

Magnetic length measuring systems

GC-MK Series

Characteristics:

- Incremental length measuring system consisting of read head and magnetic tape
- Pole length of the magnetic tape scale 1 mm, 2 mm, 5 mm
- Distance between sensor and tape: 0.5 mm, 1 mm, 2.5 mm (depending on pole length)
- Different resolutions available
- Adjustable minimum edge interval for adaptation to different counters
- Output signals 1 V_{pp}, RS422 or 24 V Push Pull
- Error signal, reference point processing (depending on model)

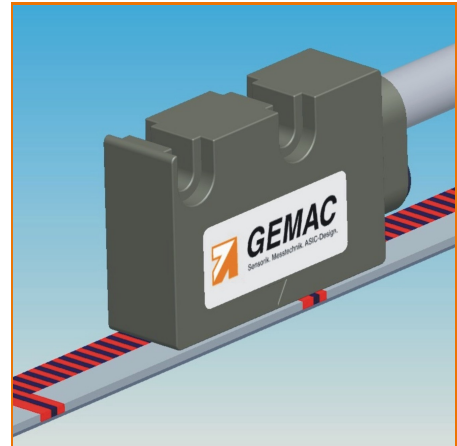


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Applications:

- Machine tools
- Wood machining tools
- Window construction
- Cutting devices

Technical Parameters:

Characteristics	GC-MK-A Series	GC-MKx-2k Series
Pole length	1 mm, 2 mm, 5 mm	1 mm, 2 mm, 5 mm
Max. resolution	72 dB	0.5 μm, 1 μm, 2.5 μm
Distance sensor – tape	(pole length / 2) – thickness of cover tape	
Reference point processing	optional	
Error signal	–	standard
Output signals	1 V _{pp} differential	square wave sequences RS422 or 24 V Push Pull*
Power supply voltage	5 VDC	5 VDC ± 5 % (24 VDC on request)
Repeatability	–	± 1 Increment
Max. velocity	max. 20 m/s (depends on resolution)	
Cable length	1 m (standard) max. 6m	
Housing	Metal	
Temperature range	- 20 ... 70 °C	
Degree of protection	IP67	

* only for sensors with 5 millimeter pole width

Magnetic tape	Parameters
Pole length	1 mm, 2 mm, 5 mm
Accuracy class	$\pm 10 \mu\text{m}$, $\pm 20 \mu\text{m}$, $\pm 40 \mu\text{m}$
Magnetic tape width	10 mm
Temperature coefficient	$(11\pm 1) \cdot 10^{-6} \text{ 1/K}$
Material tape	Synthetic, Steel
Types	Incremental, Incremental with reference marks, distance-coded
Cover tape	
Width	10 mm
Thickness	0.1 mm
Material	Stainless steel

A detailed description of the technical data can be found in the according user manual.

Ordering Information:

Product Type	GC-MKA Series	GC-MKx-2k Series
Pole length 1 mm	PR-47110-00	PR-47201-00
Pole length 2 mm	PR-47120-00	PR-47202-00
Pole length 5 mm	PR-47150-00	PR-47205-00
with reference marks	PR-47xxx-50	

Accessories:

Product Type	Description	Article Number
Display unit AZ1000	Counter for incremental position and angle measuring systems	PR-45000-00
Display unit AZ μ	Magnetic measuring system for GC-MKx Series and GC-MKx-2k Series	PR-45100-00



Display unit AZ μ



Display unit AZ1000