

# C40 *AUTOMATION*

## INDUCTIVE COUPLING SYSTEM

Ideal for gripper changing systems and pallet change applications  
Contact free transmission of energy and signals  
Flexible  
Protective



# C40 AUTOMATION PRODUCT FAMILY

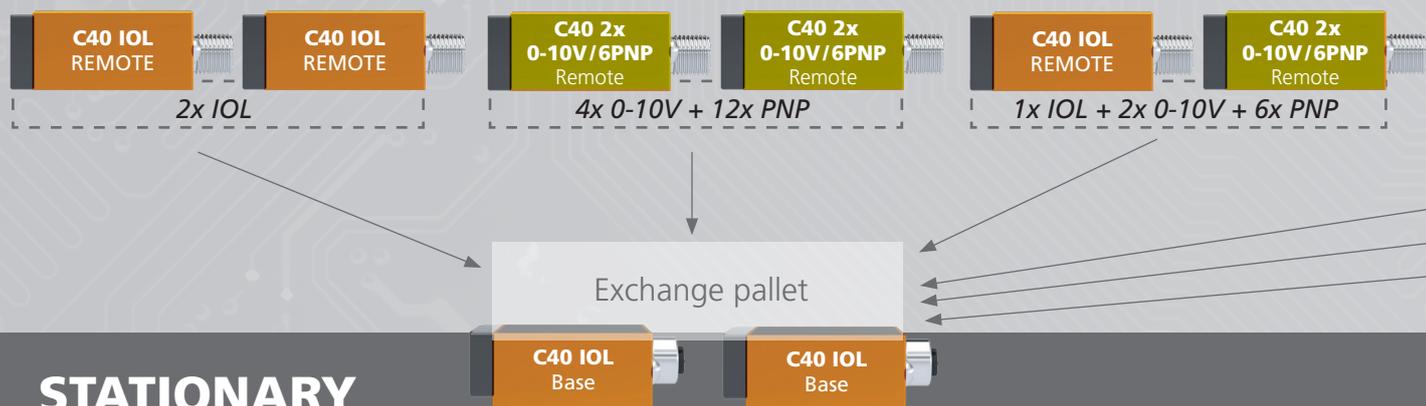
## Hybrid Dynamic Pairing

<p><b>OPERATION</b> with IO-Link sensors (Devices)</p>	 	<ul style="list-style-type: none"> <li>• <b>C40 remote units</b> are compatible with each other and can be combined</li> <li>• Consistent <b>IO-Link functionality</b></li> <li>• <b>Identification via IO-Link parameters</b> device name, IO-Link tag possible</li> <li>• <b>Scalability of analog values</b></li> </ul>
<p><b>OPERATION</b> of 2 analog (0-10V) + 6 digital (PNP) signals direction switchable (bidirectional)</p>	 	

