IO-LINK INDUCTIVE COUPLER



CONTACTLESS IO-LINK CONNECTOR

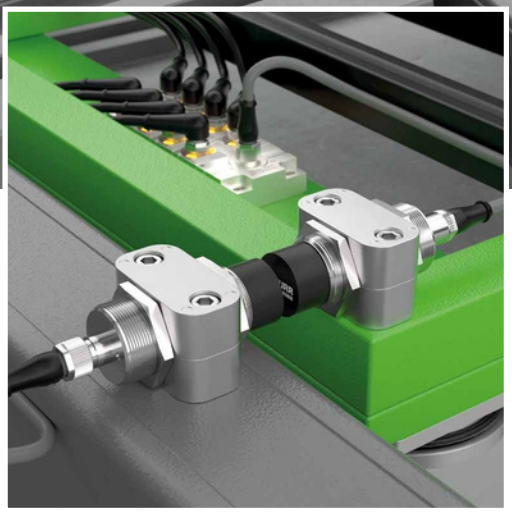
Murrelektronik's IO-Link inductive couplers transmit power and data wirelessly via an air gap. Dynamic pairing allows the primary and secondary sides to be combined flexibly. This opens up new possibilities for modular, scalable systems and enables automation concepts that conventional connectors cannot support. Since the coupling is wear-free, these devices are ideal for connections that are frequently disconnected and reconnected, subjected to movement, or require flexible interconnection.

The inductive couplers can transmit two digital input signals, one digital output signal, or IO-Link. When used with an IO-Link I/O module, up to 16 digital inputs and outputs can be transmitted.

YOUR ADVANTAGES:

- Transmission of IO-Link data and power through an air gap
- Position-independent use
- Plug & Play, no parameterization necessary
- Replaces plug-in and sliding connections
- Short cycle times, fast restart
- No mechanical wear
- Fully potted and tight according to protection class IP67

