# On the up with SICK sensor solutions

SICK at interlift 2015

Waldkirch, September 2015 – Sensor solutions for elevators, escalators, and moving sidewalks are the focus of SICK AG's presentation at the interlift 2015 trade fair in Augsburg. With the SRS50, SICK will be presenting a motor feedback system featuring a HIPERFACE® interface for speed monitoring in elevators. An additional highlight is the DBS60 incremental encoder for the positioning of the elevator car in the shaft copying system.

**Today, modern elevators offer maximum travel comfort: Near silent operation and smooth acceleration and deceleration. A number of parts are responsible for this, including the SICK encoder, which supplies the drive with feedback signals from the motor. But in addition to ensuring comfort, SICK solutions** are also key components for many other aspects. For example, they reduce noise generation in the elevator, making it suitable for operation in residential and office buildings. Sudden load and force peaks are reduced, which has a positive effect on the mechanics and the motor. This, in turn, extends the service life of all components and ensures the highest possible reliability and availability, low maintenance requirements, and maximum efficiency.

**SRS50: High-resolution motor feedback system**

Motor feedback systems from the SRS/SRM50 product family are used around the world in a large variety of applications and environments. With 1024 sine/cosine signals per revolution, this family represents the high-end solution for motor feedback systems with the HIPERFACE® interface. They use a precise metal code disk and the largest possible distance between the two ball bearings. Absolute position indication is based on an increment number of 32,768 increments per revolution and a maximum of 4,096 revolutions. Storage of motor-specific data in the electronic type label and the programming are important features of this product family. The special motor feedback systems certified to SIL2/PL d meet current requirements with regard to safety technology and make the certification process easier.

**DBS60: Rugged, versatile incremental encoders for industrial applications**

The DBS60 Core is a rugged incremental encoder with a diameter of 58 mm and a compact mounting depth. It offers a large range of mechanical and electrical interfaces and allows easy fitting in existing applications. The robust mechanical design ensures high lifetime at high radial shaft loads. The solid shaft models are available with face mount flange and servo flange. The hollow shaft versions are available with blind hollow and through hollow shafts for shafts up to 5/8" (15.875 mm). The optional shaft insulation and the shaft clamping on the back of the encoder are unique to the hollow shafts. In addition to the standard 5 V and 24 V TTL/RS422 and 24 V HTL/push-pull interfaces, the DBS60 Core features a flexible universal interface, which fits most control requirements and combines 5 V TTL and 24 V HTL in a single product. The high IP 65 enclosure rating and the large bearing distance make this a rugged and reliable solution, even at high shaft loads. The resolution of the DBS60 Core is up to 5,000 pulses.

## Solutions for elevators, escalators, and moving sidewalks

SICK supplies a wide range of sensors and sensor solutions for building automation: Inductive, magnetic, and opto-electronic sensors featuring light switches and light grids, and even pressure monitoring systems – the right solution for every application. SICK sensors supply reliable information for monitoring the elevator car, the drive, the release agent, the controls, the doors, the shaft system, and the safety elevator components. All our solutions are compliant with the new EN81 standards series for elevator systems. Various sensor technologies are used to ensure optimum performance. The range of sensors, modularity, and flexibility ensure functional safety as well as a simple installation.

Sensors also play a significant role in monitoring brakes and shaft detection systems with speed and positioning, monitoring the elevator door, measuring pressure in hydraulic elevators, safety protection of hoistway gaps and pits, as well as monitoring the end position for escalators and moving sidewalks. It makes no difference whether the elevator operates using linear drives, drive traction sheaves, or hydraulics, whether it is for people, loads, or goods, or whether innovative future technologies, such as roomless, gearless, or wireless systems, are used.

SICK offers the SICK LifeTime Services to provide top-quality services around the world, as well as a range sensors and services to assist in both system design and system modernization. These services enhance personal safety and increase machine and system productivity to provide a solid foundation for a sustainable business operation. Available services range from product-independent consultations to traditional product service offerings. Thanks to the global sales and service network, SICK products are available all over the world.

**Hall 2, Stand 2182**

Image: IM0022393.jpg
Secure travel and holding with SICK sensor solutions

Image: IM0054646.jpg
DBS60 – the robust and versatile incremental encoder for industrial applications

Image:
SRS50, the high-resolution motor feedback system

SICK is one of the world's leading manufacturers of sensors and sensor solutions for industrial applications. Founded in 1946 by Dr. Erwin Sick, the company is headquartered in the German town of Waldkirch, in the Breisgau region near the city of Freiburg. It is a technology and market leader, maintaining a global presence with more than 50 subsidiaries and equity investments as well as numerous agencies. In the 2014 fiscal year, SICK had around 7,000 employees worldwide and generated Group revenues of €1,099.8 million.