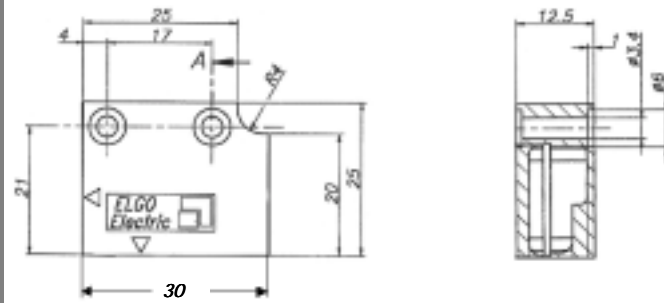


EMIX2/LMIX2 magnetic Length-Measuring-Systems

- With index pulse
- Resolution **EMIX2** = 0.01 mm (at 4-edge triggering)
Resolution **LMIX2** = 0.025 mm (at 4-edge triggering) resp. 0,1 mm (at single edge triggering)
- Repeating accuracy +/- 0.01 mm (**EMIX2**)
- Repeating accuracy +/- 0.1 mm (**LMIX2**)
- Small sensor with integrated translator
- Speed proportional output of square waves

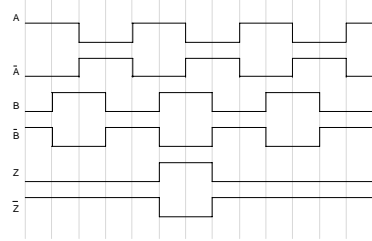
Dimensions



PIN-Assignment

	Wires open Standard	D-SUB 9 pin Option D1 (Elgo Standard))	D-SUB 9 pin Option D2 (18.50 - compatible)
Function	Colour	PIN-No.	PIN-Nr.
0V (GND)	White	1	1
5VDC In / 10-30 VDC in	Brown	2	2
Channel A	Green	3	3
Channel B	Yellow	4	4
Channel Z	Black	8	NC
Channel A'	Violet	6	7
Channel B'	Orange	7	8
Channel Z'	Grey	9	NC
Screen/shield	PE/Earth	Connected to the housing	5

Output pulses:



Type designation

L resp. EMIX2 - XXX - XX.X - X - XX - XXX

Series/Type

SN-Number

- 000 = Standard
- 001 = first special version
- 002 ... etc.

Length of signal wire (XX,X m)

Resolution (always 1)

- 1 = **EMIX2** = 0.01 mm (at 4-edge triggering)
- LMIX2** = 0.025 mm (at 4-edge triggering)

Supply/Output level

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

Options

- D1 = Connection via 9 pin D-SUB (PIN-Assignment as ELGO-Standard)
- D2 = Connection via 9 pin D-SUB (PIN-Assignment as 18.50 backup)
- L = Vertical position (PCB and installation of sensor)

EMIX2/LMIX2 magnetic Length-Measuring-Systems

Technical specifications EMIX2

Resolution:	0.01 mm in 4-edge-triggering mode
Distance tape/sensor:	0.8 mm max.
Housing:	Zinc cast
Protection class sensor head:	IP65
Operating temperature:	0° to +50°C
Output current:	20 mA max. per channel
Index pulse (every 2 mm):	periodic period dependent from operation speed
Necessary magnetic tape:	MB 20.20 (pole division 2 mm)

Supply / output levels 5 VDC / 5 V-TTL line driver output

Tolerance/supply voltage:	+/- 2.5%, ripple < 50 mV
Consumption:	200 mA max.
Output frequency:	100 kHz max. (per channel)
Operation speed:	4.0 m/s max.
Max. wire length:	10 m

Supply / output levels 10 - 30 VDC / 5 V-TTL line driver output

Tolerance/supply:	stabilized, ripple max. 5 %
Consumption:	150 mA max.
Output frequency:	100 kHz max. (per channel)
Operation speed:	4.0 m/s max.
Max. wire length:	50 m

Supply / output levels 10 - 30 VDC / 10 - 30 VDC out

Tolerance/supply:	stabilized, ripple max. 5 %
Consumption:	150 mA max.
Output frequency:	16 kHz max. (per channel)
Operation speed:	4.0 m/s max. (at optimal evaluation)
Max. wire length:	30 m

Technical specifications LMIX2:

Resolution:	0.025 mm in 4-edge-triggering mode
Distance tape/sensor:	2.0 mm max.
Housing:	Zinc cast
Protection class sensor head:	IP65
Operating temperature:	0° to +50°C
Output current:	20 mA max. per channel
Index pulse (every 5 mm):	periodic period dependent from operation speed
Necessary magnetic tape:	MB 20.50 (pole division 5 mm)

Supply / output levels 5 VDC / 5 V-TTL line driver output

Tolerance/supply:	+/- 2.5 %, ripple < 50 mV
Consumption:	200 mA max.
Output frequency:	100 kHz max. (per channel)
Operation speed:	4.0 m/s max.
Max. wire length:	10 m

Supply / output levels 10 - 30 VDC / 5 V-TTL line driver output

Tolerance/supply:	stabilized, ripple max. 5 %
Consumption:	150 mA max.
Output frequency:	100 kHz max. (per channel)
Operation speed:	4.0 m/s max.
Max. wire length:	50 m

Supply / output levels 10 - 30 VDC / 10 - 30 VDC out

Tolerance/supply:	stabilized, ripple max. 5 %
Consumption:	150 mA max.
Output frequency:	16 kHz max. (per channel)
Operation speed:	4.0 m/s max. (at optimal evaluation)
Max. wire length:	30 m

Accessories (magnetic tape):

Necessary tape for **EMIX2**:

MB20.20 - XX.X

Necessary tape for **LMIX2**:

MB20.50 - XX.X

Technical specifications of Magnetic tape:

Coefficient of expansion	$\alpha = 16 \times 10^{-6} K^{-1}$
Linear extension	$\Delta L = L \times \alpha \times \Delta \theta$
Dimensions (W x H)	10 mm x app. 1.8 mm
min. bending radius	150 mm

Länge in XX.X Meter angeben



ELGO
ELECTRIC



**EMIX2 and LMIX2
series**

**Magnetic, incremental
Length Measuring Systems**

ELGO
ELECTRIC

Positioning- und
Length measuring systems
ELGO Electric GmbH