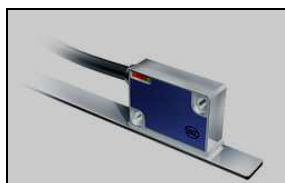


MSK1000 is an incremental magnetic positioning sensor. A magnetic strip serves as a scale embodiment, which has a magnetic pitch of 1 mm. A sensor head contactlessly scans the magnetic strip, interpolates and has an output which is RS422 compatible, two digitally driven output signals are available.



- repeating accuracy  $\pm 1 \mu\text{m}$
- system linearity  $\pm 10 \mu\text{m}$
- robust system

Type	MSK1000
<b>Operating Data</b>	
pitch of scale [mm]	1
period of output signals [μm]	4 (8 see options)
repeating accuracy [μm]	+/- 1 (+/- 2 see options)
linearity of the system [μm]	+/- 10
distance sensor head to scale surface [mm]	0,1 to 0,4
max. pitch and jaw of sensor head [°]	< 1
max. speed [m/s]	3,2 (6,4 see options)
status display	LED's
supply voltage + UB [VDC]	4,75 to 6,0
current consuption [mA]	< 25
output circuit	RS422 line driver
sensor cable	PUR, Ø 5 mm, for cable chain applications
cable length and connector	depends on order
hausing of sensor head	metal
operating temperature[°C]	-10 to +70
storage temperature [°C]	-30 to +80
humidity [%]	< 100, with condensing
protection class	IP67

Signal	Cable Color
A	red
/A	yellow
B	orange
/B	green
+ UB	brown
GND	black

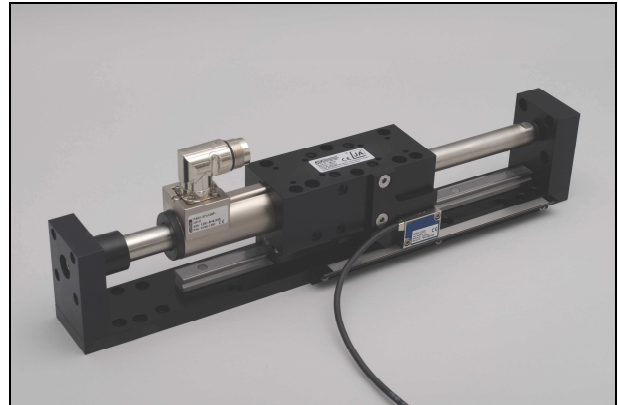
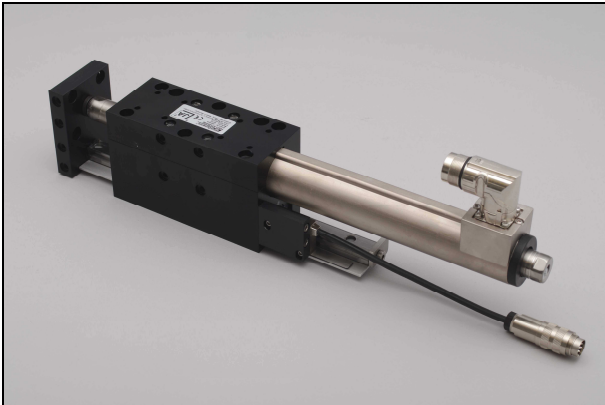
# External Positioning Sensor MSK1000

## Variations, Options & Accessories

The MSK1000 is available in different variations and with various accessories.  
See the following chart.

Type	Item No.
<b>Sensors</b>	
MSK1000 1 µm resolution (1/4 of signal period), max. speed 3,2 m/s, 2 m cable available for cable chain, SubD-9	0291397
MSK1000 1 µm resolution (1/4 of signal period), max. speed 3,2 m/s, 0,2 m cable for cable chain, round connector R7	0290802
MSK1000 1 µm resolution (1/4 of signal period), max. speed 3,2 m/s, 2 m cable for cable chain, round connector R7	0291253
MSK1000 2 µm resolution (1/4 of signal period), max. speed 6,4 m/s, 0,2 m cable for cable chain, round connector R7	0290929
MSK1000 2 µm resolution (1/4 of signal period), max. speed 6,4 m/s, 2 m cable for cable chain, round connector R7	0291254
<b>Ready-to-use Cables</b>	
MSK1000-R7/D15 extention cable, for cable chains	
MSK1000-R7/D9 extention cable, for cable chains	
MSK1000-D9/D9 extention cable, for cable chains	
MSK1000-D9/D15 extention cable, for cable chains	
<b>Cable Adaptors</b>	
MSK1000-D15/D9/D9 Y-adaptor	0291250
MSK1000-D9/D9/D9 Y-adaptor	0291251
MSK1000-D15/D9 adaptor	0291252

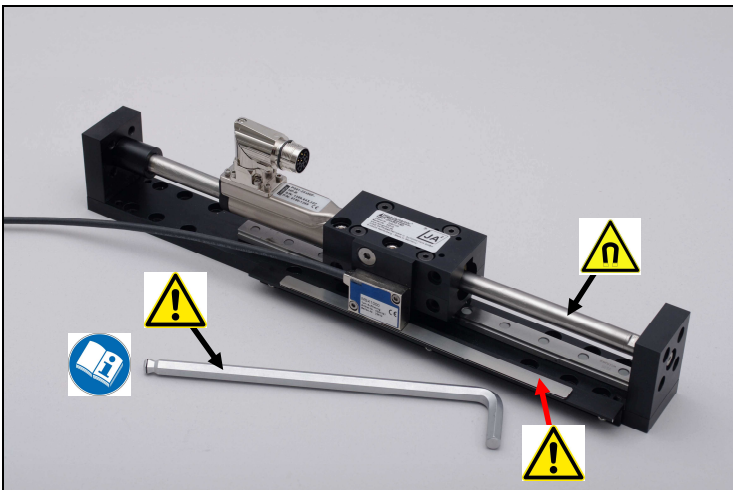
## **HighDynamic<sup>®</sup> HM01 Modules & HA01 Guides with Adaptor AD06, External Incremental Positioning Sensor MSK1000 & Scale**



When ordering a completely mounted system, the sensor head will be mounted by us. A continuous test-run is included. After dismantling and before assembly, compliance with the mechanical specifications is mandatory - see page 1 of 3.



During assembly work, it is imperative to pay attention and make sure that **no tools or workpieces made of steel ever come in contact with the magnetic slider of the linear motor and the magnetic scale**. The magnetic pitch of the magnetic scale will be destroyed by strong magnetic fields.



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