



## SEK/SEL

Absolute motor feedback system with HIPERFACE® for rugged servo applications

**SICK**  
Sensor Intelligence.



### Technical data overview

<b>Type</b>	For integration
<b>Model</b>	Absolute Singleturn / Absolute Multiturn (depending on type)
<b>Communication interface</b>	HIPERFACE®
<b>Sine/cosine periods per revolution</b>	16
<b>Mechanical interface</b>	Tapered shaft, 5 mm Tapered shaft
<b>Connection type</b>	Male connector, 8-pin, radial Male connector, 8-pin, axial
<b>Available memory area</b>	1,792 Byte E <sup>2</sup> PROM 2048

### Product description

The SEK/SEL34 and SEK/SEL37 capacitive motor feedback systems with the holistic scanning process were developed specially for the requirements of servo motors with a 40 mm edge dimension. The centerpiece of the product family is a bearing-free, capacitive sensor element. The holistic scanning process virtually offsets eccentricity errors and is extremely resistant to shock and vibrations. The motor feedback systems also have a high temperature resistance. Thanks to the capacitive measurement system, balls bearings are not needed, meaning wear and heat development is significantly reduced. The SEK/SEL motor feedback systems unite extreme reliability, multiturn capability and all the advantages of the HIPERFACE® interface in a very compact design.

### At a glance

- Motor feedback system for the basic power range
- Special design for motors with a 40 mm edge dimension
- 16 sine/cosine periods per revolution
- Absolute position with a resolution of 512 increments per revolution and 4096 revolutions with the multiturn system
- Programming of the position value
- Electronic type label
- HIPERFACE® interface
- RoHS-compliant

### Your benefits

- Its small dimensions allow manufacturers of small and very small motors to achieve a significant reduction in the length of their motors
- The SEK/SEL37 motor feedback systems are particularly suitable for use under harsh ambient conditions
- The capacitive measurement principle with holistic sensing enables high axial and radial tolerances
- Due to the uniform mechanical component, a high level of flexibility can be achieved with SKS/SKM36 when using with various encoder systems

## Ordering information

Other models and accessories → [www.sick.com/SEK\\_SEL](http://www.sick.com/SEK_SEL)

- **Communication interface:** HIPERFACE®
- **Model:** Absolute Singleturn
- **Type:** for integration
- **Sine/cosine periods per revolution:** 16
- **Mechanical design:** tapered shaft
- **Operating temperature range:** -40 °C ... +115 °C

Connection type	Type	Part no.
Male connector, 8-pin, axial	SEK37-HFA0-K02	1037376
Male connector, 8-pin, radial	SEK34-HFB0K02	1053402
	SEK37-HFB0-K02	1037378

- **Communication interface:** HIPERFACE®
- **Model:** Absolute Multiturn
- **Type:** for integration
- **Sine/cosine periods per revolution:** 16
- **Mechanical design:** tapered shaft
- **Operating temperature range:** -20 °C ... +115 °C

Connection type	Type	Part no.
Male connector, 8-pin, axial	SEL37-HFA0-K02	1037377
Male connector, 8-pin, radial	SEL34-HFB0K02	1053403
	SEL37-HFB0-K02	1037379

## 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)