Length measuring kit with rack and pinion

Rack system incl. encoder / preset counter

Incremental / absolute



Measuring system with mobile encoder holder, mounted on springs, (with rack and pinion) for an optimum contact pressure and protection of the encoder shaft.

Components suited optimally to each other. One rotation of the pinion corresponds to a movement of 50 mm.

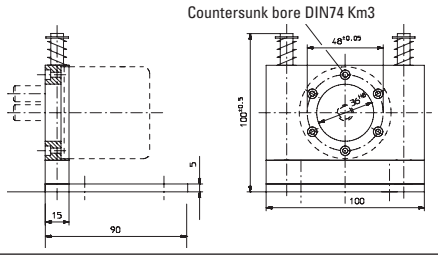
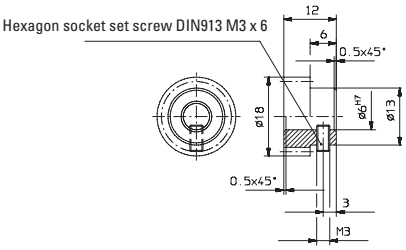
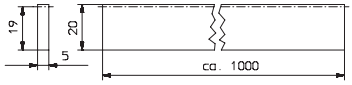
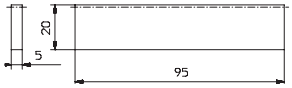
The holding device for the encoder (8.0010.7000.0004) is a movable support for encoders, to the shaft of which, for instance, a measuring wheel or pinion can be attached. Due to the fact that it is movable, optimum contact pressure is ensured and overload on the bearings of the encoder prevented.

When used in conjunction with a pulse generating unit, the rack and pinion combination (8.0010.7000.0001 and ...02) serves as a simple length and displacement measuring system. One rotation of the pinion on the rack corresponds to a displacement of 50 mm. Moreover the racks are designed in such a way that they can be butt-mounted without pitch error.

The absolute accuracy is 0.5 mm per meter. The resolution / repetition accuracy is 0.1 mm. Holding device, rack and pinion are available as a set for the purpose of displacement measurement (8.0010.7000.0005).

The installation aid (8.0010.7000.0003) is required to maintain exact pitch when butt-mounting racks.

Typical areas of application are:
- Wood working industry
- Textile industry
- Handling and automation technology
- Mechanical engineering / special machines

Single components			Order no.
Flexible holding device for encoders		**Guide rods** stainless steel **Flange** Al	**8.0010.7000.0004**
Pinion for displacement measuring device		**Material** free-cutting steel **Surface** burnished **Module pitch** approx. 1 **No of teeth** 16 with bore diameter ø 6 mm [0.24"] with bore diameter ø 10 mm [0.39"]	 **8.0010.7000.0002** **8.0010.7000.0006**
Rack		**Material** S235JR **Surface** uncoated **Module pitch** approx. 1	**8.0010.7000.0001**
Installation aid		**Material** S235JR **Surface** uncoated **Module pitch** approx. 1	**8.0010.7000.0003**
Encoder		Sendix 5000, for rack and pinion, 0.1 mm resolution	**8.5000.8354.0500**
Standard cordset		with 2 m [6.56'] PVC cable, M12	**05.00.6041.8211.002M**
Preset counter		716 LED preset counter, 100 ... 240 V AC, 1 preset 923 LCD preset counter 100 ... 240 V AC, 1 preset	**6.716.010.000** **6.923.0100.000**

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