

## GMIX1A series

**Magnetic, incremental Length Measuring System,  
universal and best suitably in different kinds of  
mechanical engineering and construction**



- 5 different adjustable resolutions
- repeating accuracy +/- 0.01 mm
- speed monitoring LED and signal output  
(for adherence to the prescribed max. 25 m's/min with panel saws)
- switch able output levels (24 V push/pull or 5 V-TTL line driver)
- status LED for each channel (A,B and Z)
- compact sensor in high protection class of IP67
- speed proportionally square wave outputs
- external metal case for translator and adjustments

## GMIX1A series - magnetic, incremental Length - Measuring - System

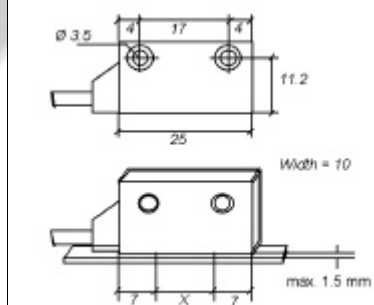
GMIX1A is suitable for applications in the wood processing. A signal output "Vmax" is set and a status LED begins to flash (in order to a defined sequence), if the operation speed exceeds 25 m's/min. Further on this status LED shows the adjusted resolution with an assigned flashing sequence. In the translator box the resolution and output levels (24 V-HTL push/pull or 5 V-TTL line driver) can be adjusted with an internal DIL-switch.

### Technical specifications

#### Sensor and translator datas

Resolution (at 4 edge triggering)	: 0.1 / 0.05 / 0.025 / 0.02 or 0.01 mm's
Repeating accuracy	: +/- 0.01 mm
Accuracy at 20° C in mm's	: +/- (0.025 + 0,02 x L) L = effective measuring length in meters
Distance tape/sensor	: max. 1.5 mm
Power supply voltage	: 10... 30 VDC, stabilized
Output levels	: HTL 10.. 30 VDC push/pull or 5 V-TTL line driver
Output Vmax	: 10... 30 V depending on supply level / max. 200 mA
Outputs	: Square waves, channels A, B, Z, durable short circuit proof
Material of housing	: die cast zinc
Protection class (sensor head)	: IP 67
Protection class (translator box)	: IP 40
Operation temperature	: 0° up to + 50 °C
Consumption of the system	: ca. 300 mA
Output frequency	: depending on selected resolution
Operating speed	: depending on selected resolution
max. Cable length	: on request up to 30 meters possible
Bending radius (sensor cable)	: min 60 mm
Datas of magnetic tape MB 20.50 (accessories)	
Operation temperature	: 0° up to + 60°C
Linear expansion coefficient	: $16 \times 10^{-6}$ 1/K
Bending radius	: minimal 150 mm
Protection class	: IP65

Dimensions of sensor



### Type designation

**GMIX1A - XXX - XX.X - X - XX**

Series/Type \_\_\_\_\_

SN-Number \_\_\_\_\_

001 = standard

002 = special versions etc.

Length of signal cable XX.X m (1, 3, 5, 8 or 10 m) \_\_\_\_\_

Resolution 1 = 0.1 mm, 2 = 0.05 mm, 3 = 0.025 mm, 4 = 0.02 mm, 5 = 0.01 mm \_\_\_\_\_

Output levels 00 = 10... 30 V push/pull, 01 = 5 V-TTL line driver \_\_\_\_\_

Magnetic tape MB20.50 (accessories)

**MB20.50 - XX.X**

ELGO-Magnetic tape 5 mm's Pole division \_\_\_\_\_

Length (in m) \_\_\_\_\_

(1 standard roll up to max 32 m, on request up to 1000 meters available)

