



ELS/ELM35

Absolute motor feedback system with BISS C or RS-485 for servo applications

SICK
Sensor Intelligence.

Advantages

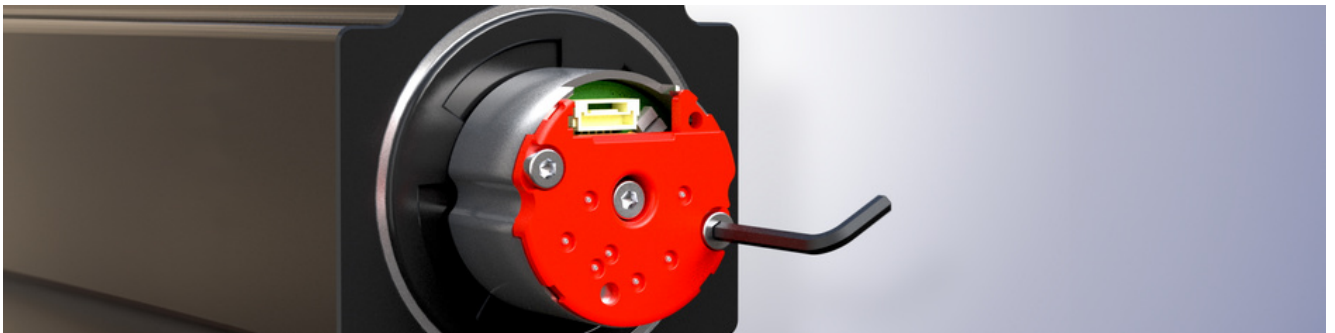


Virtually maintenance-free thanks to the mechanical multiturn gearbox

The mechanical multiturn gearbox of the ELS/ELM35 motor feedback system is almost maintenance-free. Because the gearbox stores the number of revolutions of the shaft, the device requires no batteries. The revolutions are recorded electronically during operation of the motor.



The mechanical multiturn gearbox of the ELS/ELM35 requires no batteries and makes maintenance almost superfluous, thereby reducing unplanned downtimes.

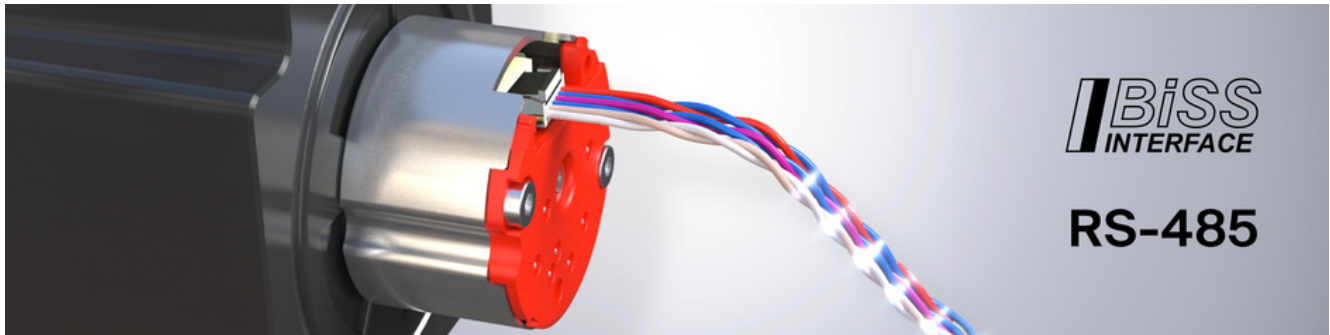


Installed in no time at all

The ELS/ELM35 is easy to mount: It is quickly attached to the servo motor even without technical knowledge. This saves time and money. The blind hollow shaft and the drive shaft can be safely and securely connected to one another using an integrated mounting screw. And the ELS/ELM35 is quickly mounted onto a servo motor using two housing screws. A hex key is all that is needed for all mounting steps.



Quickly mounted and operational: The device is easy to attach to servo motors. This saves time and money – and at the same time reduces the potential for error during mounting.



