

NEW SENSOR TECHNOLOGY



NEW GENERATION SENDIX ENCODERS

Incremental and absolute

MORE THAN JUST A SENSOR

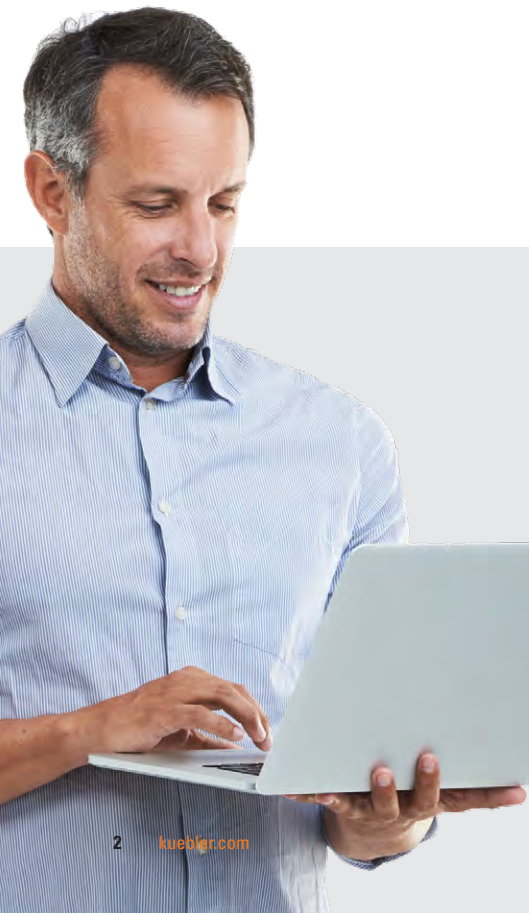
The new generation of Sendix encoders

Sendix encoders have been an integral part of the Kübler product portfolio for many years and impress customers worldwide with their reliability, robustness, and versatility. Building on this success story, Kübler has developed a uniform optical sensor platform for incremental and absolute encoders. At the heart of the new generation is innovative sensor technology combined with powerful signal processing and a particularly robust mechanical design:

