

C40 *AUTOMATION*

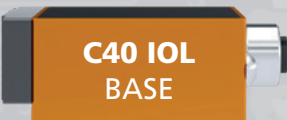
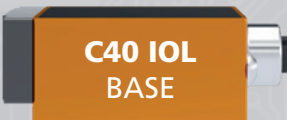
INDUCTIVE COUPLING SYSTEM

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



C40 AUTOMATION PRODUCT FAMILY

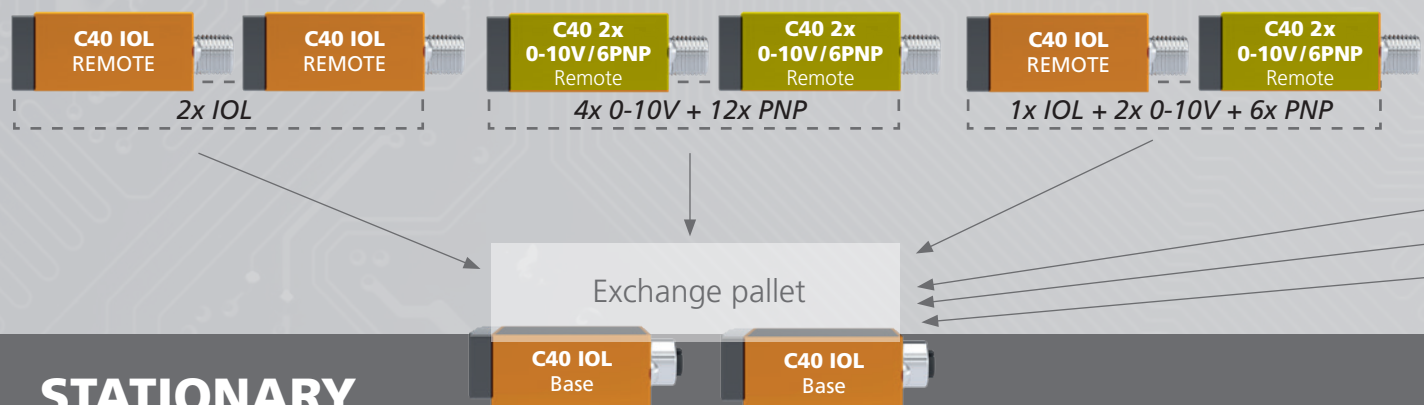
Hybrid Dynamic Pairing

OPERATION with IO-Link sensors (Devices)	 	• C40 remote units are compatible with each other and can be combined • Consistent IO-Link functionality • Identification via IO-Link parameters device name, IO-Link tag possible • Scalability of analog values
OPERATION of 2 analog (0-10V) + 6 digital (PNP) signals direction switchable (bidirectional)	 	

