

EMSC/LMSC 1/3



Magnetic Linear Measuring System with Sin/Cos Outputs

EMSC/LMSC - Magnetic Linear Measuring System with Sin/Cos outputs

General: The Series EMSC / LMSC is an incremental magnetic length measuring system. At the space saving version the sensor system and the evaluation unit are separated. The magnetic tape of the series MB20 is glued on a flat base with the included adhesive tape. The EMSC can be mounted up to max. 0.8 mm distance. LMSC can be mounted up to max. 2.0 mm distance. Several possibilities of supply voltage versions are available (10 ... 30 V / 1 Vss and 5 V / 1 Vss). The guided version is delivered with a magnetic tape, guiding rail and a guiding carriage.

Product Features:

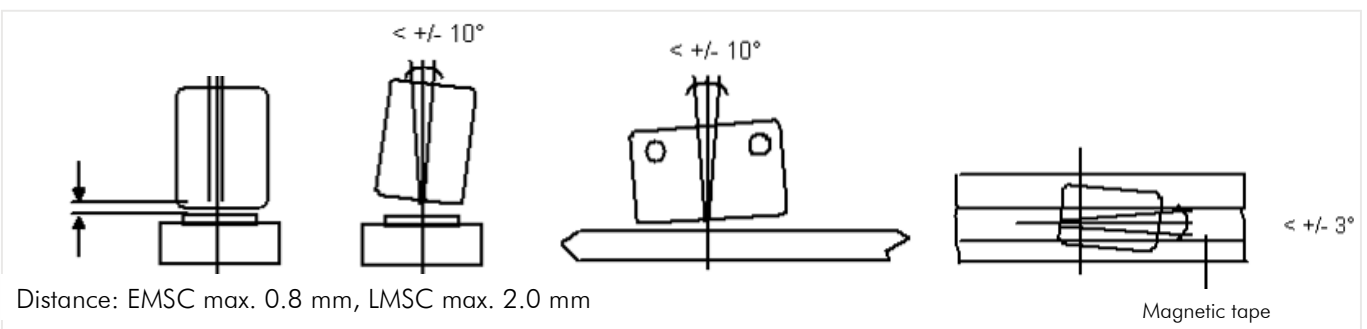
- Speed proportional Sine/Cosine outputs
- Wear less measuring system
- 2 mm measuring action results in a Sines/Cosine period at EMSC
- 5 mm measuring action results in a Sines/Cosine period at LMSC
- Mounting distance to the magnetic tape up to 0.8 mm (EMSC) and 2 mm (LMSC)
- Two different types available

Applications:

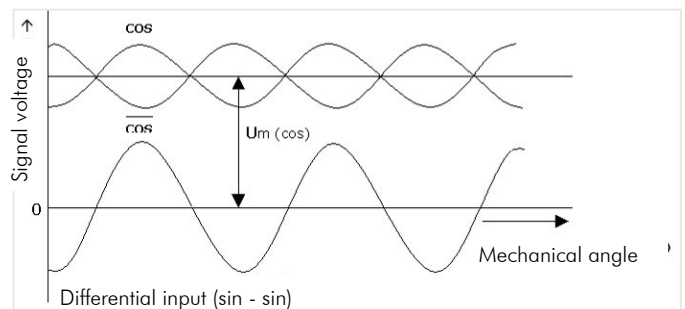
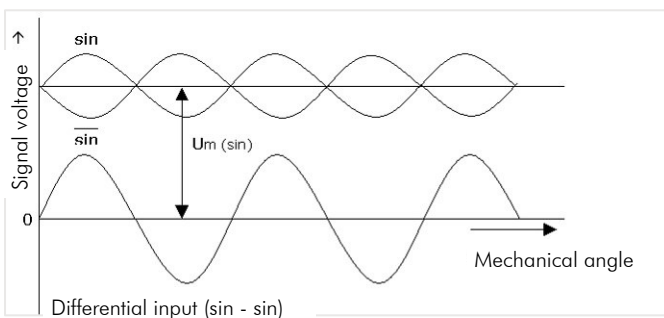
- Handlings systems
- Material and storage technology
- Hydraulic press
- Punching machines
- Injection molding machines
- Linear guiding systems
- Linear drive mechanisms
- Pick & Place Systems