Fast data transmission

The ELS/ELM35 is equipped with the digital BiSS-C or RS-485 interface, which is commonly used in industry. It enables a continuous data transmission almost in real time. Thanks to the BiSS-C or RS-485 interface and the compact housing, the motor feedback system requires little space and is therefore suitable for small servo motors. A further advantage is the simple sensor integration because many motor controllers support the motor feedback protocol of the ELS/ELM35.



Very reliable and economical: Thanks to the digital BiSS-C or RS-485 interface, actuators can be controlled simply and in almost real time.



Technical data overview

Type	For integration
Model	Absolute Singleturn / Absolute Multiturn (depends on variant)
Communication interface	BiSS C / Serial (depends on variant)
Resolution per revolution	24 bit
Mechanical interface	Blind hollow shaft, 6 mm Blind hollow shaft, 8 mm
Connection type	Male connector, 6-pin ¹⁾ Male connector, 6-pin ²⁾
Available memory area	2,048 Byte

¹⁾ 4-wire: Communication interface RS-485 (BiSS C BP3), 2-wire: Power interface.

²⁾ 2-wire: communication interface detail RS-485, 2-wire: current.

Product description

The ELS/ELM35 motor feedback systems offer good performance for rugged servo drives in mobile applications with limited installation space. Digital communication via BiSS C or RS-485 ensures fast data transmission and supports the automated commissioning of the application. Other features of the ELS/ELM35 include the universal attachment design and the reliable and maintenance-free mechatronic multiturn.

At a glance

- Efficient and cost-effective data transmission through digital, quick-to-implement BiSS-C or RS-485 interface
- Virtually maintenance-free thanks to mechanical, battery-free multiturn drive
- Withstands high loads due to rugged housing and large mechanical tolerances of the bearing-free system
- Thanks to the standardized BiSS-C or RS-485 interface, can be integrated in numerous servo motors without additional effort
- Quickly installed with a hex key using the mounting screw already integrated into the device and two housing screws
- 36 mm housing diameter, 22 mm length, and 6 mm or 8 mm diameter blind hollow shaft allow it to be installed even in small servo motors

Your benefits

- Highly cost-effective and ideal for standard applications
- Easy operation
- High resilience, even when used in mobile applications
- Suitable for many applications
- Quick and easy mounting
- Also suitable for applications with little installation space

Fields of application

- Speed and position measurement in servo motors
- Robotics
- Automation solutions for industrial processes
- Automation solutions for mobile applications

Ordering information

Other models and accessories → www.sick.com/ELS_ELM35

- **Communication interface:** BiSS C
- **Model:** Absolute Singleturn
- **Type:** for integration
- **Resolution per revolution:** 24 bit
- **Mechanical design:** blind hollow shaft
- **Connection type:** male connector, 6-pin (4-wire: Communication interface RS-485 (BiSS C BP3), 2-wire: Power interface.)
- **Operating temperature range:** –20 °C ... +105 °C

Type	Part no.
ELS35-OCA0A024A	1133558
ELS35-OCA0A024A-40	1133562
ELS35-OCB0A024A	1149615

- **Communication interface:** BiSS C
- **Model:** Absolute Multiturn
- **Type:** for integration
- **Resolution per revolution:** 24 bit
- **Mechanical design:** blind hollow shaft
- **Connection type:** male connector, 6-pin (4-wire: Communication interface RS-485 (BiSS C BP3), 2-wire: Power interface.)
- **Operating temperature range:** –20 °C ... +105 °C

Type	Part no.
ELM35-OCA0A024A	1133559
ELM35-OCA0A024A-40	1133563
ELM35-OCB0A024A	1149616

- **Communication interface:** Serial RS-485
- **Model:** Absolute Multiturn
- **Type:** for integration
- **Resolution per revolution:** 24 bit
- **Mechanical design:** blind hollow shaft
- **Connection type:** male connector, 6-pin (2-wire: communication interface detail RS-485, 2-wire: current.)
- **Operating temperature range:** –20 °C ... +105 °C

Type	Part no.
ELM35-ODA0A024A	1151242
ELM35-ODB0A024A	1151241

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.”

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