Application example of change systems

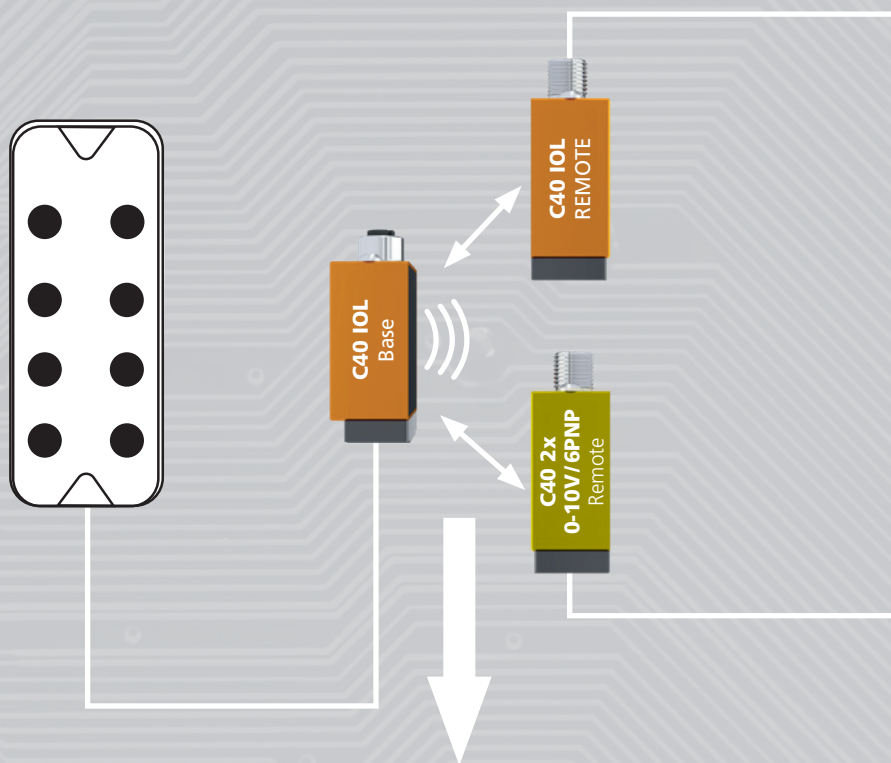
(Pallet change, tool change, format change) Remote - interchangeable units

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 Device
(sensor)**



**2x Analog signals 0-10V and
6x PNP digital switching
signals**

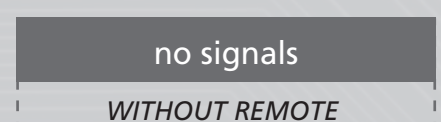
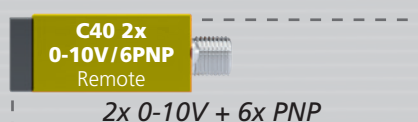
2x 0-10V