Falling gradient tolerances:



Description in signal forms:



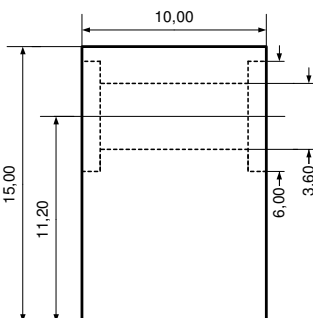
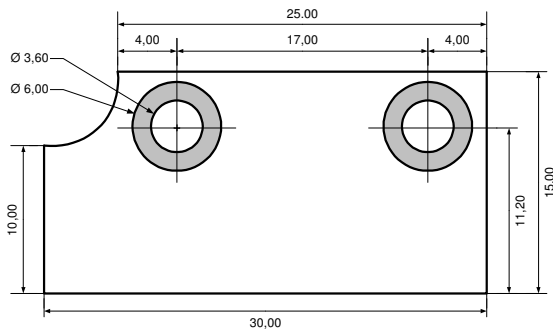
Technical Data:

Nominal voltage	10 ... 30 VDC stabilized residual ripple max. 5 % 5 VDC \pm 2.5 % allowed ripple < 50 mV
Speed	max. 10 m/s
Protection class	EMSC1 / LMSC1 = IP67 EMSC3 / LMSC3 = IP54
Operating temperature	-10... +70 °C (-25... +85 °C) on request
Storage temperature	-25... +85 °C
Humidity	non condensing - max. 80 %
Housing material	Zinc die cast
Dimensions	EMSC3 / LMSC3: L x W x H = 72 x 48 x 24 mm (evaluation unit)
	EMSC1 / LMSC1: L x W x H = 30 x 10 x 15 mm (sensor head)

Dimensions:

EMSC1/LMSC1

With external evaluation electronics



Type Designation

For orders, please use the following order code:

EMSC1
LMSC1
EMSC3
LMSC3 - $\bar{A} \bar{A} \bar{A} - \bar{B} \bar{B} . \bar{B} - \bar{C} \bar{C}$

A Version

000 = ELGO Standard

001 = First special version

B Signal cable length in meters

Example: 01.5 m = 1.5 Meter

For EMSC3/LMSC3 without cable *

With power supply „12“ max. 2.0 m

C Supply version

02 = 10 ... 30 V / 1 Vss

12 = 5 V / 1 Vss

For Example:

EMSC1 - 000 - 01.5 - 12
A A A - B B . B - C C

ELGO Standard EMSC with a cable length of 1.5 m and a power supply of 5 V / 1 Vss.

Your Order:

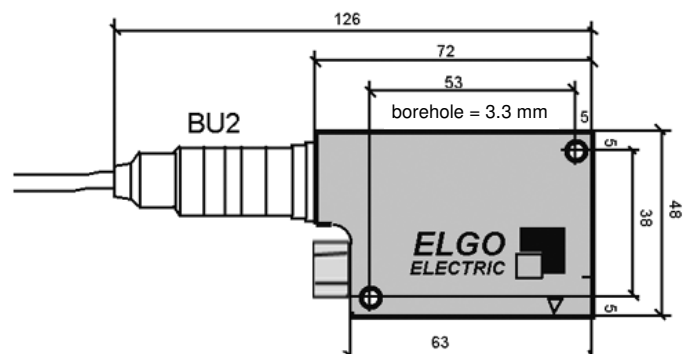
EMSC1
LMSC1 - $\bar{A} \bar{A} \bar{A} - \bar{B} \bar{B} . \bar{B} - \bar{C} \bar{C}$

EMSC3
LMSC3 - $\bar{A} \bar{A} \bar{A} - 00 . 0 - \bar{C} \bar{C}$

*see accessories (SKA1-XX.X)

EMSC3/LMSC3

with integrated evaluation unit.



Accessories:

Order Designation	Description
MB20-20-10-1-R	Magnetic tape for EMSC with 2 mm pole width
MB20-50-10-1-R	Magnetic tape for LMSC with 5 mm pole width
SKA1-XX.X	Signal cable, twisted pair, converted for EMSC3 und LMSC3

