



# IO-LINK DOOR OPENER FOR INDUSTRY 4.0 / IIoT



## Suitable encoders, draw-wire encoders, measuring wheel systems and LCD touch displays for your application.

IO-Link is establishing itself more and more on the market - and the trend is rising. IO-Link is used today in machine tools, production lines, intralogistics and packaging machines. IO-Link stands for simplicity, cost reduction and as a starting point for implementing future Industry 4.0 concepts. IO-Link products from Kübler open up new possibilities for your application. Let us make your existing or new machines / plants future-proof. Our IO-Link experts will be happy to advise you.

#### Your benefits with IO-Link products from Kübler



#### Saving time and costs

IO-Link products are already noticeable during installation / commissioning. Thanks to the insensitive transmission of IO-Link communication, simple and unshielded cables are used for this purpose. Kübler products are connected using standardized M8 or M12 industrial connectors. For smart sensors the parameter data comes directly from the controller and therefore does not need to be parameterized manually. The result is a faster machine that is ready for operation.



#### **Efficient production thanks to Smart Sensor Profile**

Flexibly and quickly, users can optimize their machines or entire production to the needs / requirements during operation. This is possible with the Smart Sensor Profile from IO-Link. Thanks to pre-defined profile classes and the corresponding stored function blocks, exchanging a sensor or switching to another sensor technology of the same profile class or other adjustments in the measured values can be implemented quickly and easily.



#### Independently applicable

With the use of IO-Link, a decision is made in favor of a standardized and fieldbus-independent interface, which, as a point-to-point connection, enables direct communication from the controller down to the lowest level of automation. IO-Link masters can thus be used to network almost any fieldbus and control system via a large number of IO-Link devices.



#### Remote diagnosis and condition monitoring

Based on the process data of an IO-Link device delivered in plain text, a deep insight into the processes and applications can be created for the service technicians. As a result, repairs can be initiated in advance and new maintenance concepts established. It also has a positive effect on remote maintenance, as this is easier to organize through IO-Link communication.

#### Industry 4.0 / IIoT ready

Networked and intelligent products are a prerequisite for Industry 4.0. Kübler IO-Link products You are able to say: "Who am I? Where am I? How do I feel?".

In addition to the classic measuring task and transmission of measured values, sensors must also provide further functionalities for networking products and for collecting or transmitting additional information. With IO-Link the "Industry 4.0 / IIoT ready features" (Connectivity, Identification, Diagnostics, Adaptability) defined by Kübler are fully supported.







#### Magnetic single- and multiturn encoders with IO-Link interface

The Sendix M36 encoders with a size of 36 mm as shaft or hollow shaft variants are based on IO-Link Version 1.1 in accordance with IEC 61131-9 and are equipped with the Smart Sensor Profile in addition to the Kübler Standard Profile. The high degree of protection up to IP67 as well as the wide temperature range from -40 °C to +85 °C ensure reliable operation.



#### Draw-wire encoders and measuring wheel systems with IO-Link interface

The new draw-wire encoders and measuring wheel systems with IO-Link interface are a combination of robust mechanics for the detection of linear movements with reliable Kübler encoders from the Sendix M36 and M58 product families. Practical solutions such as the fixed and interchangeable mounting of the encoders on the draw-wire mechanics or spring arms with adjustable contact force on the measuring wheel systems are further benefits of the Kübler products.



#### LCD-Touch IO-Link display

The 573T IO-Link display (IO-Link version 1.1 according to IEC 61131-9) can display a maximum of 2 measured values simultaneously and can be used with 2 additional analog inputs in both single-channel and dual-channel operation. For two-channel operation, all arithmetic operations are available to display sum, difference, ratio or the product. Inputs and outputs are separately scalable.

#### Kübler encoders with Smart Sensor Profile

With the Smart Sensor Profile, IO-Link is taking a step further in the direction of standardization and Industry 4.0. In principle, sensors are classified as follows, regardless of manufacturer or measurement principle:

- Type 1: Fixed switching sensors
- · Type 2: Adjustable switching
- · Type 3: Digital measuring

IO-Link solutions from Kübler can be found, for example, in the type 3 class with the new magnetic absolute Sendix M36 IO-Link encoders. Each profile class has its own profile-specific function blocks, which makes it easy to integrate the sensors into different control systems. The time-consuming, individual and expensive programming of own function blocks is thereby eliminated. By using the function blocks, sensors from the same profile class can be easily exchanged, regardless of the manufacturer or measuring principle. Adjustments such as singleturn resolutions can also be changed without further effort.



#### **BENEFITS SMART SENSOR PROFIL**

- Easy integration into the application
- No individual programming of different function blocks
- Simple exchange of sensors
- Savings in installation time and costs

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