## Application example of change systems

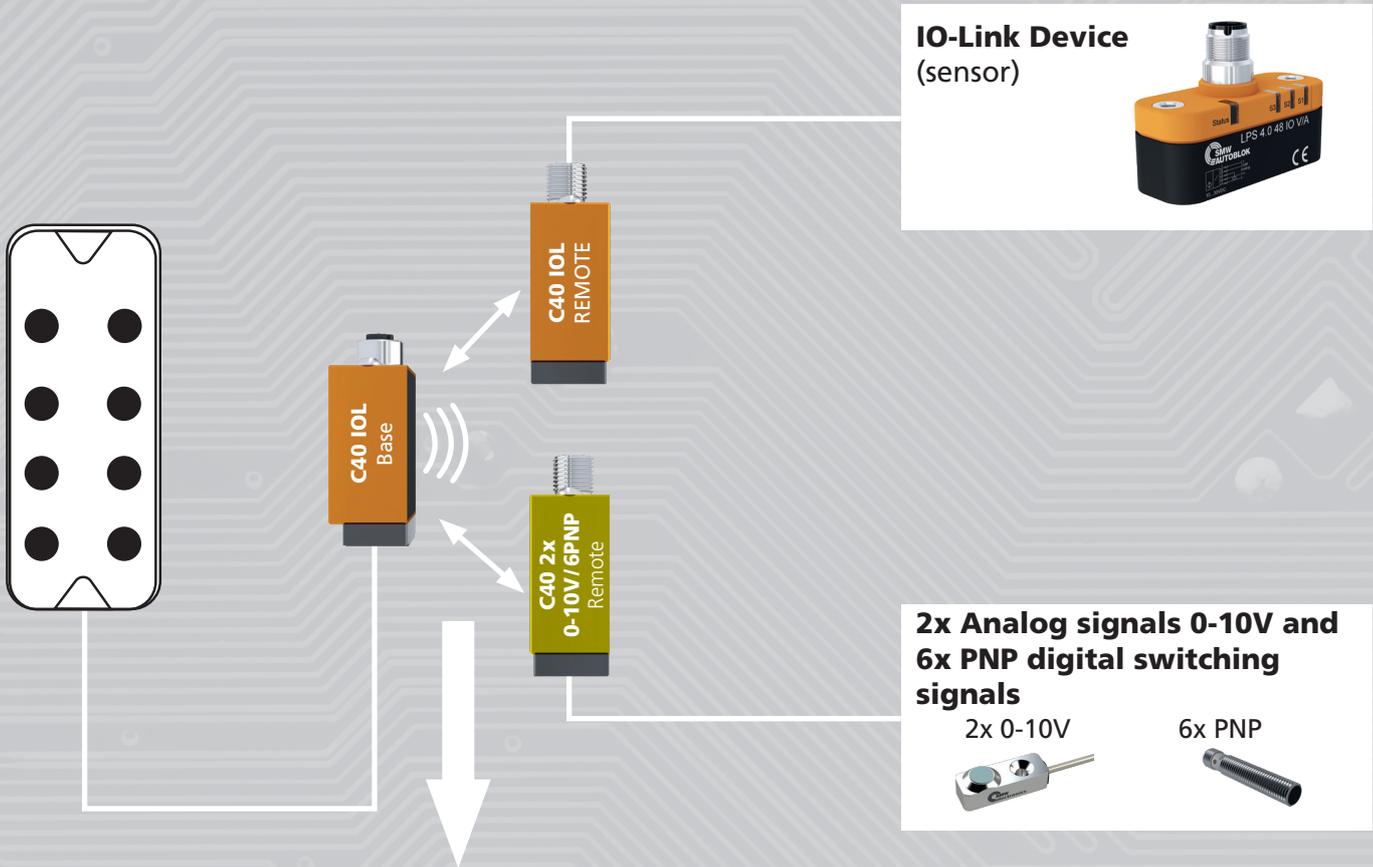
(Pallet change, tool change, format change) Remote - interchangeable units

Variants: Combination of 2 C40 systems

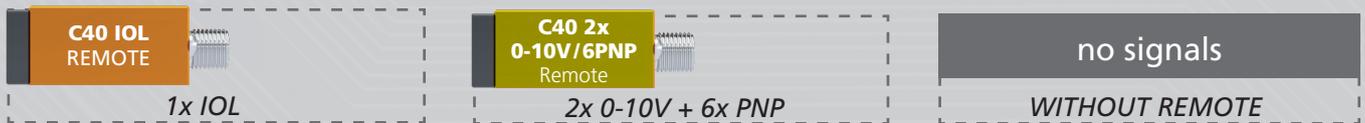


# Hybrid Dynamic Pairing

**C40 IOL BASE + C40 IOL REMOTE or  
C40-2x 0-10V / 6x PNP REMOTE**



**IO-Link and analog/digital remote can be switched dynamically during operation.**



The **remote exchangeable pallets** can be changed dynamically during operation with the stationary **C40 IOL Base unit**.

Axial coupler

- Contact free transmission of energy and signals
- Ideal for gripper changing systems and pallet change applications



 IO-Link

### Application/customer benefits

- Contact free transmission of energy and signals between moving and stationary components
- Application examples: Operation of sensors in gripper changing systems (EOAT) and pallet change applications
- Plug & work retrofit kits
- Dynamic Pairing
- Wear and maintenance free
- Protective functions: Temperature monitoring, foreign object detection, reverse polarity protection

