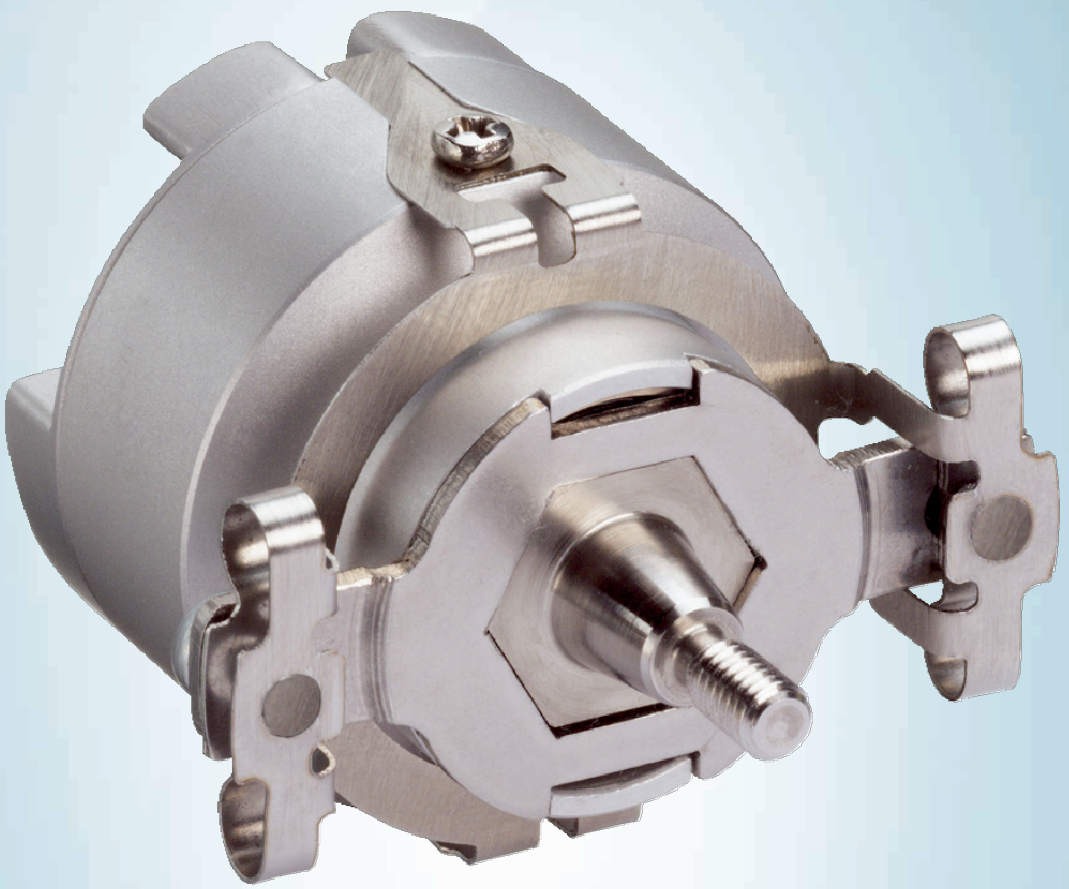
Product overview



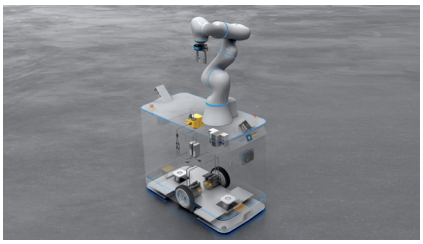
SKS/SKM36

Safe speed measurement with HIPERFACE® for standard servo applications

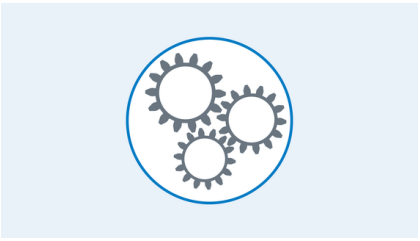
SICK
Sensor Intelligence.

