



SEK/SEL37

Flexible, robust, saves space: SICK capacitive motor feedback systems

MOTOR FEEDBACK SYSTEMS ROTARY HIPERFACE®

SICK
Sensor Intelligence.



Technical data overview

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

Product description

The SEK/SEL37 capacitive motor feedback systems are at home in two worlds of automation: On the one hand, the present world of resolvers in which users require high performance from absolute position encoders, such as servo motors or feed axes. On the other hand, thanks to the flexibility in connection with the automation engineering features, the SEK/SEL37 devices are particularly interesting for manufacturers of servo motors. With 16 sine/cosine signals per revolution, this family represents the basic solution for MFB systems with the HIPERFACE® interface. The centerpiece of the product family is a bearing-free, capacitive sensor element. The holistic scanning process virtually offsets eccentricity errors and is extremely rugged. Possible sources of error are nearly completely ruled out as there are no wear and tear parts. Furthermore, the motor feedback systems feature high temperature resistance, which was previously reserved for resolvers. SEK/SEL37 motor feedback systems features a HIPERFACE® interface recognized all over the globe, which is supported by many well-known drive manufacturers.

At a glance

- Motor feedback systems for the basic performance range
- 16 sine/cosine periods per revolution
- Absolute position with a resolution of 512 increments per revolution and 4,096 revolutions with the multiturn system
- Programming of the position value
- Electronic type label
- HIPERFACE® interface
- Installed version with tapered shaft and axial or radial male connector connection
- Conforms to RoHs

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_SEL37

- **Communication interface:** HIPERFACE®
- **Type:** for integration
- **Sine/cosine periods per revolution:** 16
- **Mechanical interface:** tapered shaft

Model	Connection type	Type	Part no.
Absolute Multiturn	Male connector, 8-pin, axial	SEL37-HFA0-K02	1037377
	Male connector, 8-pin, radial	SEL37-HFB0-K02	1037379
Absolute Singleturn	Male connector, 8-pin, axial	SEK37-HFA0-K02	1037376
	Male connector, 8-pin, radial	SEK37-HFB0-K02	1037378

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