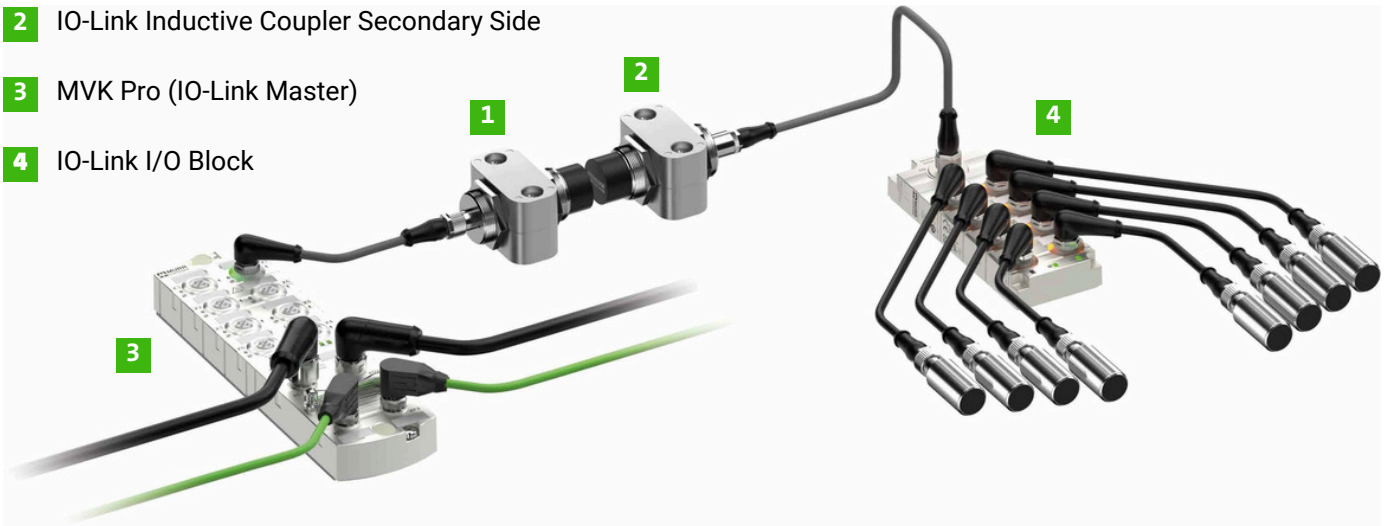


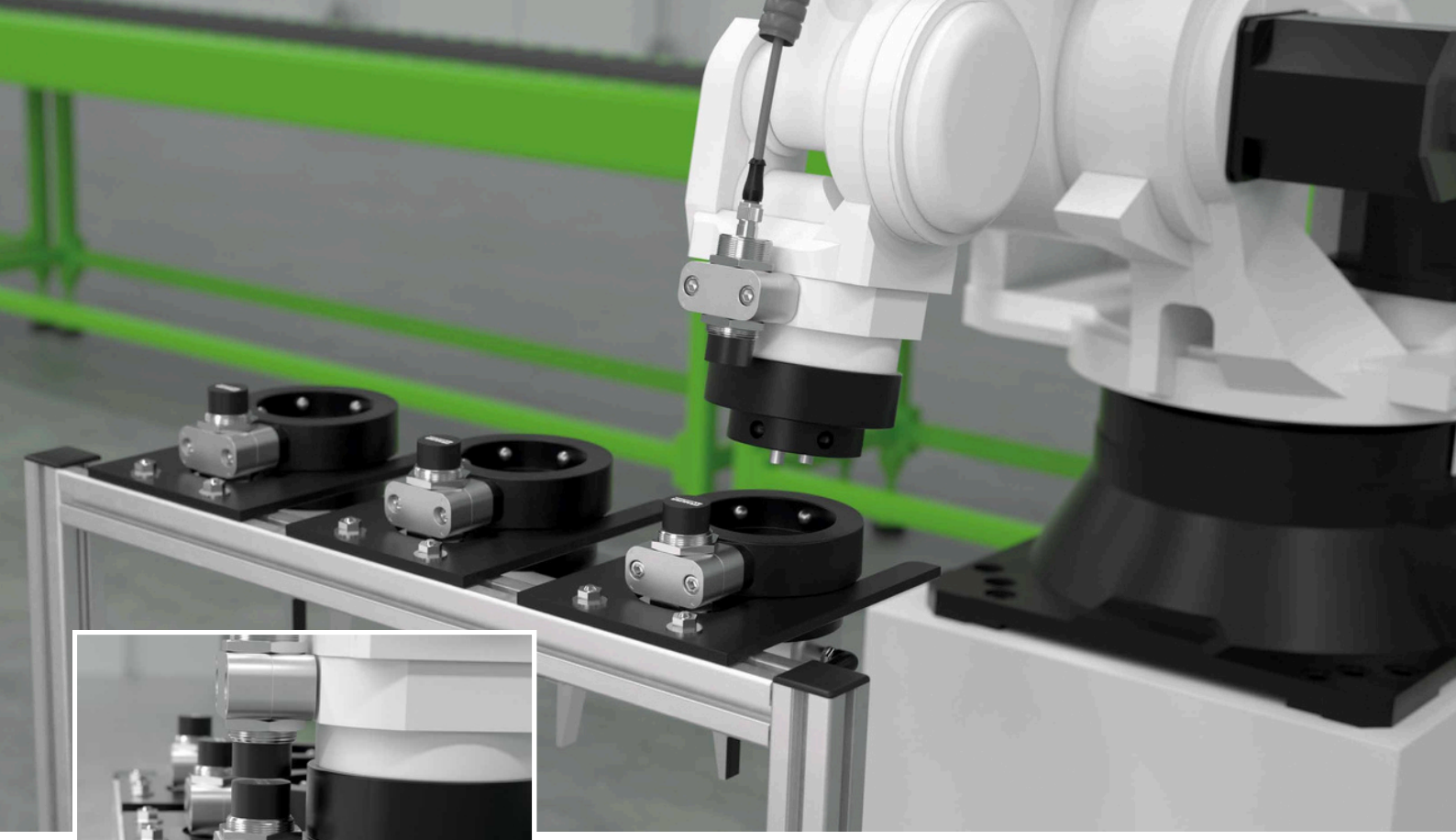


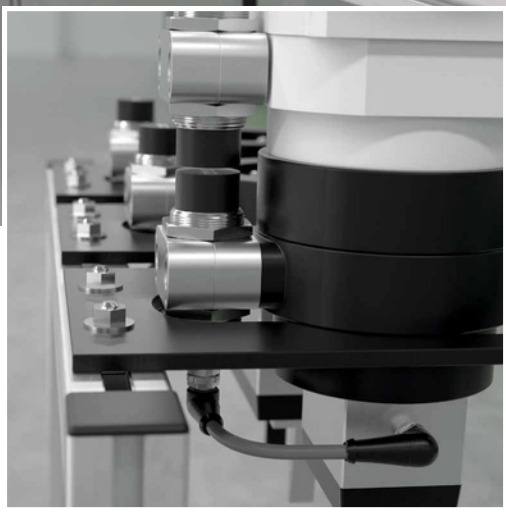
AUTOMATICALLY RECOGNIZE AND CONNECT MOBILE CARRIER SYSTEMS

In flexible manufacturing processes, quickly and reliably coupling mobile carrier systems without manual effort is crucial. The new IO-Link inductive coupler facilitates this by enabling an automatic, contactless connection between the station and the carrier system, eliminating the need for mechanical plugging or manual connection. The primary side is permanently installed on the station while the secondary side is located on the carrier systems. This allows any carrier system to be easily and efficiently docked. IO-Link is used to exchange data and uniquely identify each carrier system. This saves time, reduces errors, and ensures smooth, low-maintenance processes.

1. IO-Link Inductive Coupler Primary Side
2. IO-Link Inductive Coupler Secondary Side
3. MVK Pro (IO-Link Master)
4. IO-Link I/O Block







