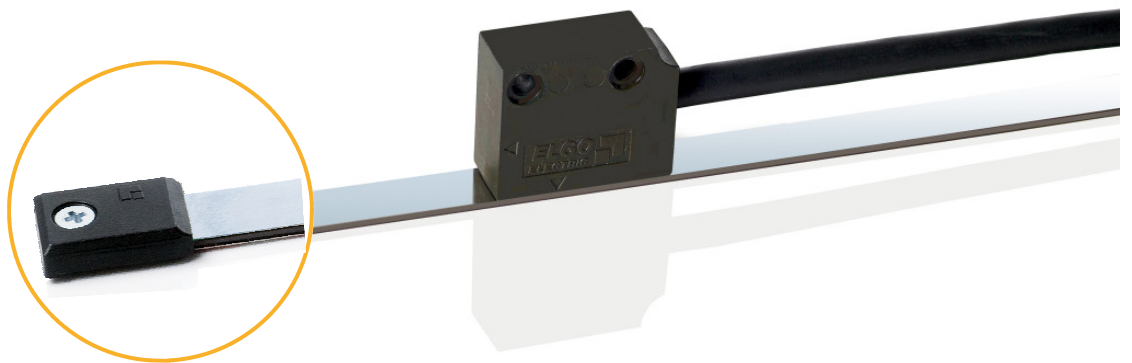


LMIX22



Magnetic Linear Encoder with selectable Resolution

General: Based on the proven LMIX linear encoder system, the linear encoder **LMIX22** was developed and offers three considerable advantages:

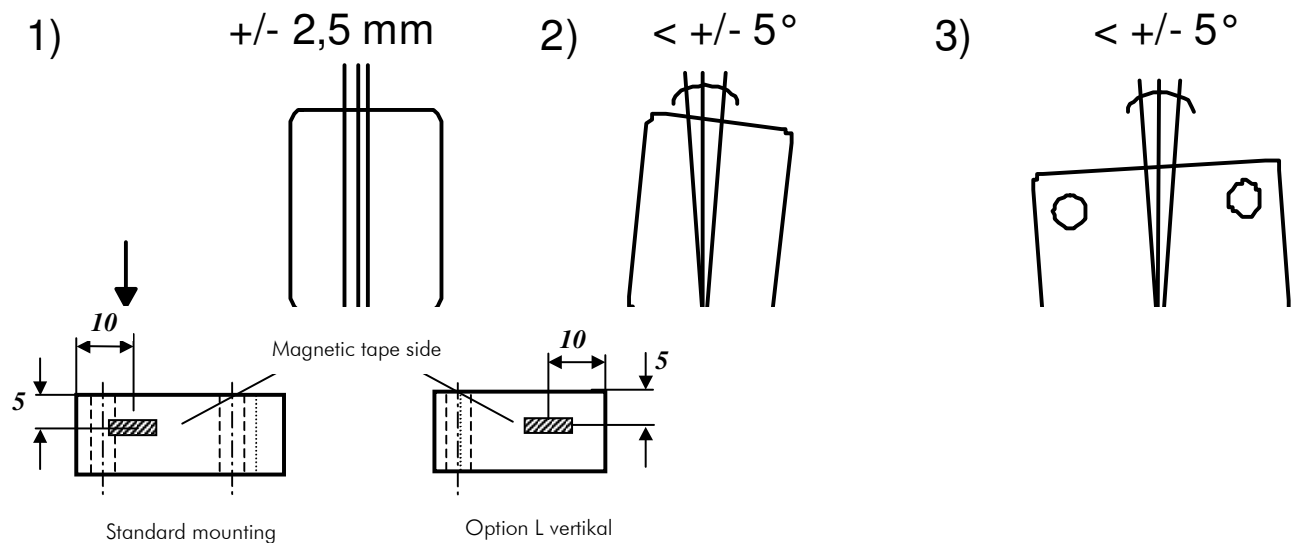
1. LMIX22 is available in many different resolutions
2. In spite of its small dimensions, the translator is integrated in the sensor head
3. The reference impulse is spent in the place, in which a magnet angle is installed

Integrated in the sensor head are the magneto-resistive measuring-bridges as well as the interpolation circuit and the output drivers. The bridge generates the distance dependent count pulses for the signal processing electronic. The sensor cable is an eight wire cable, highly flexible and suitable for tug chains. It consists of twisted pair wires and is shielded.

Product features:

- With periodic index pulse
- Mounting distance sensor / tape up to 2.0 mm
- Differential 5 V-TTL line driver or 10... 30 V-HTL outputs
- Various resolutions available (order designation)
- Repeat accuracy +/- 1 increment
- Small sensor with integrated translator
- Speed proportional output of the square waves

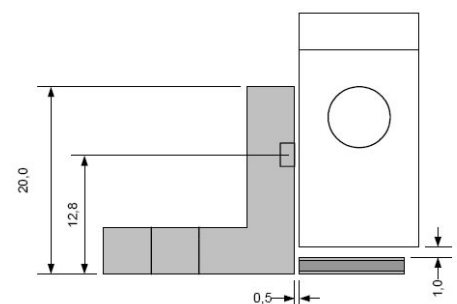
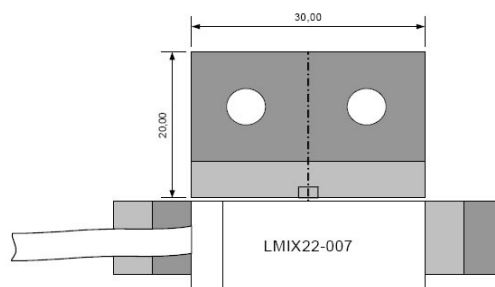
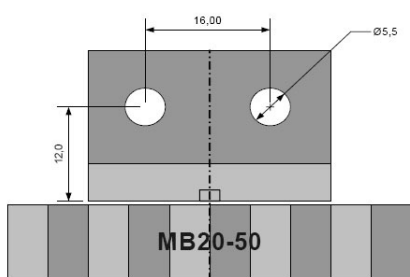
Installation LMIX22