The new Sendix encoders of the K series

But that's not all

The concept behind the new Sendix platform also incorporates many aspects that affect the product throughout its entire life cycle with the user.



Completely customer-oriented ...

Technical planning

Innovative, future-proof technology – simple product selection – a suitable solution for every new concept – just one design-in ?

Technical purchasing

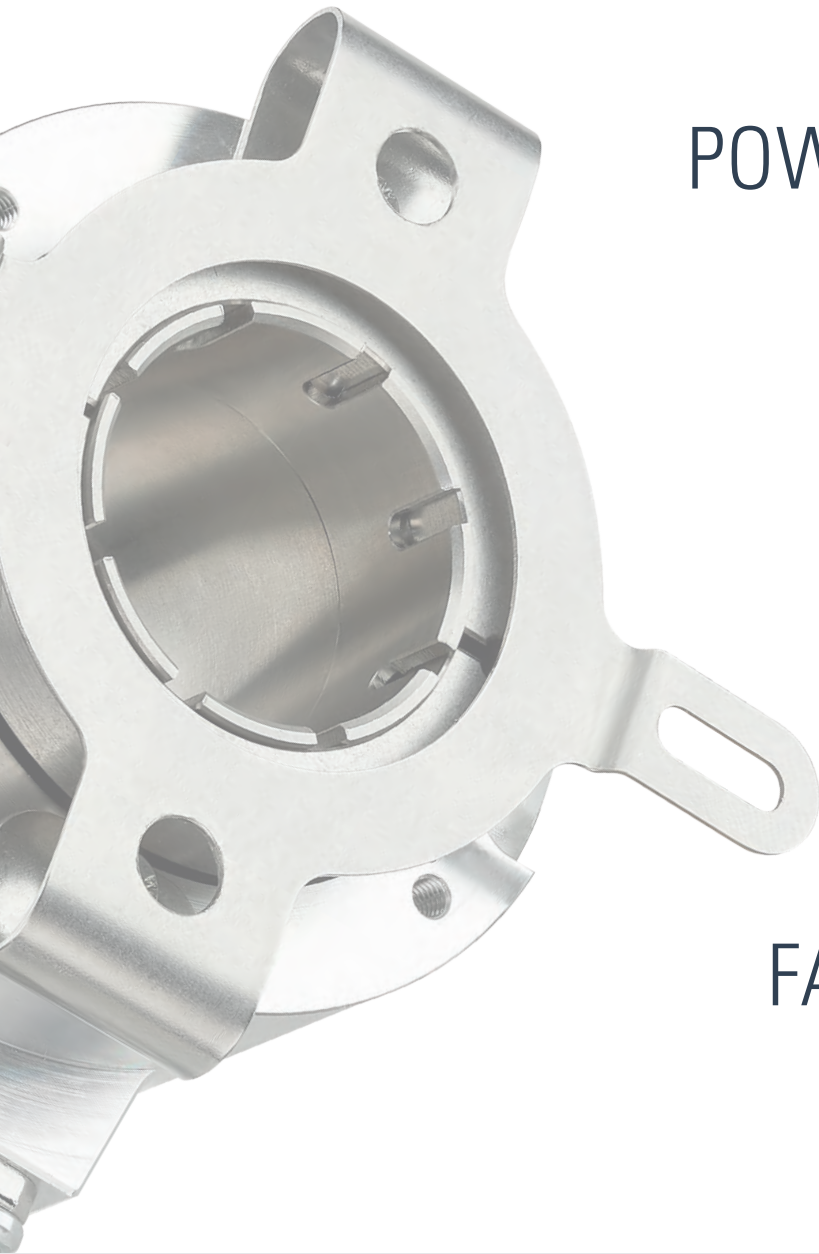
Fast, reliable delivery – long-term availability guaranteed – quick replacement available in case of emergency ?