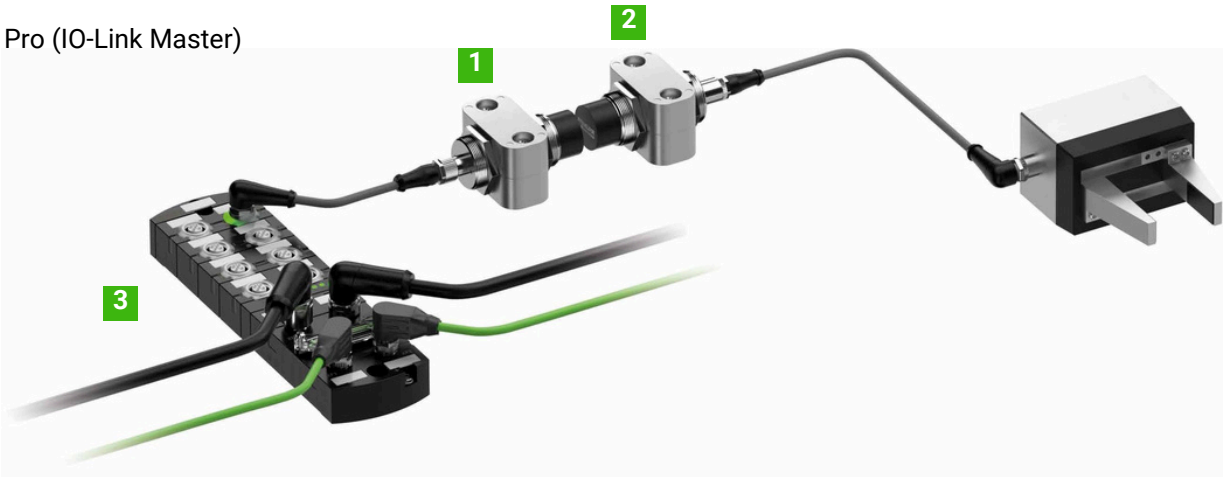
TOOL CHANGE WITHOUT MANUAL COUPLING

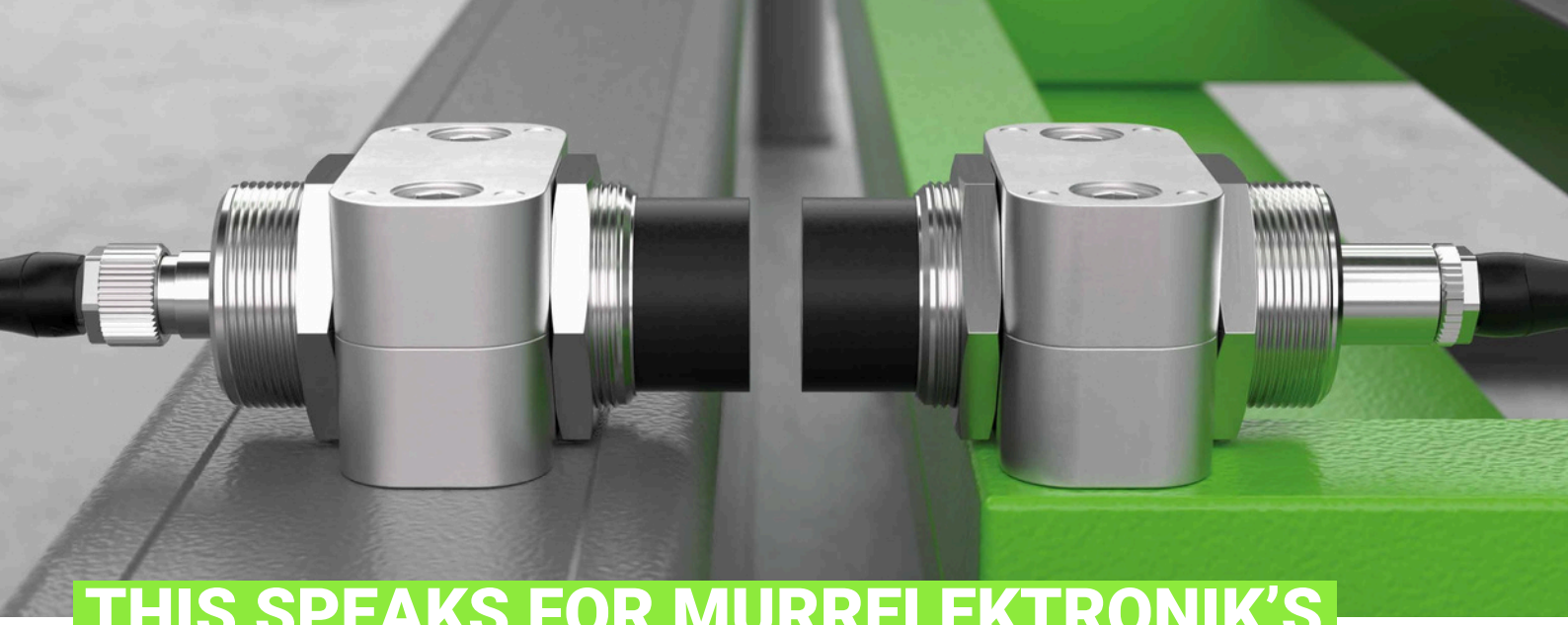
When it comes to automated tool changes, every second counts — especially with frequent and dynamic change cycles. The IO-Link inductive coupler establishes a contactless, wear-free connection between the robot and tool, eliminating the need for manual plugging. Different tools can be connected wirelessly and identified automatically. This prevents mechanical wear, saves valuable time, and makes the entire tool-change process more efficient and reliable. It is ideal for applications with high cycle times and changing machining tasks.

1 IO-Link Inductive Coupler Primary Side

2 IO-Link Inductive Coupler Secondary Side

3 IMPACT67 Pro (IO-Link Master)

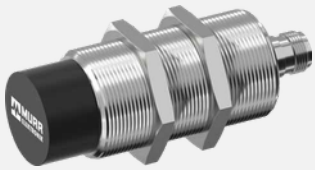




THIS SPEAKS FOR MURRELEKTRONIK'S IO-LINK INDUCTIVE COUPLERS

- Wear-free: No connectors or slip rings required
- Low-maintenance: Fewer downtimes and lower costs
- Quick to deploy: Automatic pairing via the air gap without plugging in
- IO-Link transparency: Easy parameterization & advanced diagnostics
- Flexible application: Ideal for modular, rotating applications