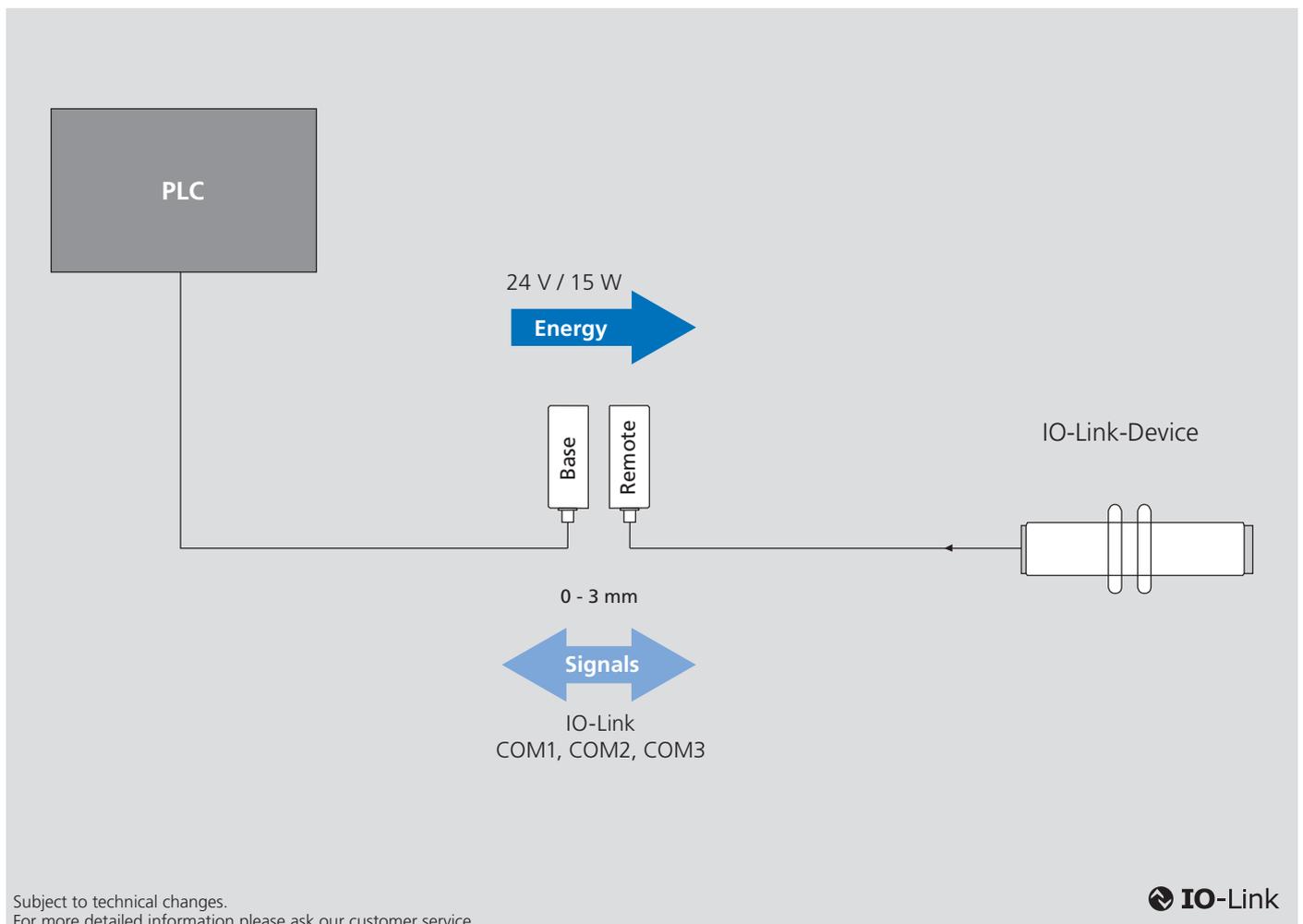
### Technical features

- Mounting via 2x M4 mounting screws (stainless steel)
- Operating voltage 24 V (18 ... 30 V)
- Transmission distance 0 - 3 mm
- Transmission of energy 24 V / 15 W
- Transmission of signals: 1 x IO-Link (COM 1, COM 2, COM 3)
- Connections: Base: M12 x 1 male 5-pin, Remote: M12 x 1 female 5-pin
- Protection class: IP67