Kübler Sendix encoders



Kübler Sendix encoders





POWERFUL

RELIABLE

FLEXIBLE

FAST

... across the entire value chain

Product management

Reliable technologies – high flexibility for all requirements – customizable solutions – consulting service – complete documentation ?

Manufacturing / Assembly

Simple and error-free installation – no complex adjustments for mounting and cabling – as few mounting variants as possible ?

Kübler Sendix encoders

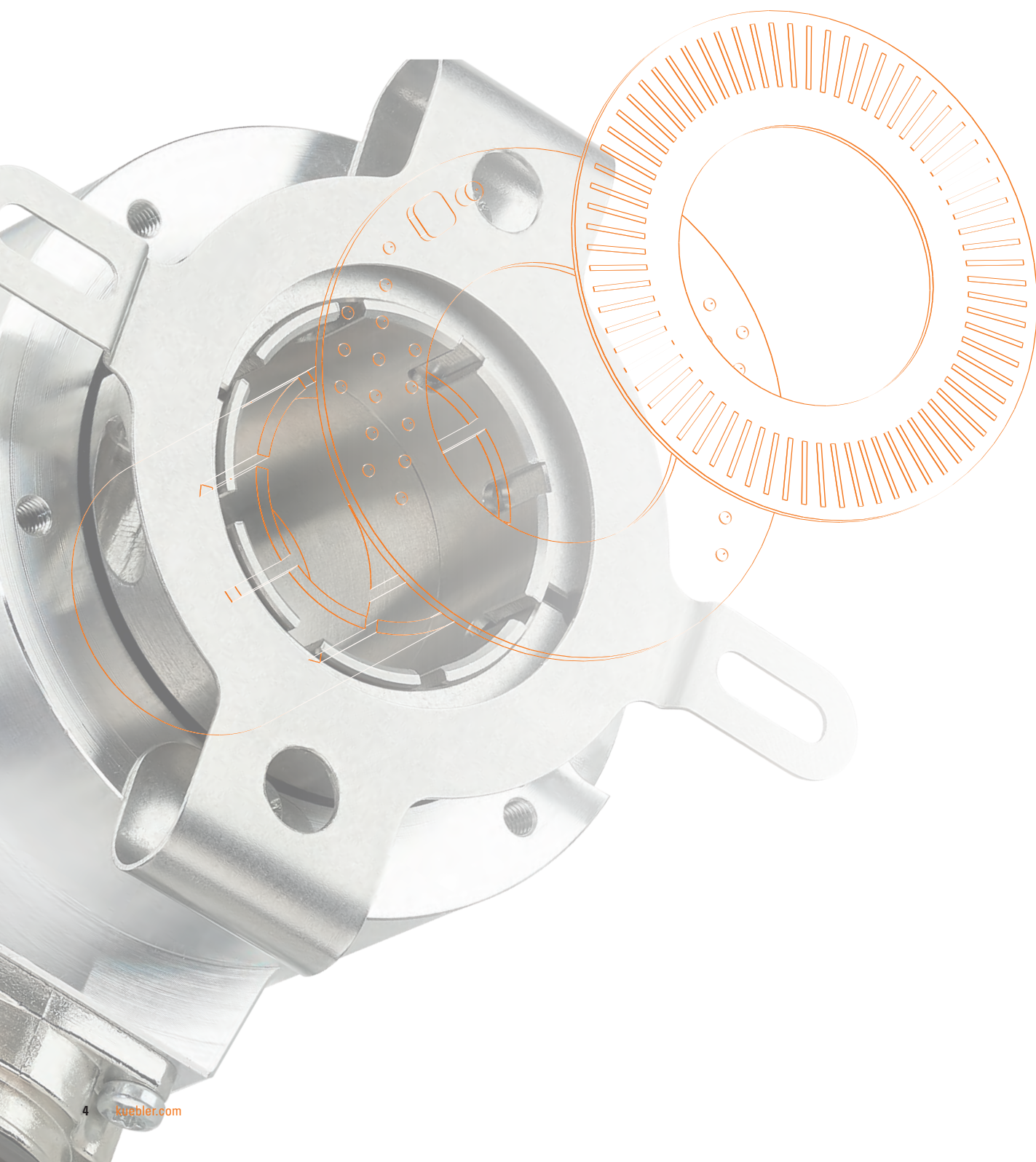


Kübler Sendix encoders



POWERFUL

High-resolution sensor technology | High-performance electronics



High-resolution optical sensor technology

The new Kübler Sendix encoders are based on reflective optical sensor technology with a metal code disc. The LED and sensor for receiving the light signal are located on the same circuit board. Compared to a transmissive principle with LED and sensor modules on different levels, this results in a significantly more compact design of the entire sensor unit.

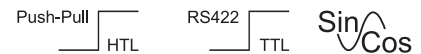
- ⊕ Space-saving reflective optical sensor system
- ⊕ Robust metal code disc
- ⊕ Security of supply thanks to state-of-the-art components



High-performance digital signal processing

Equipped with state-of-the-art electronics, digital signal processing enables resolutions of up to 36,000 pulses per revolution for incremental speed and 21-bit singleturn and 12-bit multiturn for absolute position data.

- ⊕ Incremental and absolute signal formats
- ⊕ Compatible with all common interfaces



