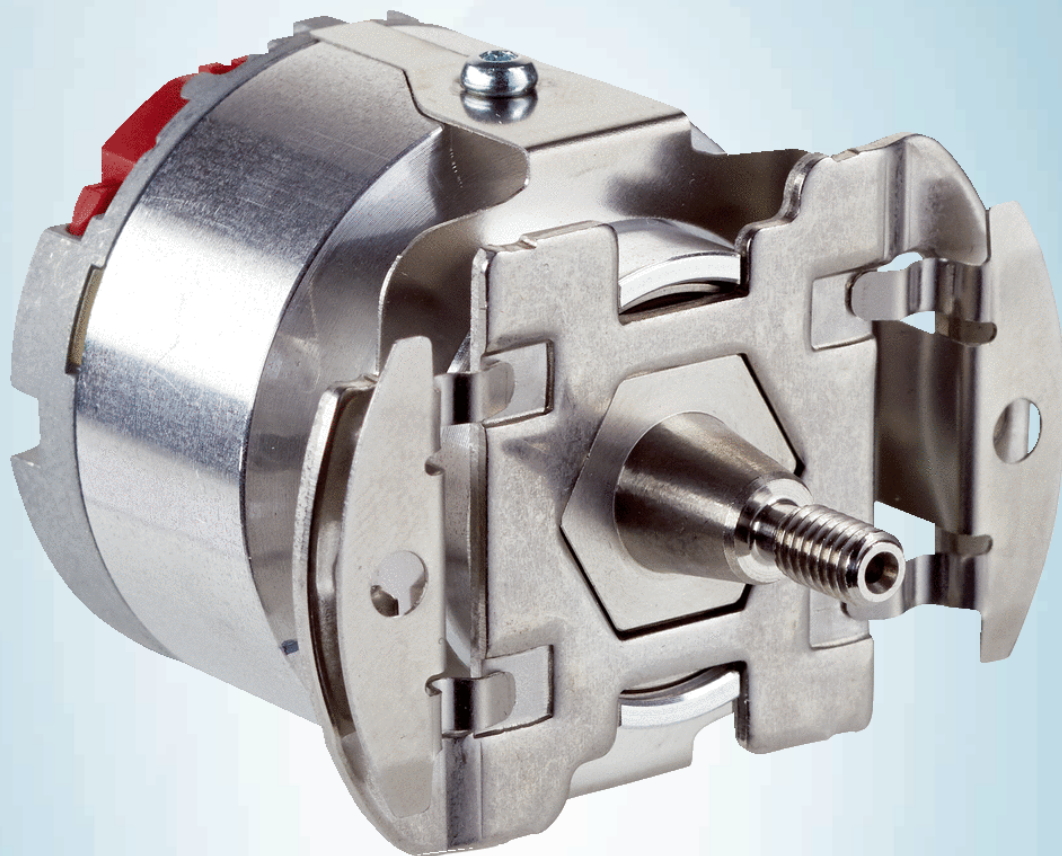




EKS/EKM36

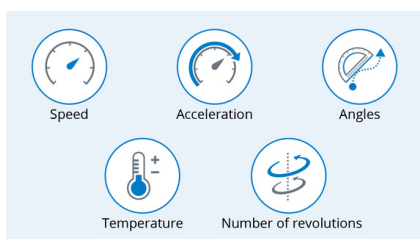
Safe speed measurement with HIPERFACE DSL® for standard servo applications

SICK
Sensor Intelligence.

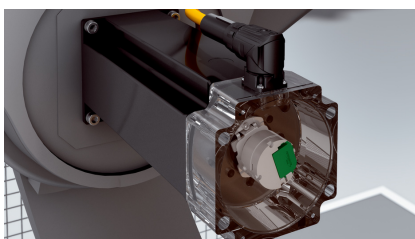
Advantages



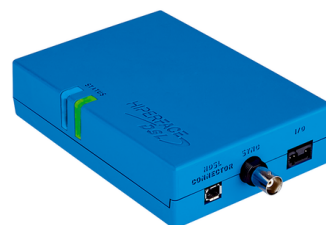
The EKS/EKM36 motor feedback system has a small housing diameter and an optical scanning system. With high rotational speeds and ruggedness, it meets the requirements of standard servomotors. With its SIL2 certification, the motor feedback system also offers a safely-limited speed (SLS), which increases machine availability.