ORDER DATA IO-LINK INDUCTIVE COUPLER



PRIMARY SIDE

Art.No. 500E-MICIA-A00C1P0

Operating voltage: 24 V DC ± 20 %
Operating current: max. 1700 mA
Nominal gap: 0 to 7 mm
Offset: max. 5 mm
Angular offset: max. 15 °
Ambient temperature: -20 to +55 °C
Transmission function: IO-Link V1.1 (Class A) or 2 DI (PNP/NPN) or 1 DO (PNP/NPN)
Protection class: IP67 and IP68
Electrical connection: M12 plug A-coded, 4-pin
Design: Threaded pipe M30 x 1.5



SECONDARY SIDE

Art.No. 500E-MICIA-00AC2S0

Output voltage: 24 V DC ± 10 %
Output current: max. 750 mA
Peak output current: 0.1 ms, 2.5 A
Peak output current: 0.02 ms, 10 A
Cycle time: 10 ms
Nominal gap: 0 to 7 mm
Ambient temperature: -20 to +55 °C
Transmission function: IO-Link V1.1 (Class A) or 2 DI (PNP/NPN) or 1 DO (PNP/NPN)
Protection class: IP67 and IP68
Electrical connection: M12 socket, A-coded, 5-pin
Design: Threaded pipe M30 x 1.5



MOUNTING CLAMP

Art.No. 500E-MICIA-000Z001

Design: M30 x 1.5
Material: Aluminium
Mounting holes: M6 x 35

The information contained herein has been compiled with the utmost care. Liability for the correctness, completeness and topicality of the information is restricted to gross negligence.