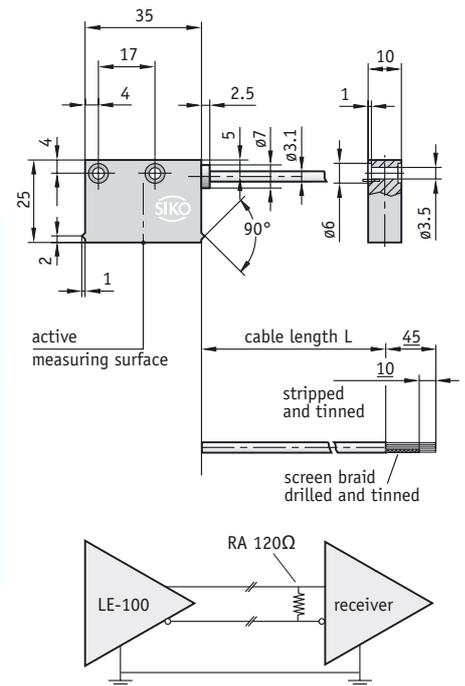


Linear Encoder LE100

Contactlessly measuring scanning unit with integrated analog signal output (sine 1 V_{ss}). Together with the magnetic scale MB100 and a follower interpolation electronics unit, the LE100 forms an open linear measuring system.



Features:

- easy mounting
- insensitive to dust, shavings, humidity
- signal period 1000 μm (analog)
- output signals 1 V_{ss} nominal
- real-time data processing
- scale MB100
- reference track on request

Temperature resistance (housing) ~125 °C
Softening temperature (housing) ~145 °C

Feature	Ordering data	Technical data	Additional information
Operating voltage	4	24 V DC ±20%	standard, with polarity protection
	5	5 V DC ±5%	
Connection	E1	flying leads	standard
	E6	circular plug	
Cable length	2.0	in meter, available up to max. 20 m	standard, PUR oil-resistant
Reference signal	0	without	standard
	I	digital, period, index signal every 1 mm	RS422 (Line Driver)
	R	fix reference signal analog	see signals illustration in the appendix
Power consumption		approx. 30 mA, unloaded	with polarity protection at operating voltage 24 V DC
Output signals		Sin, Cos, /Sin, /Cos, I, /I, or R, /R	
Signal amplitude		1 V _{ss} ±10 %	with RA = 120 Ohm up to 1 kOhm
Sine/ Cosine offset		2.5 V ±0.5 %	
Offset		analog reference signal	see signals illustration in the appendix
Counting frequency		< 10 kHz	
Reference signal		digital, periodic: sin 0°/ cos -90°	see signals illustration in the appendix
		analog, fixed: sin 45°/ cos -135°	see signals illustration in the appendix
Real time requirements		real-time signal processing	
Signal period		1000 μm	
Travel speed		max. 10 m/s	with R: 5 m/s
System accuracy		max. 1 % related to dividing period	
Harmonic distortion		< 1%	
Gap strip/ sensor		0.1 - 0.4 mm, reference signal R < 0.2 mm	over whole measuring distance, without cover strip
Parallel sensor/ strip offset		±0.5 mm	angle offset ±3° (±1° with R)
Temperature range		working temperature: -20 ... +70 °C	storage temperature: -20 ... +85 °C
Interference protection class		3, according to IEC 801	test mark CE
Protection class		IP 67	according to DIN VDE 0470
Vibration resistance		[5... 2000 Hz] at 20 g	
Shock resistance		200 g at 11 ms	

Your order:

LE100 - - - -