Installation magnetic angle MW-007 (Option)

The assembly of the angle must be centered at any Polwechsel. (Alignin

The assembly of the angle must be centered at any pole change (with attached pole search foil)

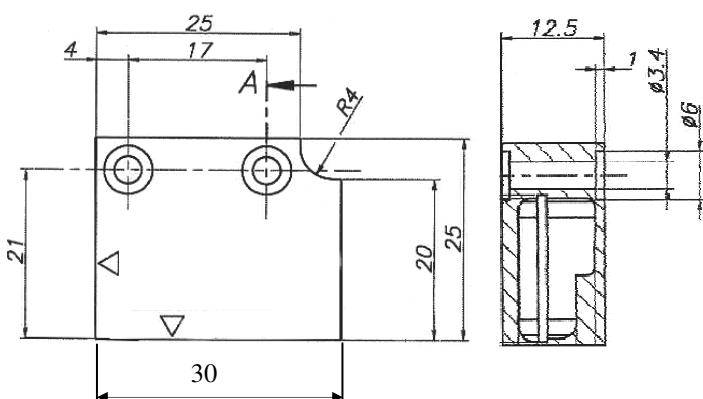


Technical specifications:

Measuring principle	Incremental
Signal output	Speed proportional
Resolution at 4 edge triggering	Depends on order designation (0.01 mm in case of no other indications)
Repeat accuracy	+/- 1 Increment
Accuracy of the system in μm at 20°C	+/- (25 + 20 x L) L = measuring length in meter
Max. permitted distance to the tape	2.0 mm
Power supply	5 VDC or 10... 30 VDC
Tolerance of power supply	5 VDC: +/-2.5 %, remaining ripple < 50 mV 10...30 VDC: +/-10 %, remaining ripple < 5 %
Consumption	5 VDC: max. 200 mA 10... 30 VDC: max. 150mA
Translator circuit intern	intern
Output levels	5 V - TTL Line Driver or 10.. 30 V - HTL
Output channels	A, A', B, B', Z, Z'
Output characteristics	Push/ pull, durable short circuit proof
Max. output frequency per channel at 1 μm resolution	TTL: 100 KHz at 4.0 m/s HTL: 100 KHz at 4.0 m/s, with an optional evaluation!
Output current per channel	20 mA
Max. operating speed	4.0 m/s (10 μm resolution)
Index pulses	Periodic output of channels Z and Z'
Maximum length of wire	5 VDC / 5V-TTL = 10 m 10-30 VDC / 10-30 V-HTL = 30 m 10-30 VDC / 5 V-TTL = 50 m
Min. bend radius of sensor cable	60 mm's
Operation temperature	-10... +70 °C (-25... +85 °C) on request
Storage temperature	-25... + 85 °C
Humidity	95%, not condensing
Angular tolerances (assembly)	See drawing
Sensor head	
Housing	Zinc die cast
Protection class	IP67
Dimensions L x W x H	30 mm x 12,5 mm x 25 mm
Mounting position	Horizontal (Option L)
Mechanical guidance	None

g with attached Polsucherfolie)

Dimensions:



Order reference:

For orders, please use the following order code:

LMIX22 - $\bar{A} \bar{A} \bar{A} - \bar{B} \bar{B} \bar{B} - \bar{C} \bar{C} \bar{C} \bar{C} - \bar{D} \bar{D} - \bar{E} \bar{E} \bar{E}$

A Version

- 000 ELGO standard
- 001 First special version
- 007 sign-one reference signal

B Signal cable length in XX,X m 1,5 m Standard

C Resolution in μm

- 2N50 2,5
- 3N12 3,125
- 0005 5
- 0010 10
- 0020 20
- 0025 25
- 0040 40
- 0050 50
- 0100 100
- 0125 125
- 0200 200
- 0625 625

D Supply / Output level

- 00 10-30 VDC / 10-30 V-HTL
- 01 10-30 VDC / 5V-TTL line driver
- 11 5 VDC / 5 V-TTL line driver

E Options

(Multiple nominations possible)

- D1 = Connection D-SUB 9pol (PIN-assignment standard)
- D2 = Connection D-SUB 9pol (18-50 compatible PIN-assignment)
- D3 = Connection plug (MIX compatible PIN-assignment)
- L = Vertical position

For Example:

LMIX22 - 000 - 01.5 - 2N50 - 00 - D1
AAA - BB.B - CCCC - DD - EE

LMIX22 ELGO standard with 1,5 m sensor cable length, 2,5 μm resolution, 10-30 VDC / 10-30 V-HTL power supply and connection D-SUB 9pol standard.

Your order:

LMIX22 - $\bar{A} \bar{A} \bar{A} - \bar{B} \bar{B} \bar{B} - \bar{C} \bar{C} \bar{C} \bar{C} - \bar{D} \bar{D} - \bar{E} \bar{E} \bar{E}$

Accessories:

MB20-50-10-1-R	Magnetic tape for LMIX22
Magnetic tape end cap 10 mm - Set	2 end caps (10 mm) and two M3 screws, additional fixation in the radial and linear area as well as a protection of the magnetic tape <i>Art. Nr. 731031002</i>
Magnetic tape end cap 10 mm	one end cap (10 mm) <i>Art. Nr. 731031000</i>
AP1.0	Alu profile
FW2070	Carriage for LMIX22
FS2050-000-XXX	Guiding rail for LMIX22 (incl. magnetic tape)

