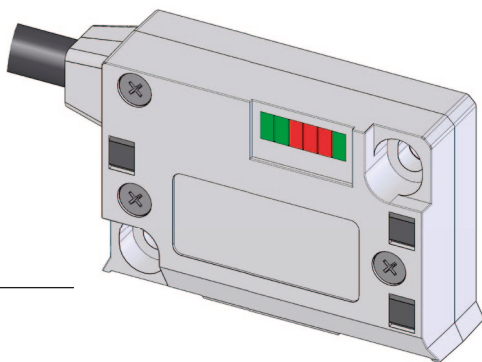


Linear Encoder LE1100



SIKO GmbH

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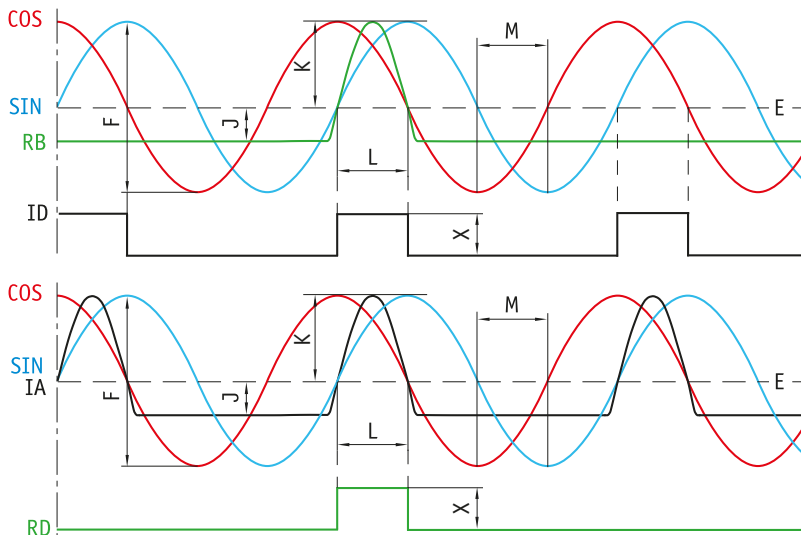
eMail
 info@siko.de
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Features:

- robust metal housing
- LED status display
- signal period 1000 μ m
- scale MB100
- Limit switches with lateral scanning

Signals:

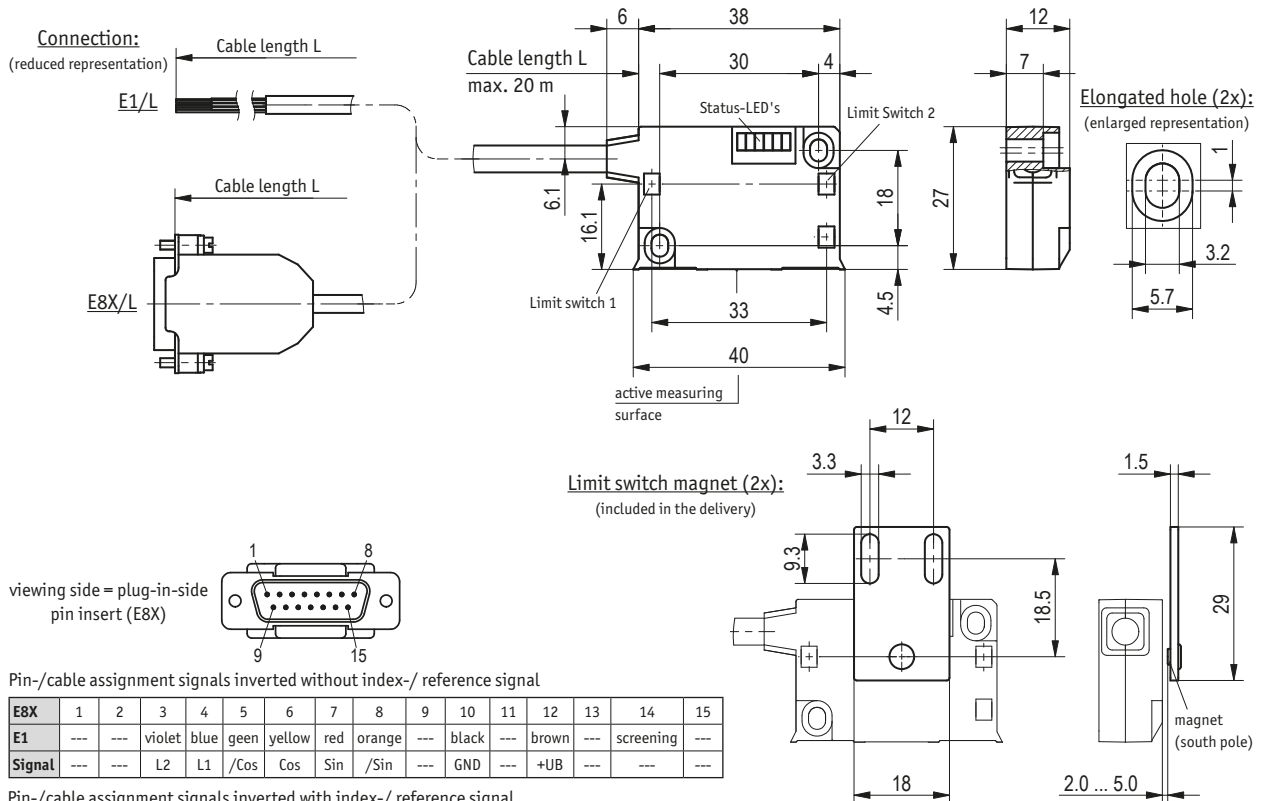
- E: reference voltage 2.5 V
- F: 1 Vpp \pm 10 %
- J: \geq 0.2 V
- L: $>$ 90°
- M: 90° \pm 1.0° / $<$ \pm 3° (25 KHZ)
- X: 1 Vpp
- K: \geq 0.3 V