6x PNP

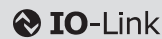


**IO-Link and analog/digital remote can
be switched dynamically during operation.**



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

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



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

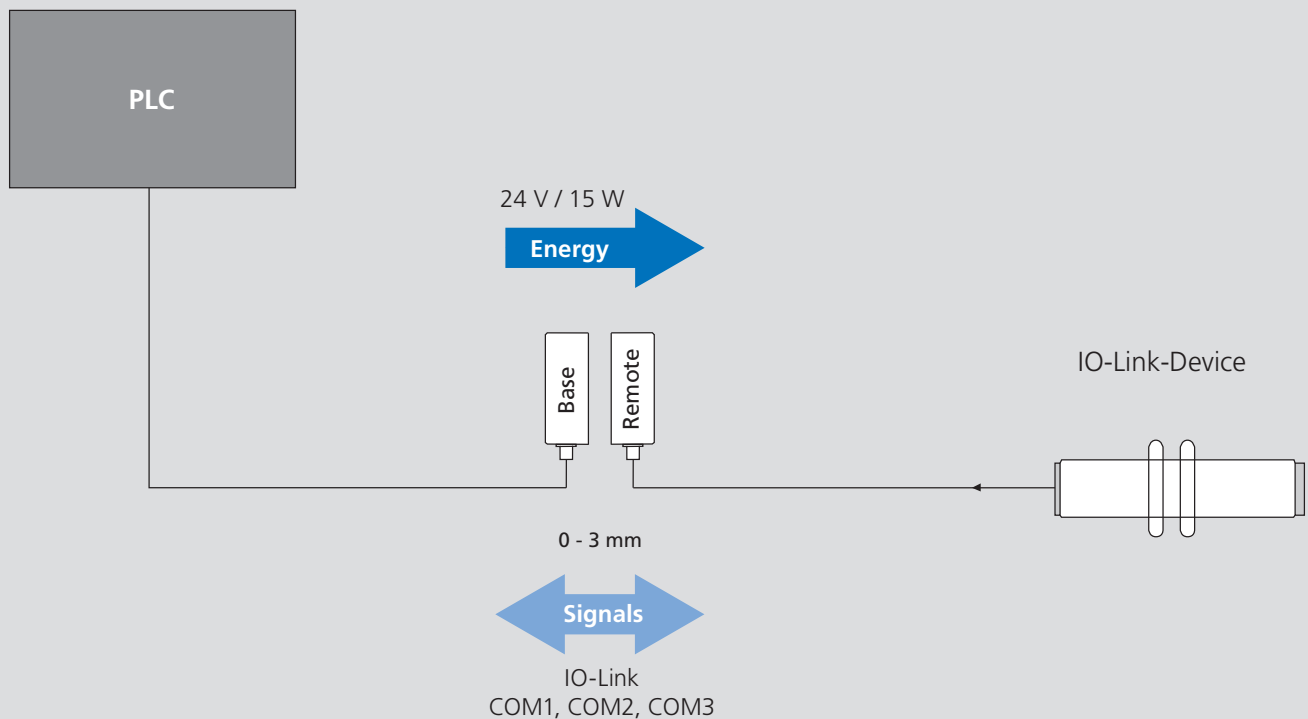
Technical features

- 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



Subject to technical changes.
For more detailed information please ask our customer service.