Individually programmable

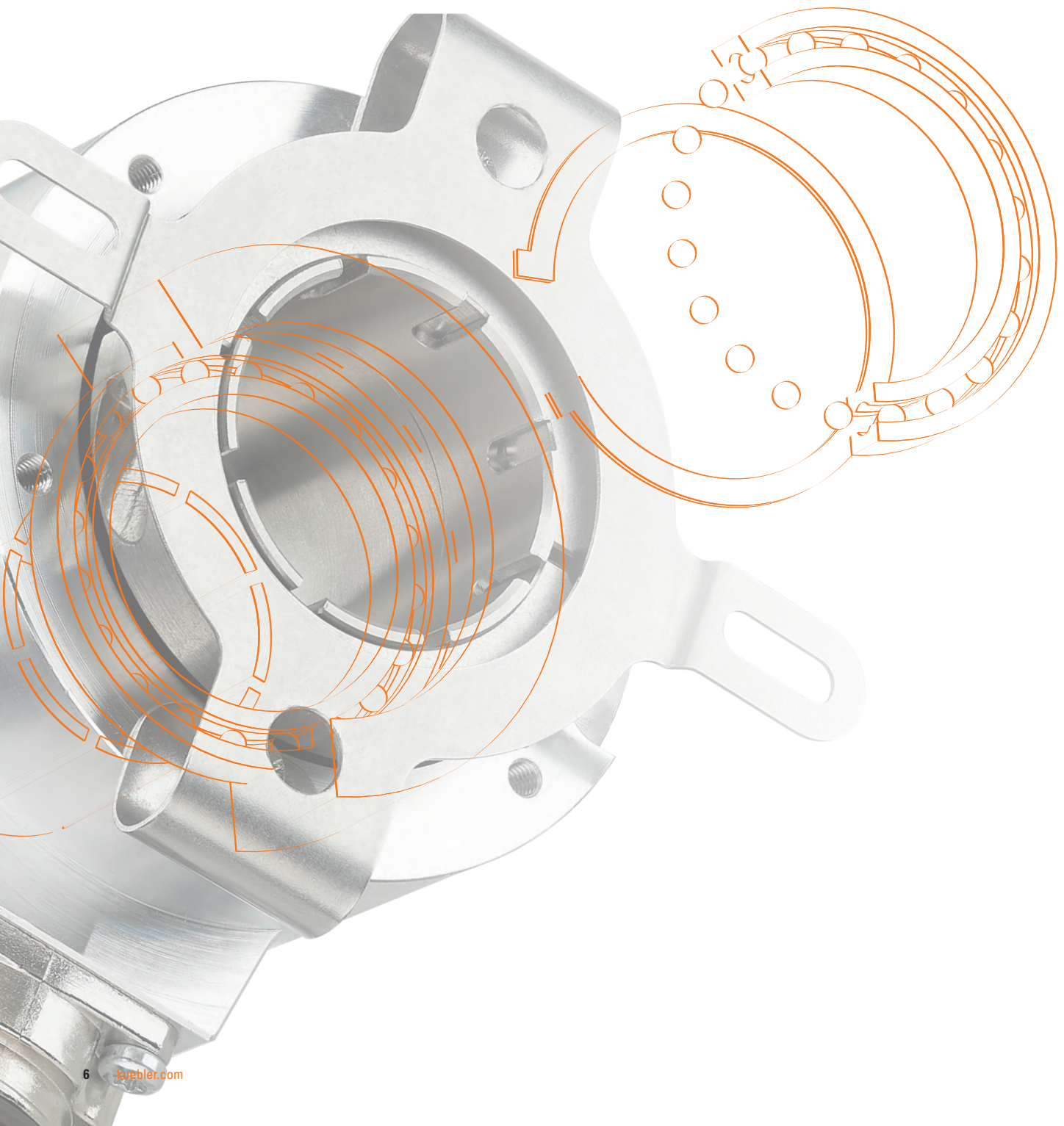
The new Sendix K58l encoders from the Performance-Line are particularly impressive due to the possibility of programming various parameters. The settings can be made before or after installation using a Kübler programming tool. This enables a quick, direct response to changing or new requirements without having to replace the encoder.

- ⊕ Pulse numbers up to 36,000 ppr
- ⊕ Output signal
- ⊕ Counting direction
- ⊕ Zero pulse settings (length, links)



RELIABLE

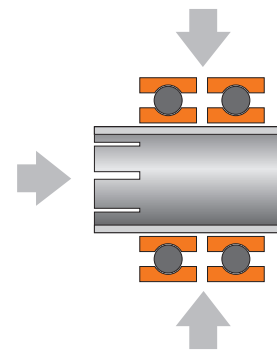
Robust bearing construction | Robust housing | Robust concept



Robust bearing construction Safety-Lock 2.0™

With locked bearings, large bearing spacing, and extra-strong outer bearings, Kübler's Safety-Lock™ bearing construction has been synonymous with high stability under vibration and robustness against installation errors for years.

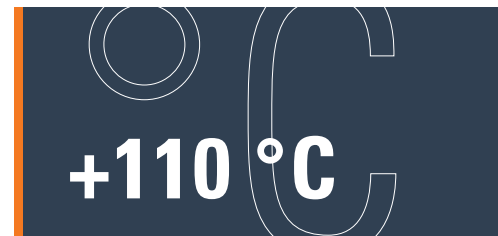
- ⊕ High load capacity in a compact housing
- ⊕ Prevention of machine downtime and repairs



Robust housing concept

Robust and innovative housing-flange connection to withstand high shocks and vibrations.

- ⊕ High shock and vibration resistance
- ⊕ Variants up to +110°C operating temperature
- ⊕ Variants for Ex 2/22 areas and salt spray tested surface protection



