



## SES/SEM

Motor feedback system with HIPERFACE® and mechatronic multi-turn

**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>	32 / 64 (depending on type)
<b>Mechanical interface</b>	Through hollow shaft
<b>Connection type</b>	Male connector, 8-pin
<b>Available memory area</b>	2,048 Byte E <sup>2</sup> PROM 2048

### Product description

The trend toward compact and rugged direct drives in factory automation has clearly strengthened in recent years. With the SES/SEM rotative motor feedback system with industrial HIPERFACE® standard interface, SICK is providing new options for hollow shaft types and direct drives. The motor feedback system, which works with holistic sensing, is mounted directly on the drive shaft without addition mounting tools and renders transmission components such as timing belts or couplings unnecessary. A mechanical multiturn function is also integrated into the device, which eliminates the need for additional components such as external buffer batteries. The small design saves space and weight, and is rugged, wear-free, and reliable thanks to the bearing-free technology.

### At a glance

- Singleturn and multiturn variants with 25 mm hollow shaft and 50 mm hollow shaft
- 32 and 64 sine-cosine periods per revolution, 4,096 revolutions with the multiturn variant
- HIPERFACE® interface with extended type label
- Maximum speed: 6,000 rpm and 8,500 rpm
- Easy mounting without special mounting tools
- High shock and vibration resistance

### Your benefits

- Integrated mechanical multiturn function for additional measuring of revolutions without external battery
- Direct mounting on the drive shaft renders transmission components such as timing belts or couplings unnecessary
- Simple, compact design, wear-free, low maintenance costs
- Quick installation without special mounting tools: easy to put on, turn, and go
- Rugged and reliable thanks to high shock and vibration resistance
- Reliable establishment of the absolute position at high speeds
- Mounting check for reading out the axial position of the rotor

### Fields of application

- Hollow shafts and torque motors
- Applications with axial movements, e.g. extrusion machines, injection molding machines
- Revolving machines and woodworking machines
- Rotary table applications
- Robot applications

## Ordering information

Other models and accessories → [www.sick.com/SES\\_SEM](http://www.sick.com/SES_SEM)

- **Communication interface:** HIPERFACE®
- **Model:** Absolute Singleturn
- **Type:** for integration
- **Mechanical design:** through hollow shaft
- **Connection type:** male connector, 8-pin
- **Operating temperature range:** -30 °C ... +115 °C

Sine/cosine periods per revolution	Inner diameter of hollow shaft	Type	Part no.
32	25 mm	SES70-HN025AK22	1074671
64	50 mm	SES90-HN050AK22	1075350

- **Communication interface:** HIPERFACE®
- **Model:** Absolute Multiturn
- **Type:** for integration
- **Mechanical design:** through hollow shaft
- **Connection type:** male connector, 8-pin
- **Operating temperature range:** -30 °C ... +115 °C

Sine/cosine periods per revolution	Inner diameter of hollow shaft	Type	Part no.
32	25 mm	SEM70-HN025AK22	1074669
64	50 mm	SEM90-HN050AK22	1075348

## 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)