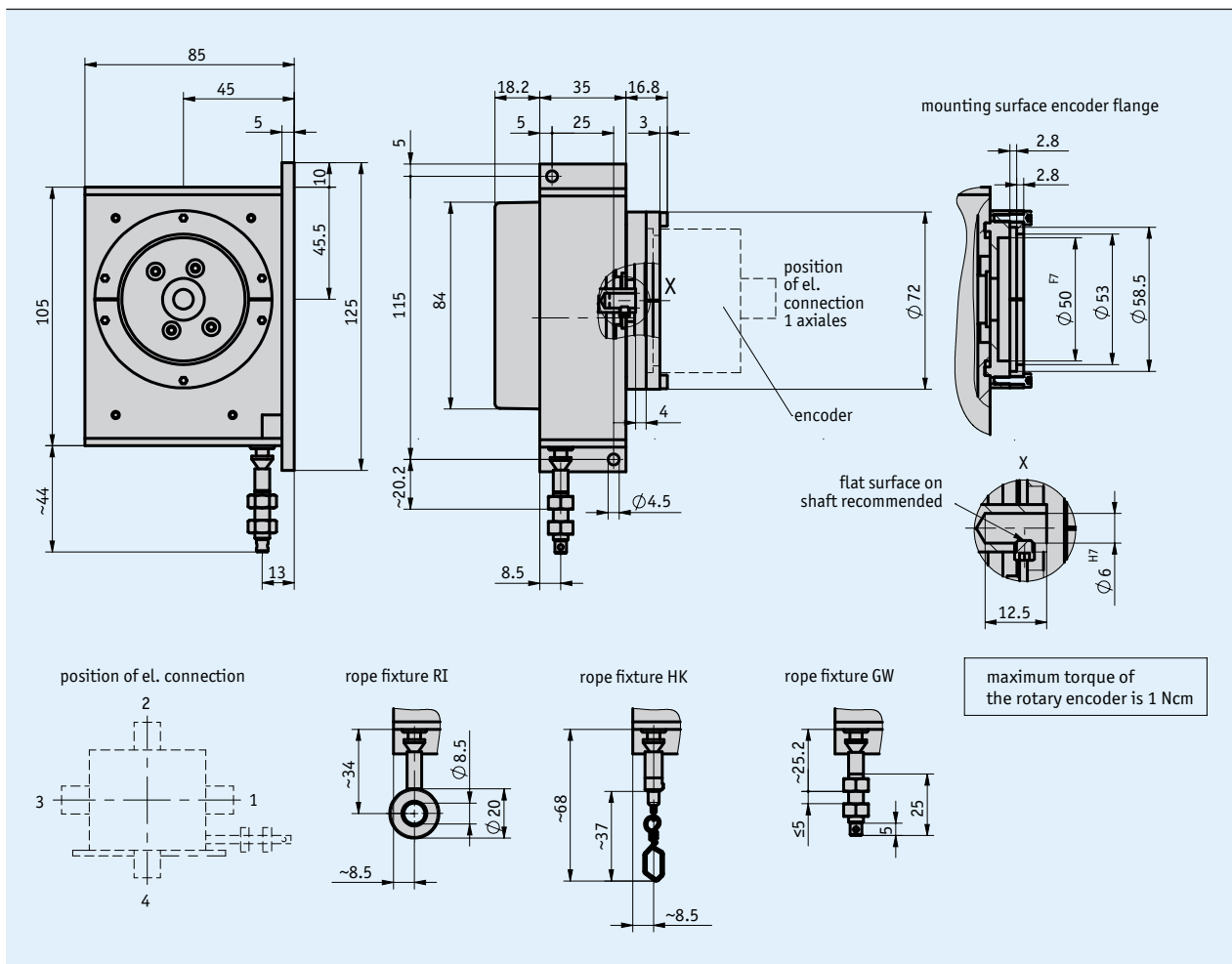
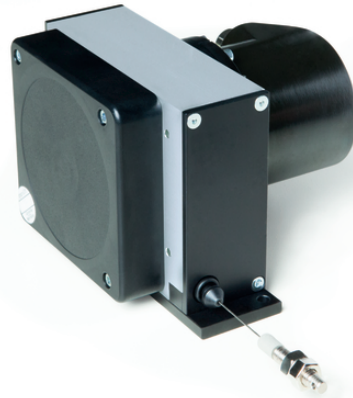


## Profile

- Robust design
- Easy mounting
- Measurement lengths up to max. 12000 mm
- Flexible wire outlet thanks to Wire-Flex technology
- Incremental or absolute encoder
- Also available as a safety version in combination with WV58MR rotary encoder
- High flexibility thanks to free choice of rotary encoders with 58 mm standard flange
- Various wire types
- With PURE.MOBILE technology



## Mechanical data

Feature	Technical data	Additional information
Housing	aluminum/plastic	
Wire design	<ul style="list-style-type: none"> <li>Ø0.6 mm</li> <li>Ø0.6 mm</li> <li>Ø0.6 mm</li> </ul>	<ul style="list-style-type: none"> <li>steel cable</li> <li>steel cable, plastic sheathed</li> <li>para-line</li> </ul>
Extension force	≥8 N	on the rope
Measured distance/ rope drum revolution	200 mm	
Acceleration	≤23.5 m/s <sup>2</sup>	