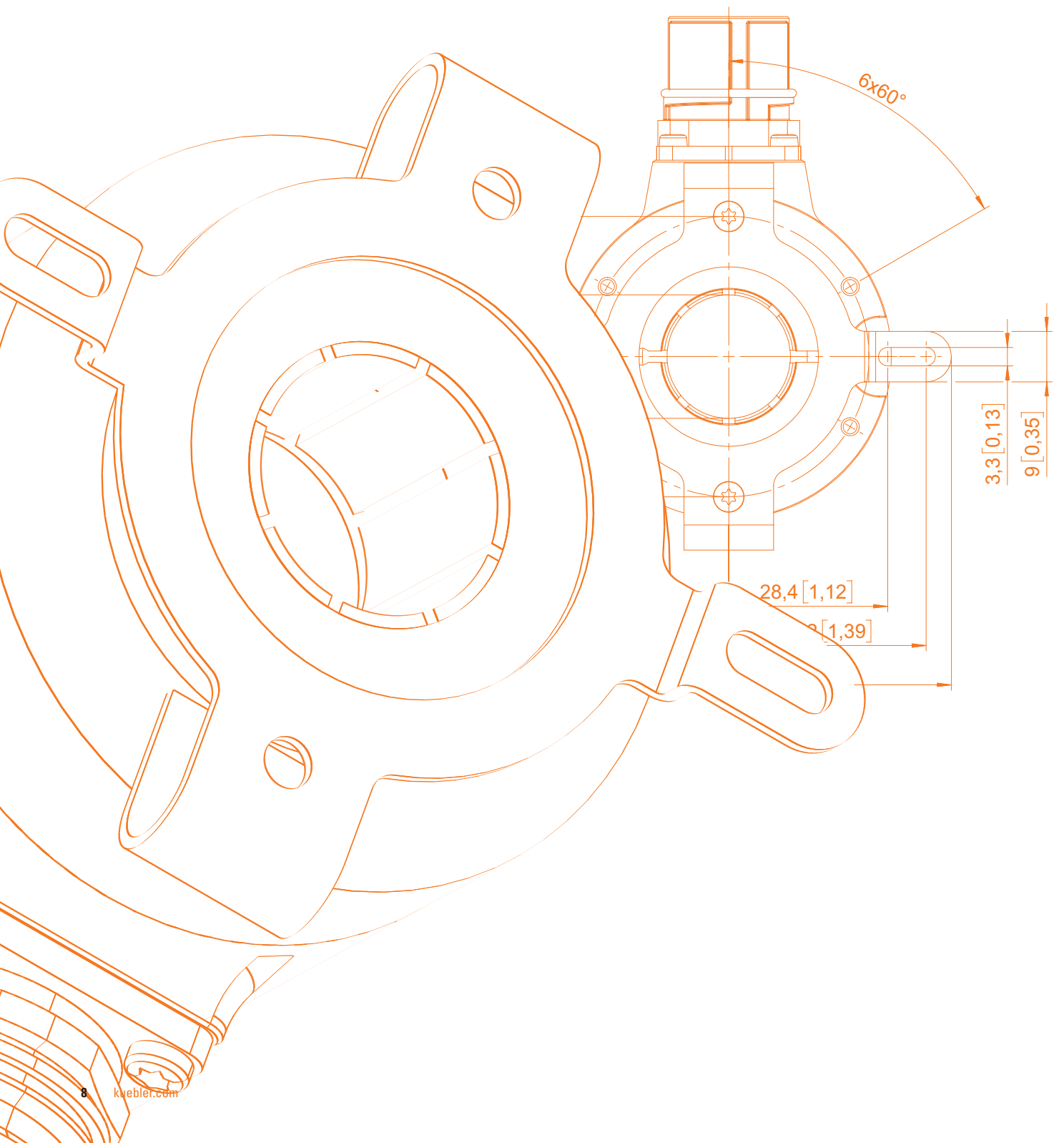
Robust sensor technology

Optical reflective sensor technology generally enables a simple and robust design. At Kübler, the individual elements such as the code wheel and sensor board are already pre-assembled. This eliminates sources of error during installation and calibration, and the entire system remains even more robust during use.

- ⊕ Insensitive sensor technology, pre-assembled as a component
- ⊕ Innovative, highly efficient EMC shielding technology for maximum interference immunity

FLEXIBLE

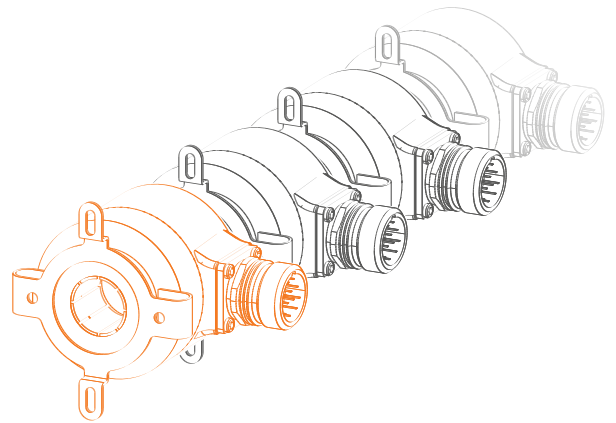
Consistent platform concept | Across all variants