### Standard equipment

Inductiv coupler base or remote with each 2 mounting bolts

### Block diagramm



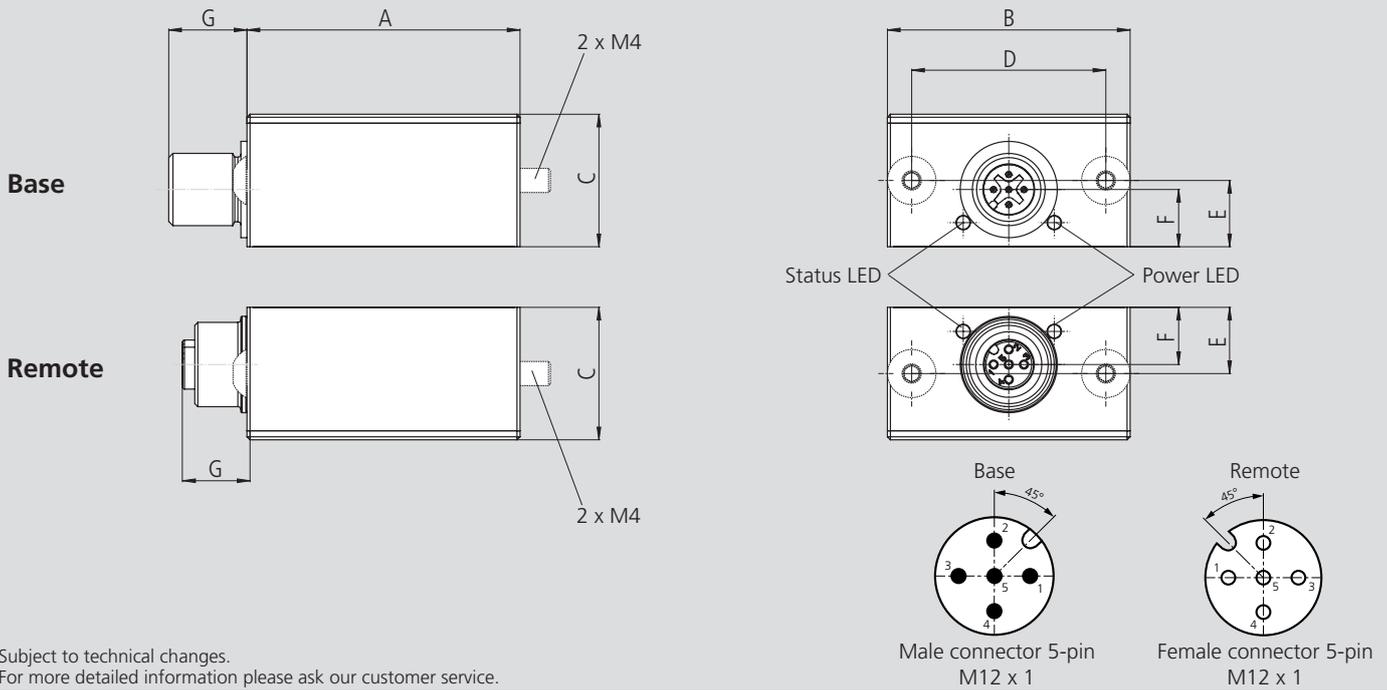
 IO-Link

# Inductive Coupling System

# C40-IOL

- Contact free transmission of energy and signals
- Ideal for gripper changing systems and pallet change applications

Axial coupler



Inductive coupling system C40-IOL			
Type		Base	Remote
Id. No.		0E012615	0E012616
A	mm	45	
B	mm	40	
C	mm	22	
D	mm	32	
E	mm	11	
F	mm	9.5	
G	mm	13	10.6
Housing material		AL, V2A, FR4	
Protection class		IP67	
Operating temperature		-25° C ... +50° C	
Storage temperature		-25° C ... +80° C	
Transmission distance		0 - 3 mm	
Weight	kg	0,087	0,086
Operating voltage		24 V (18 ... 30 V)	-
Output voltage		-	24 V ± 10% DC
Power consumption (Base)		2000 mA	-
Power output (Remote)		-	625 mA
Overload protection / short circuit protection		✓	✓
Residual ripple		-	< 200 mV
Reverse polarity protection		✓	-
Temperature monitoring		✓	✓
Data-Valid Output		150 mA	-
Ready delay		< 600 ms	
PIN assignment		Signal Base	Signal Remote
Supply voltage	1	24 V IN	24 V OUT
Digital signal	2	-	-
Ground	3	GND	GND
IO-Link Signal	4	IO-Link CQ	IO-Link CQ
Data-Valid	5	DAV 24 V	-

# C40-2x 0-10V / 6 PNP

Axial coupler

## Inductive Coupling System

- Contact free transmission of energy and signals
- Ideal for gripper changing systems and pallet change applications
- Integrated IO-Link sensor hub



### Application/customer benefits

- Contact free transmission of energy and signals between moving and stationary components
- Application examples: Operation of sensors in gripper changing systems (EOAT) and pallet change applications
- Integrated IO-Link sensor hub
- Plug & work retrofit kits
- Dynamic Pairing
- Wear and maintenance free
- Protective functions: Temperature monitoring, foreign object detection, reverse polarity protection