## Electric data

Rotary encoders suitable for the SG121 are featured on our website [www.siko-global.com](http://www.siko-global.com). Depending on the output signals, the following are suitable for:

- Analog outputs such as current or voltage: AV58M
- Incremental outputs: IV5800
- Absolute outputs: WV58MR, WV5800M, WV36M/SSI, WV36M/CAN

Among others, SIKO encoders have the following interfaces: Incremental, SSI, CANopen, CANopen Safety, SAE J1939, Field bus, and Ethernet

The technical specifications for these devices are given in the respective data sheet. Numerous encoder models from various manufacturers can also be used.

## System data

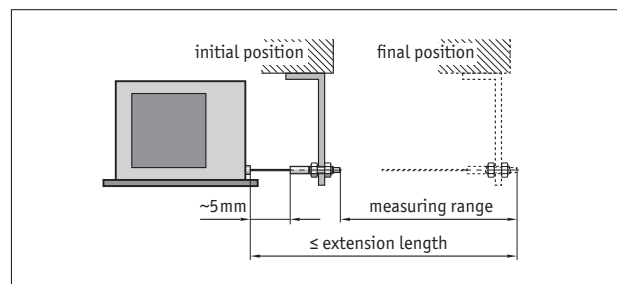
Feature	Technical data	Additional information
Repeat accuracy	±0.15 mm	mechanical, depending on the direction of travel (1st position)
Measuring range	≤12000 mm	
Travel speed	≤3000 mm/s	

## Ambient conditions

Feature	Technical data	Additional information
Ambient temperature	-20 ... +80 °C	
Protection category		depending on the mounted rotary encoder
Shock resistance	500 m/s <sup>2</sup> , 11 ms	EN 60068-2-27
Vibration resistance	100 m/s <sup>2</sup> , 5 ... 150 Hz	EN 60068-2-6

## Hint for mounting

When securing the wire it must be ensured that the wire is straight and vertical in relation to the wire outlet. Recommendation: Only select the starting position after an unwound length of approx. 5 mm. This prevents the wire hitting the end stop when it is rewound.

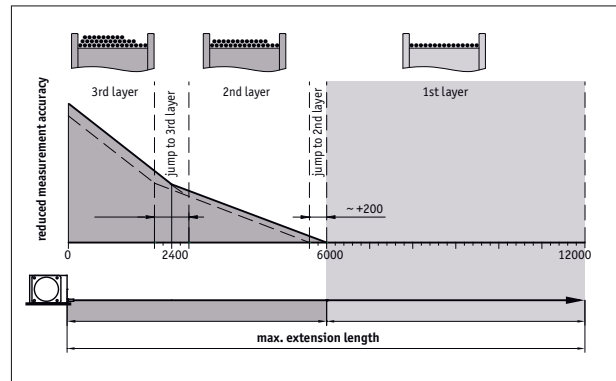


symbolic depiction

## Extension length/measuring range

SIKO wire-actuated encoders achieve the maximum measuring accuracy when the entire wire length (measuring range) is only wound onto the drum in one layer. On the SG121, the wire diameter is selected so that when the first drum layer is used, a maximum measuring range of 6000 mm is possible.

If a lower measuring accuracy is acceptable, two to three layer winding is also possible, and the possible measuring lengths change accordingly.



dimensions refer to millimeters

## Order

### Ordering information

One or more system components are required:

Absolute encoder WV58MR	<a href="http://www.siko-global.com">www.siko-global.com</a>
Absolute encoder WV5800M	<a href="http://www.siko-global.com">www.siko-global.com</a>
Absolute encoder AV58M	<a href="http://www.siko-global.com">www.siko-global.com</a>
Incremental encoder IV5800	<a href="http://www.siko-global.com">www.siko-global.com</a>
Absolute encoder WV36M/SSI	<a href="http://www.siko-global.com">www.siko-global.com</a>
Absolute encoder WV36M/CAN	<a href="http://www.siko-global.com">www.siko-global.com</a>

### Ordering table

Feature	Ordering data	Specification	Additional information
Measuring range	... <b>A</b>	7000, 8000, 9000, 10000, 11000, 12000 in mm	
Rope fixture	<b>GW</b> <b>HK</b> <b>RI</b>	wire suspension with thread wire suspension with hook wire suspension with ring	
Wire design	<b>S</b> <b>SK</b> <b>P</b>	stainless steel wire steel wire, plastic-sheathed para-leine	
Encoder type	<b>OG6</b> <b>S6</b>	without encoder great number of encoders possible	
Position of electrical connection	<b>1</b> <b>2</b> <b>3</b> <b>4</b> <b>0</b>	direction or wire outlet or axially upward opposite the wire outlet downward without encoder	depending on installed encoder

### Order key



Scope of delivery: SG121, Quick Start Guide

Accessories:  
Guide roller UR  
Wire extension piece SV

[www.siko-global.com](http://www.siko-global.com)  
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