Advantages

The SKS/SKM36 motor feedback system is characterized by its small housing diameter and optical scanning system. With high rotational speeds and ruggedness, it meets the requirements of standard servomotors. The storage of motor-specific data on the electronic type label makes commissioning easy. Thanks to the SIL2 certification, the motor feedback system offers a safely limited speed (SLS), thereby increasing machine availability.



Thanks to its small design, the built-in encoder is easy to integrate into servomotors.



The mechatronic multiturn drive of the SKS/SKM36 motor feedback system is maintenance free and requires no battery.

The standalone variant with IP50 protection class is ideal for external mounting on servomotors, e.g., in AGV systems.

The SKS/SKM36 motor feedback system is the right choice for standard servomotors in the medium performance range.

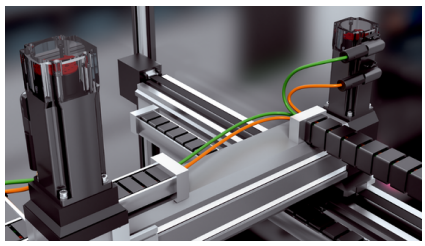
HIPERFACE communication interface for precise and dynamic servo systems

The hybrid HIPERFACE® interface consists of an analog process data channel (sine/cosine signals) and a bidirectional parameter channel (RS-485). The sine/cosine signals are available as real-time information. At the same time, absolute position

information and other parameters such as encoder type, resolution or encoder temperature are available via the RS485 interface.

Hybrid transmission of process and parameter data with HIPERFACE.

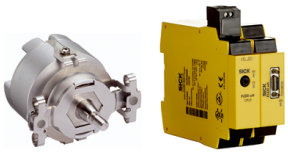
For safety applications: The HIPERFACE communication interface satisfies safety integrity level 2 (Safe Increment).



The HIPERFACE interface ensures fast data transmission and precise positioning of servomotors.

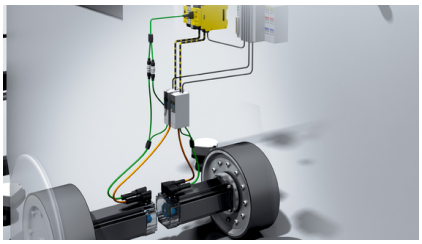
With the widely used HIPERFACE interface, almost any industrial application can be solved and, thanks to SIL2 certification, safety-relevant machine sequences can also be implemented.

Safe Motion: intelligent safety solutions for machine movements



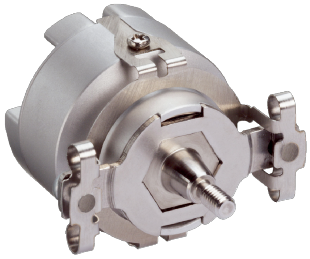
Perfectly aligned: SKS/SKM36-S in combination with the Flexi Soft Drive Monitor.

SKS/SKM36-S safe motor feedback systems with HIPERFACE interface meet the requirements of SIL2 / 61800-5-2 / EN 61508 and Cat.3 / PL d in accordance with EN ISO 13849-1.



Safe speed measurement with HIPERFACE® for servo applications.

Simplify the certification process for your system: The SKS/SKM36 is already certified by an external testing body and can be quickly integrated into your system.



Technical data overview

Type	For integration / Stand-alone (depends on variant)
Model	Absolute Singleturn / Absolute Multiturn (depends on variant)
Communication interface	HIPERFACE®
Sine/cosine periods per revolution	128
Safety system	– / ✓ (depends on variant)
Mechanical interface	Tapered shaft, Spring mounting plate, 5 mm Solid shaft, Servo-/face mount flange, 9.5 mm
Connection type	Male connector, 8-pin, radial Male connector, M12, 8-pin, radial Cable, 8-wire, 1.5 m
Available memory area	1,792 Byte E^{2}PROM 2048
Measurement principle	Optical

Product description

The SKS/SKM36 motor feedback systems offer high performance for accurate and safe servo drives. The communication via HIPERFACE® is compatible with the leading frequency inverters and supports the operator with automated commissioning of the application. Safe applications are easy to implement thanks to safe speed detection. This means the SKS/SKM36 can be used simultaneously for controlling the motor and for safety-related monitoring, which saves on components and cabling. The universal attachment design and the reliable and maintenance-free mechatronic multiturn are further features of the SKS/SKM36.