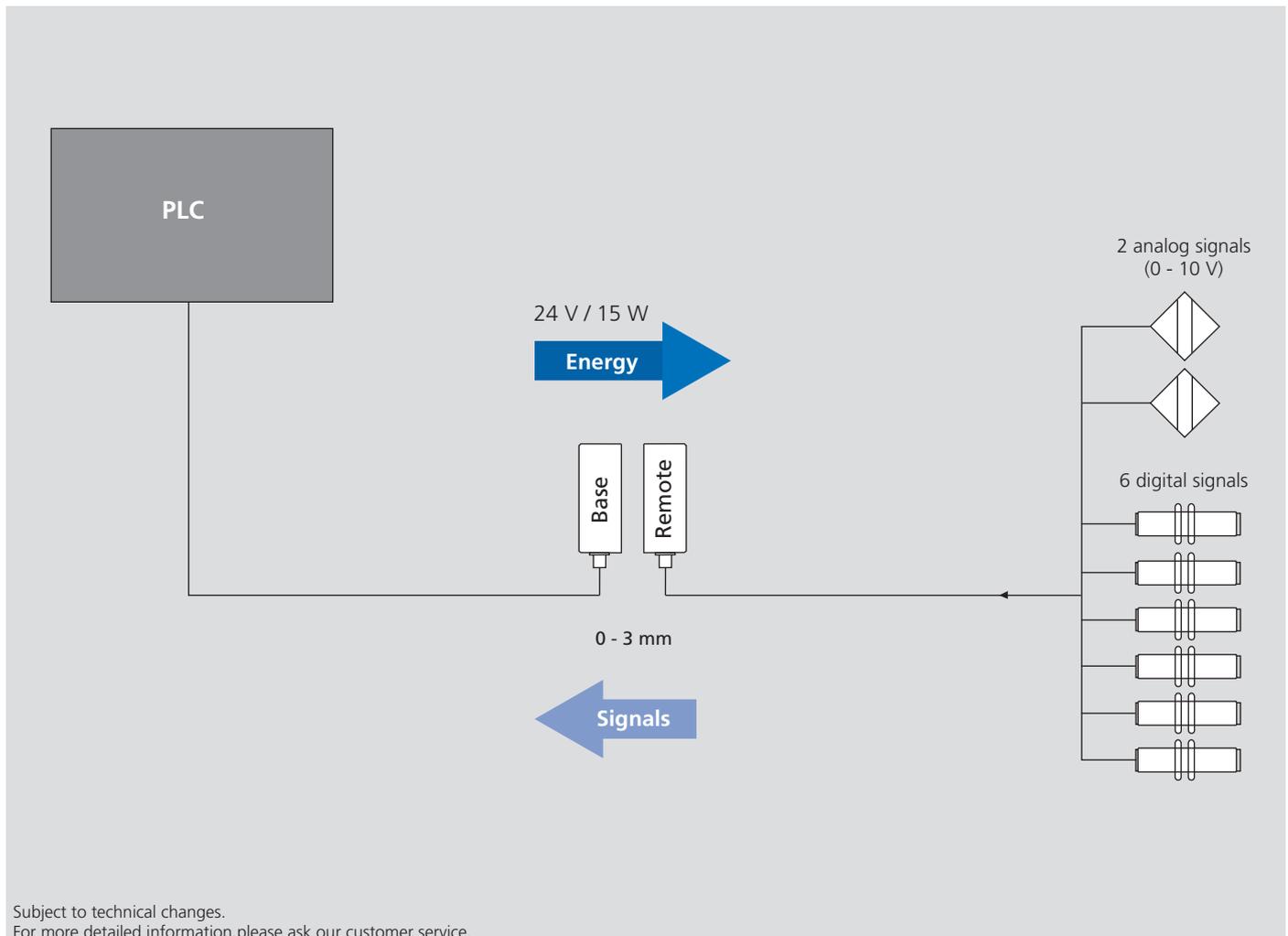
### Technical features

- Mounting via 2 x M4 mounting screws (stainless steel)
- Operating voltage 24 V (18 ... 30 V)
- Transmission distance 0 - 3 mm
- Transmission of energy 24 V / 15 W
- Transmission of signals: 6x PNP, 2x Analog 0 - 10 V
- Connections: Base: M12 x 1 male 12-pin, Remote: M12 x 1 female 12-pin
- Protection class: IP67