One plan – regardless of the variant used

FLEXIBLE planning without a jungle of variants – whether Industrial-Line or Performance-Line, whether size 58 mm or 80 mm, whether incremental or absolute, all Sendix encoders follow a uniform concept. A common architecture, the same interfaces, and standardized mounting options enable smooth planning and easy component selection – no matter which variant you choose.

- ⊕ Uniform design-in for users
- ⊕ Easy replacement of installed products with new variants



Programmable Performance-Line in the test phase – Industrial-Line in series production

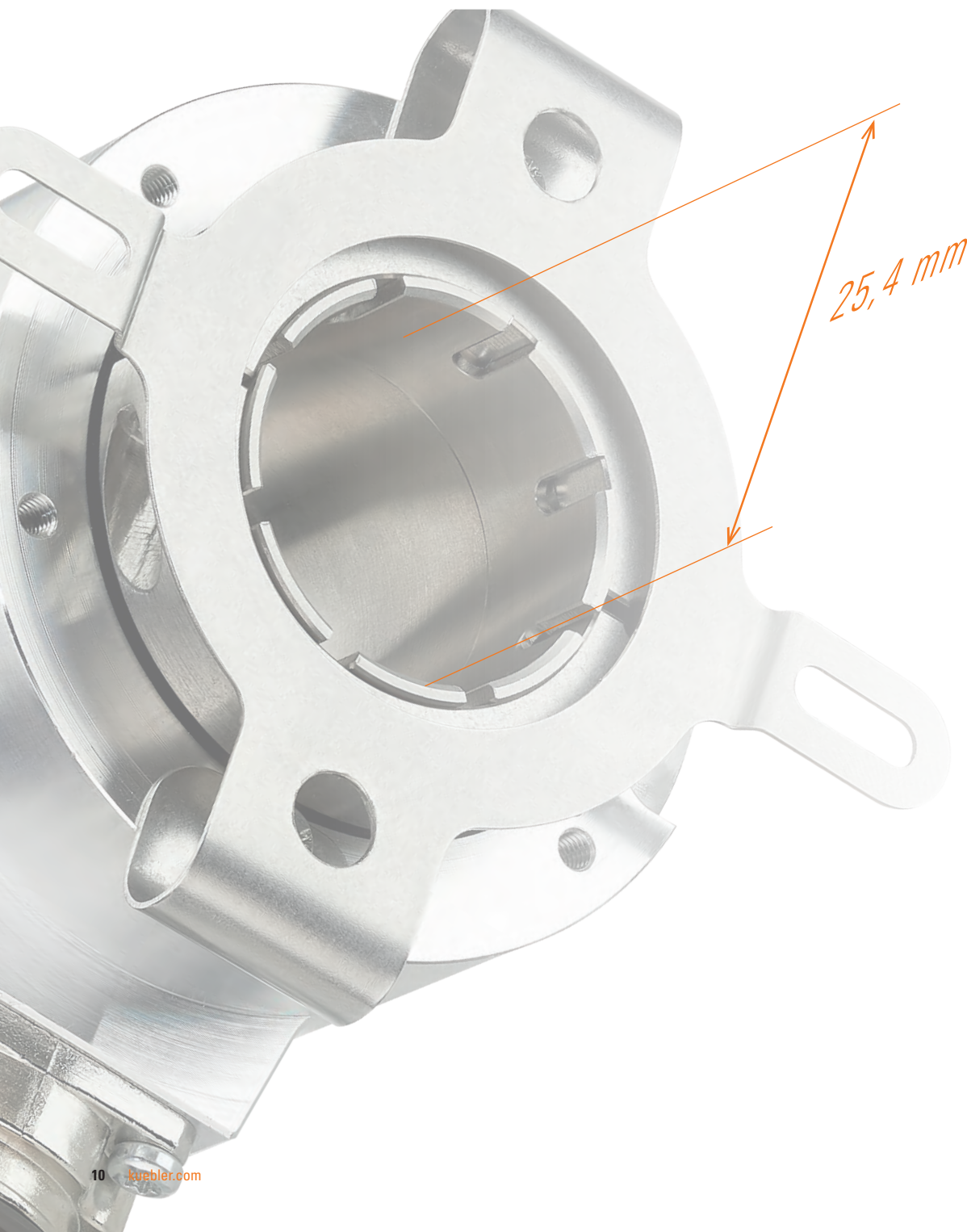
Another major advantage of the identical construction across all variants is the interchangeability of performance features offered by the rotary encoder. During the test phase for a project, it can be helpful to test different process parameters using the programmability of the Performance-Line. Once the appropriate settings have been found, the corresponding variant of the Industrial-Line fits 1:1 into the application for series production.