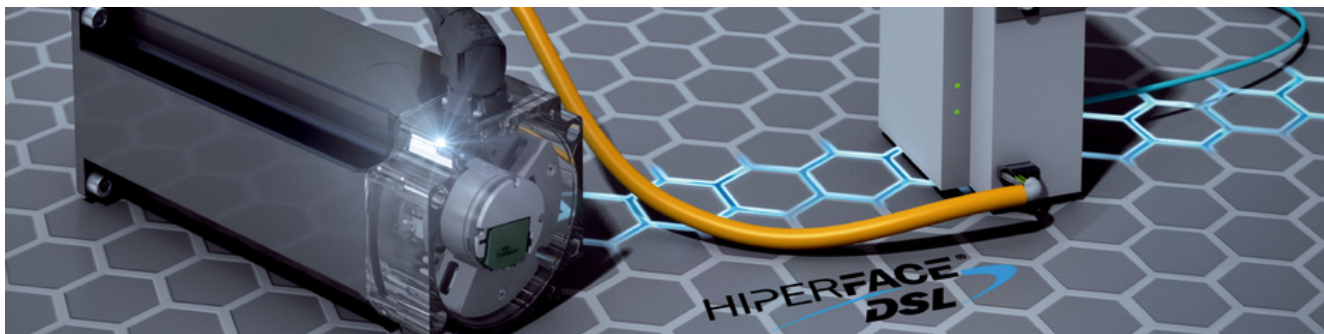
The motor feedback system reliably detects the numerous parameters of a servo motor such as speed, position, acceleration and temperature and saves them in a mission time histogram.



Thanks to HIPERFACE DSL, encoder communication is integrated directly into the motor cable, which minimizes cabling work.



The PGT-13-S programming tool was specially developed for data integration and visualization for sensors with HIPERFACE DSL® interface. It facilitates the operation, configuration, testing and implementation of compatible sensors.



Powerful, especially reliable HIPERFACE DSL communication interface

Data is transmitted from the EKS/EKM36 into the motion system via the digital HIPERFACE DSL motor feedback protocol. This reliable communication interface also makes the motor feedback system suitable for integration into safety applications. Even safe motion applications can be easily solved in this way. Only one cable is needed for data transmission. This reduces the connection costs, energy consumption, and space requirements of the devices.

Find out more



For strict requirements: The HIPERFACE DSL® transmits process data with high resolution and accuracy.



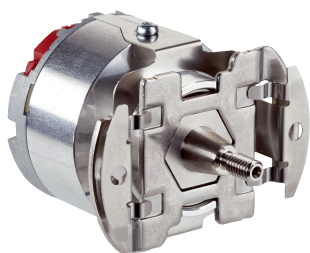
For safety applications: The communication interface of the EKS/EKM36 satisfies safety integrity level 3.



For diagnostics in real time: Thanks to the digital interface, large amounts of data can be permanently analyzed via condition monitoring.



With the digital HIPERFACE DSL one cable technology, it is possible to achieve a high controller performance for servo drives – at a very high safety level.



Technical data overview

Type	For integration
Model	Absolute Singleturn / Absolute Multiturn (depends on variant)
Communication interface	HIPERFACE DSL®
Resolution per revolution	18 bit / 20 bit (depends on variant)
Safety system	- / ✓ (depends on variant)
Mechanical interface	Tapered shaft
Connection type	Male connector, 4-pin
Available memory area	8,192 Byte
Measurement principle	Optical

Product description

The EKS/EKM36 motor feedback systems offer high performance for accurate and safe servo drives in the packaging industry or robotics. Digital communication via HIPERFACE DSL® offers the advantage of one cable technology and supports operators with automated commissioning of the application. Functionally safe applications can be easily implemented thanks to safe speed detection. The universal attachment design and the reliable and maintenance-free mechatronic multiturn are further features of the EKS/EKM36.