### Standard equipment

Inductiv coupler base or remote with each 2 mounting bolts

### Block diagram

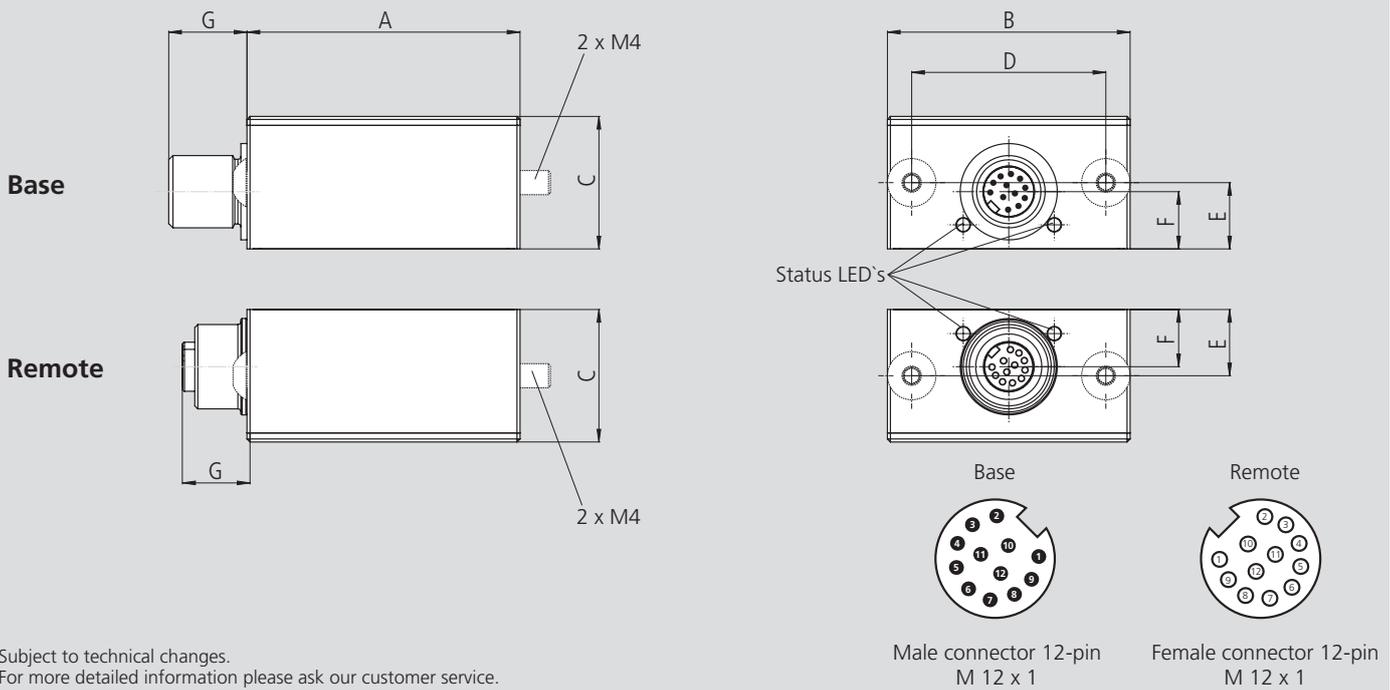


# Inductive Coupling System

- Contact free transmission of energy and signals
- Ideal for gripper changing systems and pallet change applications
- Integrated IO-Link sensor hub