- ⊕ Full performance during the test phase
- ⊕ Cost advantages for the series

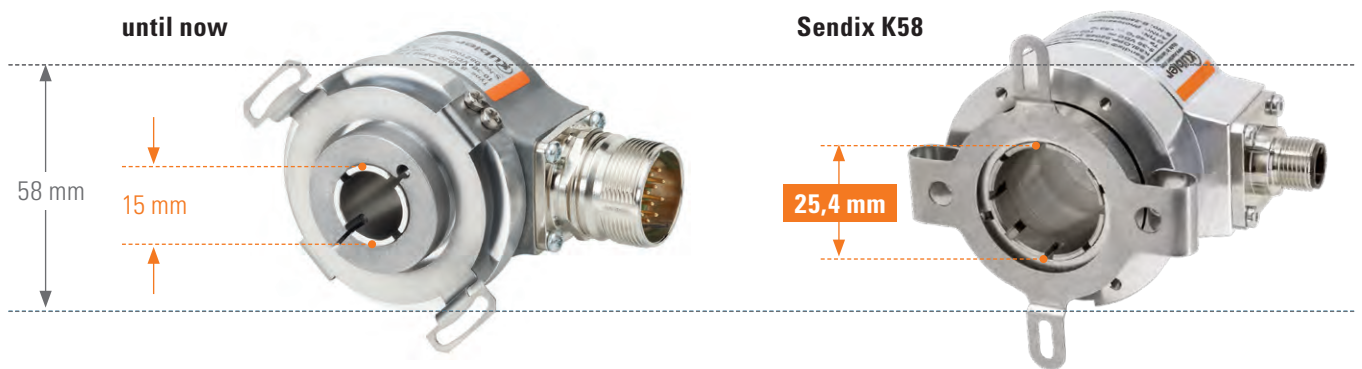


FLEXIBLE

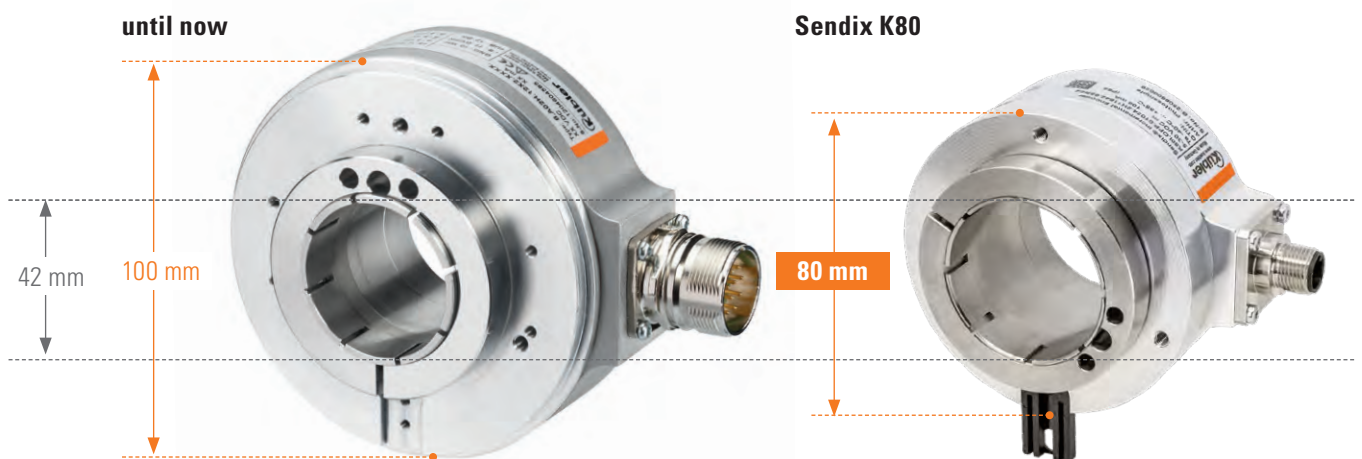
New hollow shaft options compared



Sendix K58 encoders – larger hollow shaft / same size



Sendix K80 encoders – identical hollow shaft / more compact design

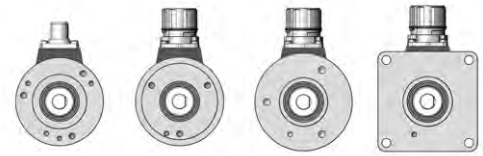


FLEXIBLE

Many options | Individual variations

Flexible in mechanical connection

Whether spring elements, various stator couplings, or torque arms – we offer the right mounting solution for hollow shaft encoders or flange versions of shaft encoders. Reliable, compact, and always the right solution for your application.



Shaft Clamping flange Synchro flange Servo flange Square flange



Hollow shaft ≤ 15 mm Spring element Torque stop Stator coupling ø 63 mm Stator coupling ø 65 mm



Hollow shaft > 15 mm Spring element Torque stop Stator coupling ø 56 -70 mm

Flexible with insulating insert

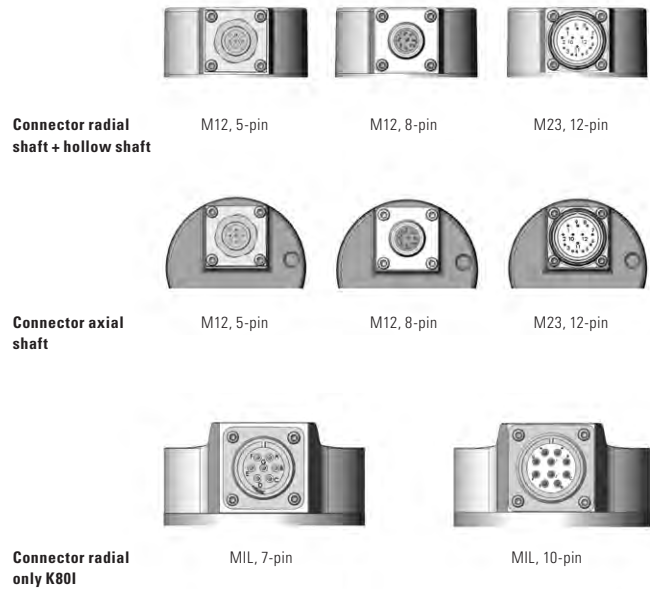
Insulating insert for hollow shafts allow each encoder to be quickly adapted to different drive shafts. At the same time, the reducing inserts ensure electrical isolation between the rotary encoder and the drive.



Flexible electrical connection

Extensive range of connection options:

- Connectors M12, M23, MIL
- Cable connection with open end
- Cable connection with connector



