line Driver | only with operating voltage 4 |
| output signal | E NI I | not inverted inverted | only with output circuit PP |
| reference signal | F 0 | without | |

Magnetic sensor MSK2000

Compact sensor, incremental, digital interface, resolution 0.25 mm

| Feature | Ordering data | Spezifikation | Additional information |
|------------|---------------|----------------|------------------------|
| | I | periodic index | |
| Resolution | G ... | 0.25, 1 in mm | |

■ Order key



Scope of delivery:

MSK2000, Fastening set, Installation Instructions