At a glance

- Motor feedback system with HIPERFACE DSL® interface
- Compact, rugged design with 36 mm diameter
- Up to 20 bit resolution per revolution and 4,096 revolutions measurable with the multiturn system
- Facility for connecting an external temperature sensor
- E²Prom with 8 KB of free memory space
- SIL2-certified (only applies to EKS/EKM36-2...)
- Service life histogram

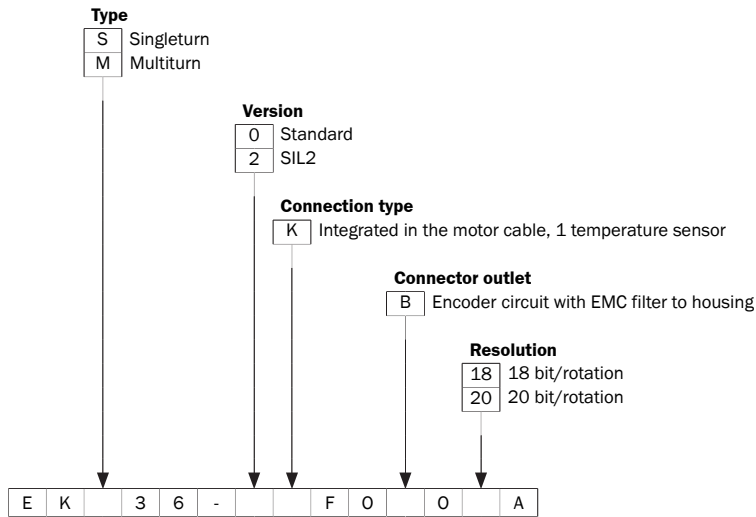
Your benefits

- Saving all analog components on the controller part due to exclusively digital data transmission
- Enormous cost saving as the separate encoder cable is longer necessary, data transmitted synchronously to the controller cycle
- Minimal cabling thanks to integration of the encoder communication into the motor cable
- Optimization of the controller circuit via automated synchronization with the controller cycle

Type code

Other models and accessories → www.sick.com/EKS_EKM36

EKS/EKM36



Ordering information

Other models and accessories → www.sick.com/EKS_EKM36

- **Communication interface:** HIPERFACE DSL®
- **Model:** Absolute Singleturn
- **Type:** for integration
- **Mechanical design:** tapered shaft
- **Connection type:** male connector, 4-pin
- **Operating temperature range:** -20 °C ... +115 °C (Given typical thermal connection between motor flange and encoder stator coupling. The max. internal sensor temperature may not exceed 125 °C.)

Resolution per revolution	Safety system	Type	Part no.
18 bit	✓	EKS36-2KF0B018A	1084231
	-	EKS36-0KF0B018A	1084229
20 bit	✓	EKS36-2KF0B020A	1084232
	-	EKS36-0KF0B020A	1084230

- **Communication interface:** HIPERFACE DSL®
- **Model:** Absolute Multiturn
- **Type:** for integration
- **Mechanical design:** tapered shaft
- **Connection type:** male connector, 4-pin
- **Operating temperature range:** -20 °C ... +115 °C (Given typical thermal connection between motor flange and encoder stator coupling. The max. internal sensor temperature may not exceed 125 °C.)

Resolution per revolution	Safety system	Type	Part no.
18 bit	✓	EKM36-2KF0B018A	1084235
	-	EKM36-0KF0B018A	1084233
20 bit	✓	EKM36-2KF0B020A	1084236
	-	EKM36-0KF0B020A	1084234

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