Flexible and rapid implementation of individual variants

Customer-specific variants can be quickly and easily connected via the internal connector on the electronics board. Various cover options with different connection concepts and interfaces such as CANopen or Industrial Ethernet are available – the sensor core and mechanical design always remain the same.

FAST

Fast delivery | Easy assembly

Sendix encoders – optimized for fast production

The standardized rotary encoder platform is optimized for both the application and our production processes.

- Reduced complexity
- Thanks to the pre-assembled sensor unit, no calibration is required after installation
- The intelligent bearing design eliminates waiting time during the adhesive curing process

This supports our delivery promise:

One encoder within 24 hours – 10 encoders within 10 working days

- ⊕ Fast delivery service for the individual encoder
- ⊕ Minimized downtime

24ONE



24ONE





KÜBLER WORLDWIDE

600 EMPLOYEES · 4 PRODUCTION SITES · PRESENCE IN OVER 50 COUNTRIES

EUROPE AUSTRIA · BELARUS · BELGIUM · BULGARIA · CROATIA · CZECH REPUBLIC · DENMARK · ESTONIA · FINLAND · FRANCE · GERMANY · GREAT BRITAIN · GREECE · HUNGARY · ICELAND · IRELAND · LITHUANIA · ITALY · NETHERLANDS · NORWAY · POLAND · PORTUGAL · RUSSIA · SLOVAKIA · SLOVENIA · SPAIN · SWEDEN · SWITZERLAND · TURKEY · UKRAINE
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