Series
GMIX2

Magnetic, incremental Length Measuring System, best suitable for long distances

GMIX2   Magnetic, Incremental Measuring Length System

General: With *GMIX2*, ELGO offers an incremental sensor, which can be installed with a distance from up to 4 mm to the magnetic tape. With a resolution of 2.5 mm (repeating accuracy +/- 2.5 mm) and a max. operation speed of 10 m/s (output frequency 4 KHz), GMIX2 is suitable for applications in storage- or conveyor- techniques resp. for longer distances. Thanks to the wear-free measuring-principle (by magnetic scanning) and high protection class of IP67, the sensor works in rough environments always uninfluenced and reliably. The translator circuit, which converts the detected signals into 90° shifted square wave signals A and B (like output signals of rotary encoders), is already integrated in the sensor head . Thus *GMIX2* can be connected directly to follow-up circuits (e.g. position indicator). The system is supplied with 10... 30 VDC. The output signals are HTL - according to supply level.

Product features:

- Predestined for tasks in storage- or conveyor- techniques

- Resolution of 2.5 mm (at 4 edge triggering)

- Repeating accuracy +/- 2.5 mm

- Compact sensor with integrated translator circuit

- Speed proportional square wave outputs

- High protection class of IP67

Pulse data:

10... 30 V

0 V

90 ° phase displacement (+/- 20 %)
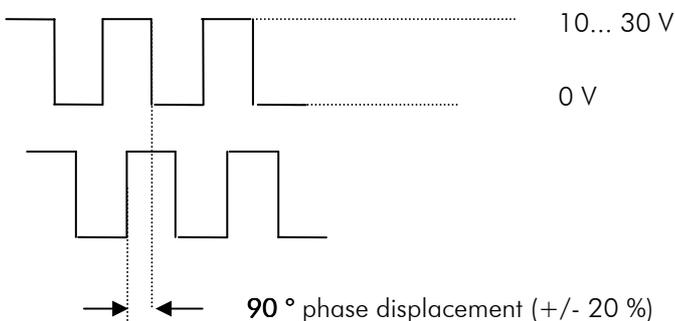
Installation:
Incline tolerance sensors

1)   +/- 3 mm   2)   < +/- 5°   3)   < +/- 5°   4)   < +/- 1,5°

Distance
Max. 2,0 mm

Magnetic tape
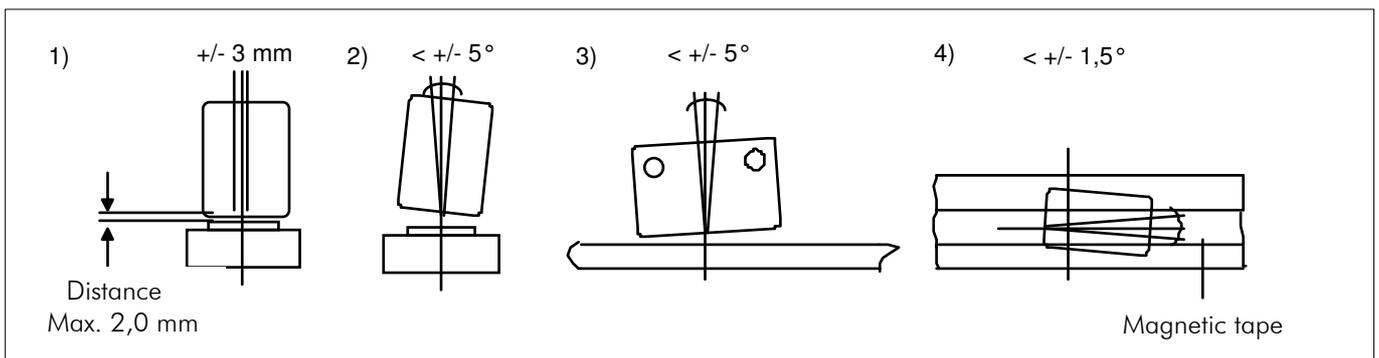
Technical specifications:

Resolution	2,5 mm (at 4 edge triggering)
Repeating accuracy	+/- 2.5 mm
Accuracy at 20° C in μm	+/- (25 + 20 x L) L = effective measuring length in meters
Distance tape/sensor	max. 4,0 mm
Power supply voltage	10... 30 VDC, stabilized
Output levels	HTL 10.. 30 VDC (according to supply voltage, less approx.. 0.7 V
Material of housing	HM-PA (Polyamid), black
Protection class (sensor head)	IP 67
Operation temperature	-10… +70 °C (-25… +85 °C) on request
Storage temperature	-25… +85 °C
Output current	max. 20 mA per channel
Outputs	push/pull, durable short circuit proof
Consumption	ca. 30 mA
Output frequency	4 kHz (per channel A or B)
Operating speed	max. 10,0 m/s
Cable length	on request max. 30 m possible

Order reference:

For orders, please use the following order code:

GMIX2 - _ _ _ - _ _ , _
       A A A - B B , B

A Version
   000 *ELGO* standard
   001 First special version

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

For Example:

GMIX2 - 0 0 0 - 0 1 , 5
       A A A - B B , B

GMIX2 *ELGO* standard, signal cable length: 1,5 m.

Your order:

GMIX2 - _ _ _ - _ _ , _
       A A A - B B , B

Dimensions
Sensor:

Ø = 3,2
Dicke = 10 mm
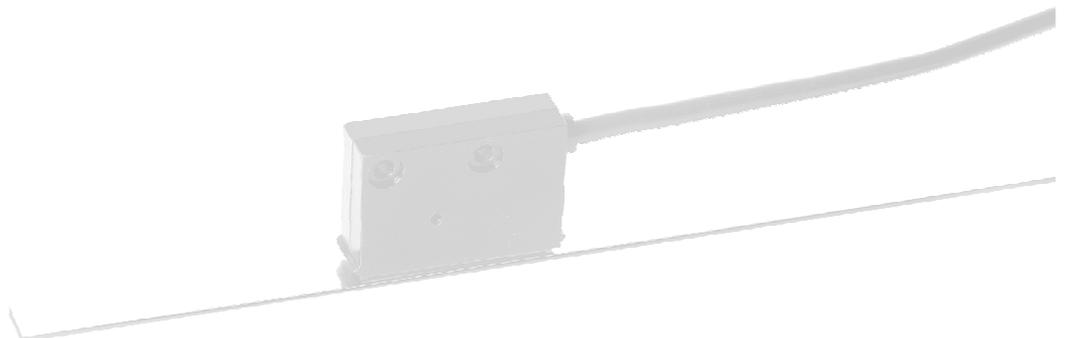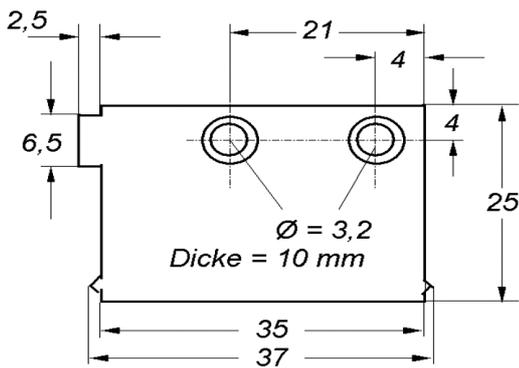
Accessories:

MB20-50-10-1-R   Magnetic tape, 5 mm pole width

Magnetic tape end cap 10 mm - Set   2 end caps (10 mm) and 2 M3 screws;
additional fixation in the radial and linear area,
as well as a protection of the magnetic tape ends
<u>Order No. 731031002</u>

Magnetic tape end cap 10 mm   1 end cap (10 mm)
<u>Order No. 731031000</u>

FS2050   Guiding rail with MB20-50-10-1-R

FW2060   Carriage for GMIX2 sensor

AP1.0   Cover, length 1,0 m