Feature	Order text	Additional information
Operating voltage	10	10.5 ... 30 V DC, inverse-polarity protection
	5	5 V DC \pm 5 %
Connection	E1	stripped cable ends
	E8X	15-pol. D-Sub-male connector
Cable length (in m)	...	max. 20.0 m
Reference signal	0	without
	IA	periodic index (analog)
	ID	periodic index (digital)
	RB	fixed, tape side (analog)
	RD	fixed, tape side (digital)

Your ordering: LE1100 - - - -

Linear Encoder LE1100



Technical data

Mechanical data	
Housing	zinc die-cast
Sensor/band reading distance	0.1 ... 0.4 mm, with reference signal RB <2 mm
Cable sheath	PUR dragchain-compatible 8 wire $\phi 5_{-0.4}$ mm, 10 wire $\phi 5_{-0.2}$ mm
Cable bending radius	5x cable diameter, V = 30 double strokes/min
Weight	0.03 kg (without cable)

Electrical data

Operating voltage	10.5 ... 30 V DC, polarity protection 5 V DC $\pm 5\%$, not polarity protection
Current consumption	<25 mA, at 24 V DC <50 mA, at 5 V DC
Output signals	sin, /sin, cos, /cos, index, /index
Output voltage	1 Vpp $\pm 10\%$, Output voltage 0 ... 70 °C
Output current	≤ 60 mA peak, 5 s, per core
Output impedance	0 Ω ($R_{load} > 75 \Omega$), short-circuit proof
Signal period	1000 μ m
Offset voltage	2.5 V, ± 100 mV, sine/cosine mean to GND (10.5 ... 30 V DC) VCC/2 ± 100 mV, sine/cosine mean to GND (5 V DC)
Phasing	90° $\pm 1^\circ$, $\pm 3^\circ$ (20 kHz), sin/cos 45°, sin (eference signal) 135°, cos (eference signal)

Technical data

Real-time requirement	speed-proportional signal output
Type of connection	open cable end D-Sub, 15 pole pin

System data

System accuracy	10 μ m
Repeat accuracy	1 μ m, unidirectional
Travel speed	≤ 25 m/s ≤ 5 m/s, with reference signal RB, RD

Ambient conditions

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	<300 m/s ² , 11 ms, EN 60068-2-27
Vibration resistance	<200 m/s ² , 50 Hz ... 2 kHz, EN 60068-2-6 (axial, radial)

Accessory

	22x hexagon socket head cap screw (ISO 4762-M3x14) separately enclosed 2x lock washer (3 DIN 7980) separately enclosed 2x limit switch magnet separately enclosed
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