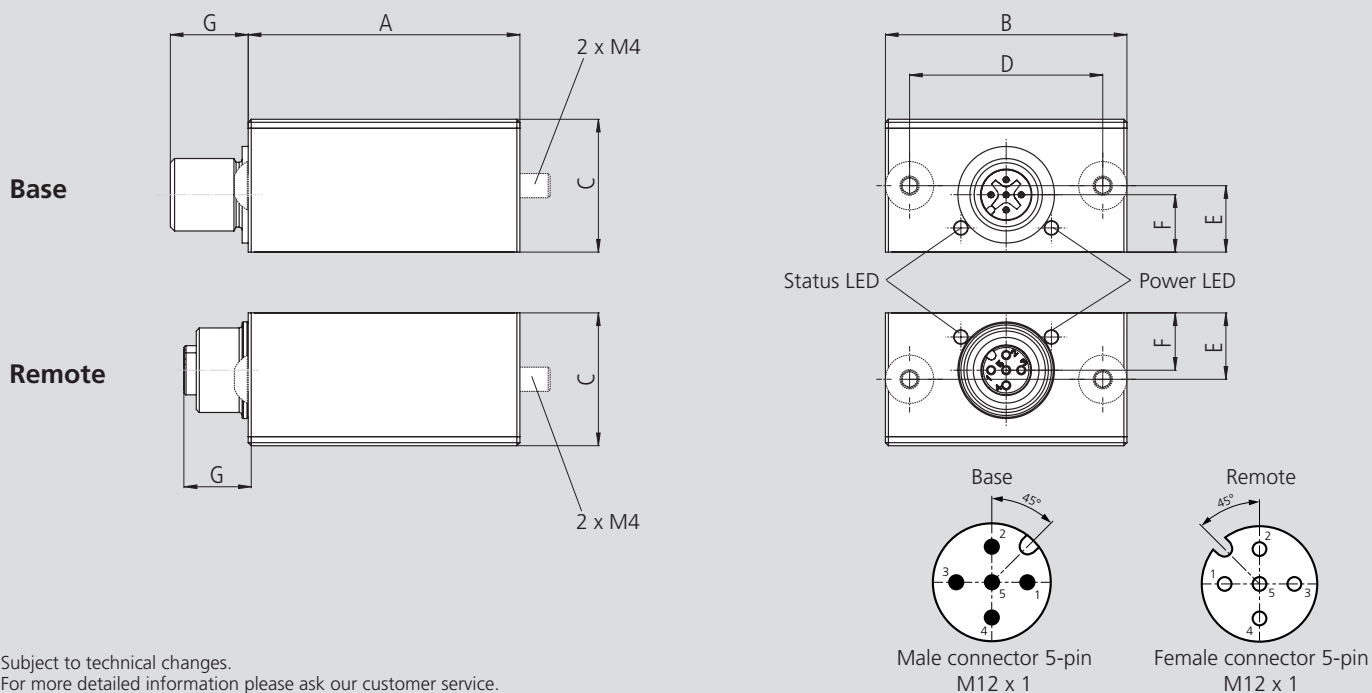


Inductive Coupling System

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

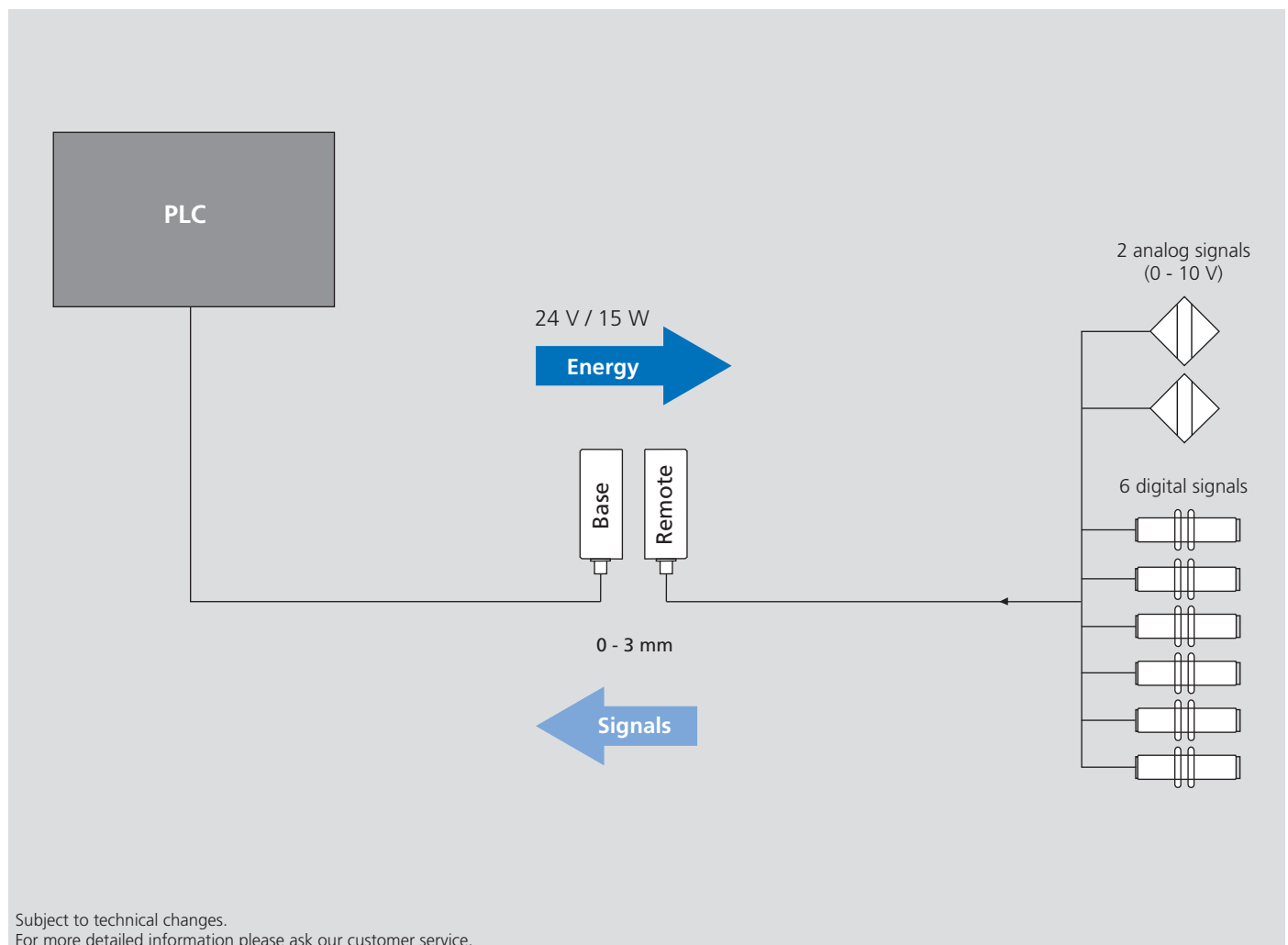
Technical features

- 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



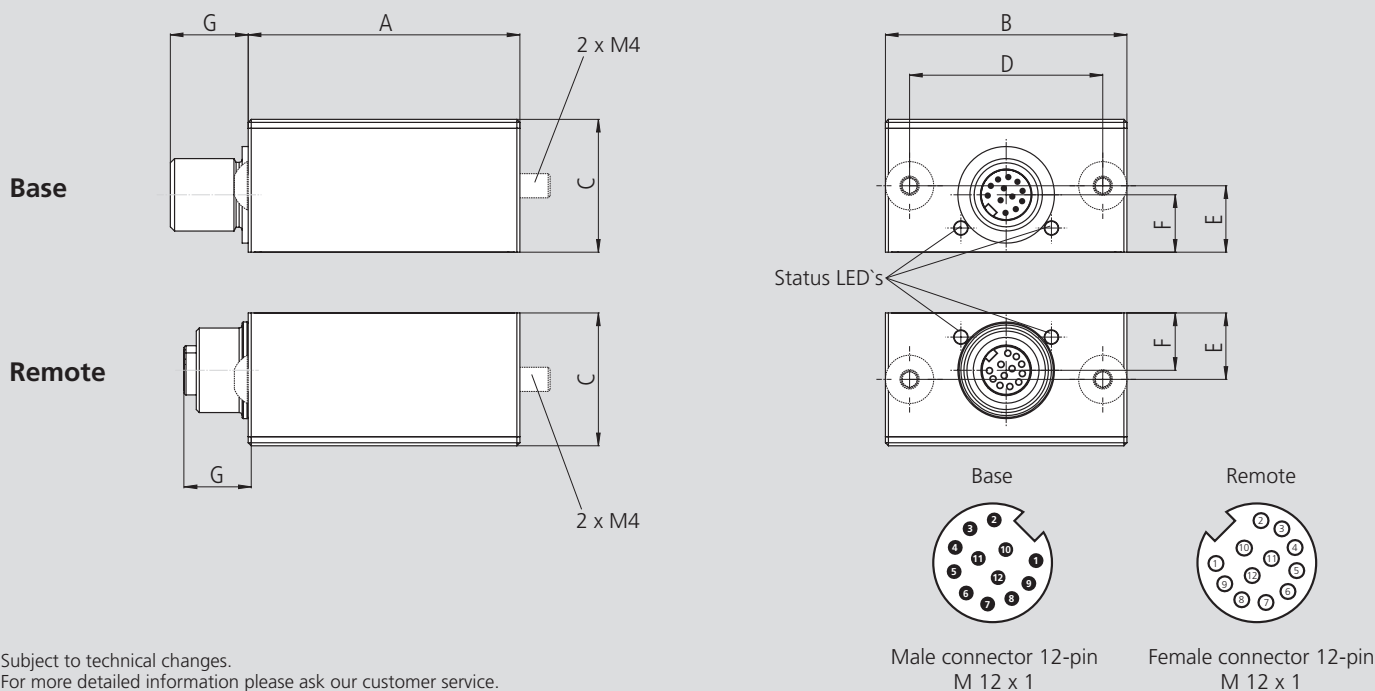
Subject to technical changes.
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Inductive Coupling System

- 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



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

Type		Base	Remote
Id. No.		0E012720	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