# C40-2x 0-10V / 6 PNP

Axial coupler



Male connector 12-pin  
M 12 x 1

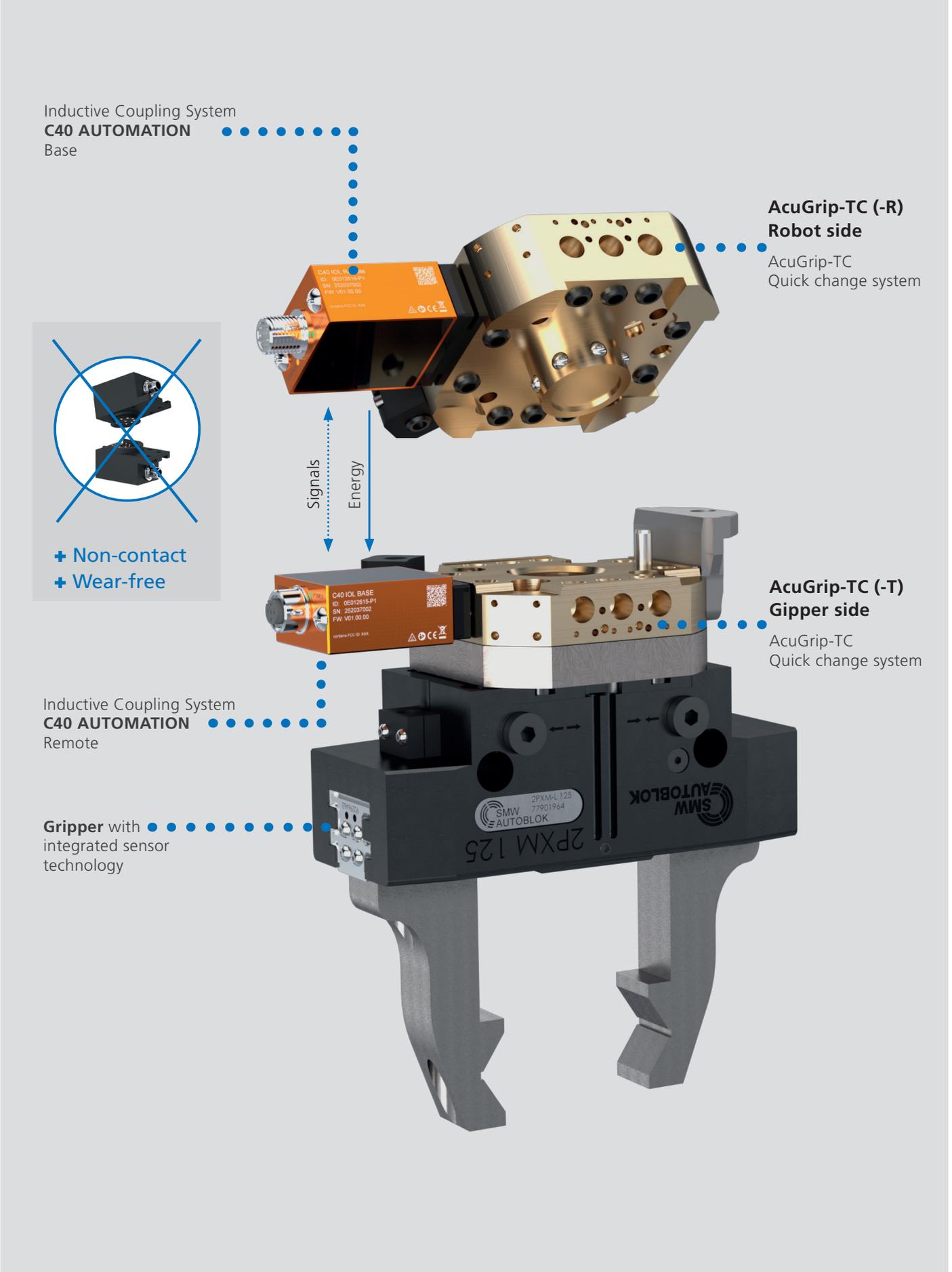
Female connector 12-pin  
M 12 x 1

Inductive coupling system C40-2x 0-10V / 6 PNP

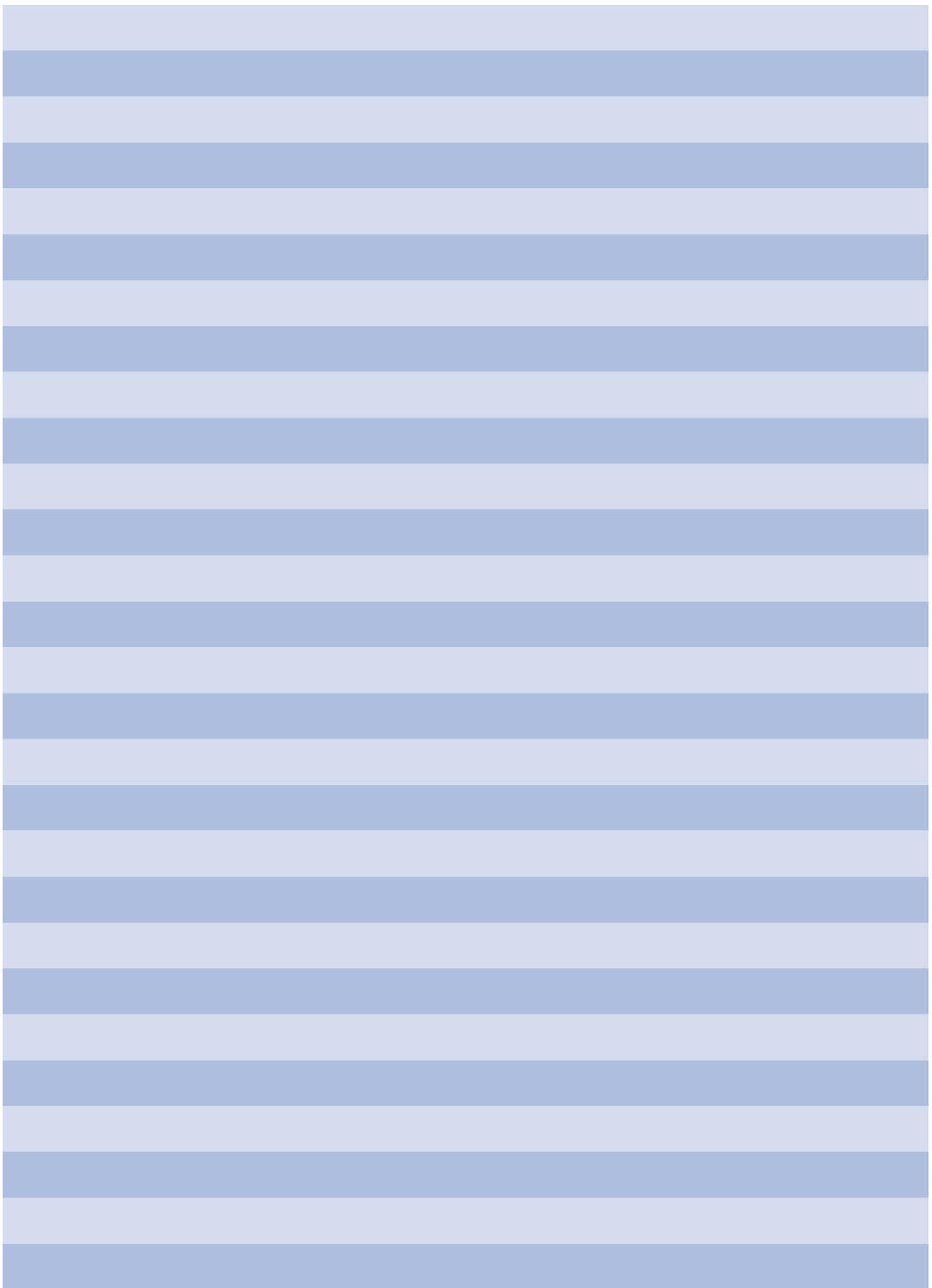
Type		Inductive coupling system C40-2x 0-10V / 6 PNP	
Id. No.		Base 0E012720	Remote 0E012721
A	mm		45
B	mm		40
C	mm		22
D	mm		32
E	mm		11
F	mm		9.5
G	mm	13	10.6
Housing material		AL	
Protection class		IP67	
Operating temperature		-25° C ... +50° C	
Storage temperature		-25° C ... +80° C	
Transmission distance		0 - 3 mm	
Weight	kg	0,087	0,086
Operating voltage		24 V (18 ... 30 V)	-
Output voltage		-	24 V ± 10% DC
Power consumption (Base)		2000 mA	-
Power output (Remote)		-	625 mA
Overload protection / short circuit protection		✓	✓
Residual ripple		-	< 200 mV
Reverse polarity protection		✓	-
Temperature monitoring		✓	✓
Data-Valid Output		150 mA	-
Ready delay			< 600 ms
Ready for operation (switching on the entire system)			< 1200 ms
Ready for operation (approach remote to switched-on base)			< 600 ms
Delay on signal change (analog signal / digital signal)			< 20 ms / <10 ms
PIN assignment		Signal Base	Signal Remote
Supply voltage	1	24 V IN	24 V OUT
Ground	2	GND	GND
Digital signal 1	3	0/24 V OUT	0/24 V IN
Digital signal 2	4	0/24 V OUT	0/24 V IN
Digital signal 3	5	0/24 V OUT	0/24 V IN
Digital signal 4	6	0/24 V OUT	0/24 V IN
Digital signal 5	7	0/24 V OUT	0/24 V IN
Digital signal 6	8	0/24 V OUT	0/24 V IN
Analog signal 1	9	0 ... 10 V OUT	0 ... 10 V IN
Analog signal 2	10	0 ... 10 V OUT	0 ... 10 V IN
Ground Analog signal	11	Analog GND *	Analog GND *
Data-Valid	12	DAV 24 V	-

\* For analog operation, analog GND and GND must be connected externally.

### Application example: Gripper change with sensory detection



# Notes



# Notes

A large area of horizontal stripes in alternating shades of blue and light blue, intended for taking notes.

# Notes

A large rectangular area filled with horizontal stripes in two shades of blue: a medium blue and a light blue. The stripes are evenly spaced and cover the majority of the page, providing a template for taking notes.



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