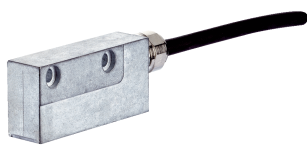


## TTK50

Position and speed measurement for compact linear drives

**SICK**  
Sensor Intelligence.



### Technical data overview

<b>Measuring length</b>	0 m ... 0.94 m
<b>Resolution</b>	1 µm
<b>Connection type</b>	Cable, 8-wire (4 x 2 x 0.15 mm <sup>2</sup> )
<b>Safety system</b>	- / ✓ (depending on type)



### Product description

Precision, speed, dynamics, stiffness and high control accuracy - it is exactly these properties which play an important role in high-end applications in drive technology. The TTK50 linear measurement system has all these properties and is a very compact motor feedback system with HIPERFACE® interface. The magnetic principle of operation, the long measuring length, and the extremely high resolution open up all kinds of application possibilities for absolute position detection with linear motors. The TTK50 contains the newest sensor and evaluation technology. The sensor board aligned to the measuring plane is equipped with Hall sensors in two parallel tracks. Their arrangement corresponds with the division of the magnetic tape into an incremental and an absolute component. To calculate the absolute position values during operation, the read head initially detects the absolute starting position when the linear motor starts. All other actual positions of the drive are then determined via the incremental position on the magnetic track or the sine/cosine signals.

### At a glance

- Absolute, non-contact, wear-free length measurement system for linear motors
- Measured lengths of up to 1 m
- Suitable for high traverse speeds of up to 10 m/s
- Reliable location positioning even in the event of condensation and contamination of the magnetic tape
- Electronic type label and programming of the position value
- Absolute location positioning, no reference run
- HIPERFACE® interface
- Certified according to SIL2 and PL d

### Your benefits

- No need for a reference run due to the absolute measurement system
- Maintenance-free thanks to the non-contact measurement principle
- Simple system integration as a result of the HIPERFACE® interface
- Specially developed for use with linear direct drives
- Can even be used under harsh ambient conditions
- Certification allows for easy integration into a safe motion system

### Ordering information

Other models and accessories → [www.sick.com/TTK50](http://www.sick.com/TTK50)

Safety system	Connection type	Type	Part no.
✓	Cable, 8-wire (4 x 2 x 0.15 mm <sup>2</sup> ), 0.5 m	TTK50S-HXJ0-K02	1099696
	Cable, 8-wire (4 x 2 x 0.15 mm <sup>2</sup> ), 1 m	TTK50S-HXI0-K02	1099697
	Cable, 8-wire (4 x 2 x 0.15 mm <sup>2</sup> ), 2 m	TTK50S-HXQ0-K02	1099698
	Cable, 8-wire (4 x 2 x 0.15 mm <sup>2</sup> ), 5 m	TTK50S-HXM0-K02	1099699
-	Cable, 8-wire (4 x 2 x 0.15 mm <sup>2</sup> ), 0.5 m	TTK50-HXJ0-K02	1057791
	Cable, 8-wire (4 x 2 x 0.15 mm <sup>2</sup> ), 1 m	TTK50-HXI0-K02	1057792
	Cable, 8-wire (4 x 2 x 0.15 mm <sup>2</sup> ), 2 m	TTK50-HXQ0-K02	1057793
	Cable, 8-wire (4 x 2 x 0.15 mm <sup>2</sup> ), 5 m	TTK50-HXM0-K02	1067934

## SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

## WORLDWIDE PRESENCE:

Contacts and other locations –[www.sick.com](http://www.sick.com)