Inductive Coupling System
C40 AUTOMATION
Base

AcuGrip-TC (-R)
Robot side

AcuGrip-TC
Quick change system



+ Non-contact
+ Wear-free

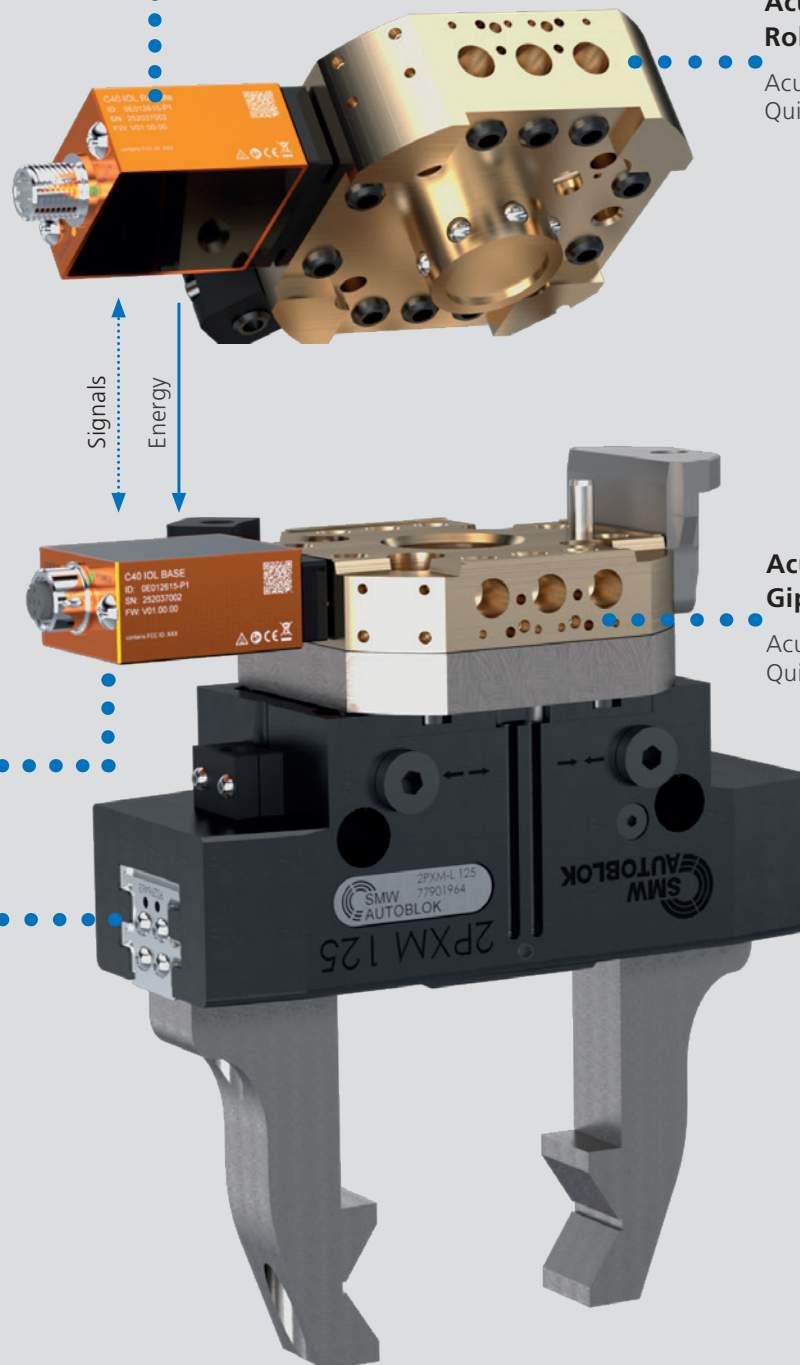
Signals
Energy

AcuGrip-TC (-T)
Gripper side

AcuGrip-TC
Quick change system

Inductive Coupling System
C40 AUTOMATION
Remote

Gripper with
integrated sensor
technology



Notes

Notes

Notes



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