At a glance

- Motor feedback systems for the standard performance range
- 128 sine/cosine periods per revolution
- Absolute position with a resolution of 4,096 increments per revolution and 4,096 revolutions with the multiturn system
- Programming of the position value and electronic type label
- HIPERFACE® interface
- Integrated version and stand-alone design
- Certified according to SIL2/PL d (only valid for SKS36S/SKM36S-H...)
- Conforms to RoHs

Your benefits

- The small dimension allows manufacturers of low-power and minimal-power motors to considerably reduce the size of their motors
- The stand-alone version is ideally suited as a master and path encoders
- The SKS/SKM36 motor feedback systems have strongly penetrated the drive technology market
- The consistent mechanical components in SEK/SEL37 allow for a high degree of flexibility with various encoder systems

Ordering information

Other models and accessories ➜ www.sick.com/SKS_SKM36

- **Communication interface:** HIPERFACE®
- **Model:** Absolute Singleturn
- **Type:** for integration
- **Sine/cosine periods per revolution:** 128
- **Mechanical design:** tapered shaft, Spring mounting plate
- **Connection type:** male connector, 8-pin, radial
- **Operating temperature range:** –20 °C ... +110 °C

Safety system	Type	Part no.
✓	SKS36S-HFA0-K02	1036556
	SKS36S-HFA0-K02-40	1131703
–	SKS36-HFA0-K02	1034095
	SKS36-HFA0-K02-40	1131702

- **Communication interface:** HIPERFACE®
- **Model:** Absolute Singleturn
- **Type:** Stand-alone
- **Sine/cosine periods per revolution:** 128
- **Mechanical design:** Solid shaft, Servo-/face mount flange
- **Operating temperature range:** –20 °C ... +100 °C

Safety system	Connection type	Type	Part no.
✓	Male connector, M12, 8-pin, radial	SKS36S-HVA0-K02	1036557
–	Cable, 8-wire, 1.5 m	SKS36-HVV0-K02	1035604
	Male connector, M12, 8-pin, radial	SKS36-HVA0-K02	1035603

- **Communication interface:** HIPERFACE®
- **Model:** Absolute Multiturn
- **Type:** for integration
- **Sine/cosine periods per revolution:** 128
- **Mechanical design:** tapered shaft, Spring mounting plate
- **Connection type:** male connector, 8-pin, radial
- **Operating temperature range:** –20 °C ... +110 °C

Safety system	Specialty	Type	Part no.
✓	–	SKM36S-HFA0-K02	1036558
		SKM36S-HFA0-K02-40	1131704
–	–	SKM36-HFA0-K02	1034094
		SKM36-HFA0-K02-40	1131701
	Firmware version: SKS_M.V11 23.01.24, Delayed command time (response time) by 1.6 ms, Command timing similar to FIRMWARE V09 25.05.09	SKM36-HFA0-S17	1144947

- **Communication interface:** HIPERFACE®
- **Model:** Absolute Multiturn
- **Type:** Stand-alone
- **Sine/cosine periods per revolution:** 128
- **Mechanical design:** Solid shaft, Servo-/face mount flange
- **Operating temperature range:** –20 °C ... +100 °C

Safety system	Connection type	Type	Part no.
✓	Male connector, M12, 8-pin, radial	SKM36S-HVA0-K02	1036559
–	Cable, 8-wire, 1.5 m	SKM36-HVV0-K02	1035602
	Male connector, M12, 8-pin, radial	SKM36-HVA0-K02	1035601

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

SICK
Sensor Intelligence.