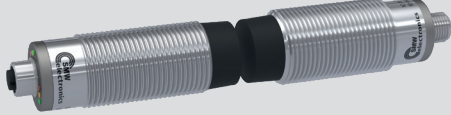


Axial coupler

■ Contact free transmission of energy and signals



### Application/customer benefits

- Contact free transmission of energy and signals between moving / rotating and stationary components
- Application examples: Process monitoring edibles, manufacturing of plastic, test engineering, machine tools
- Dynamic Pairing
- Wear and maintenance free
- Operating display

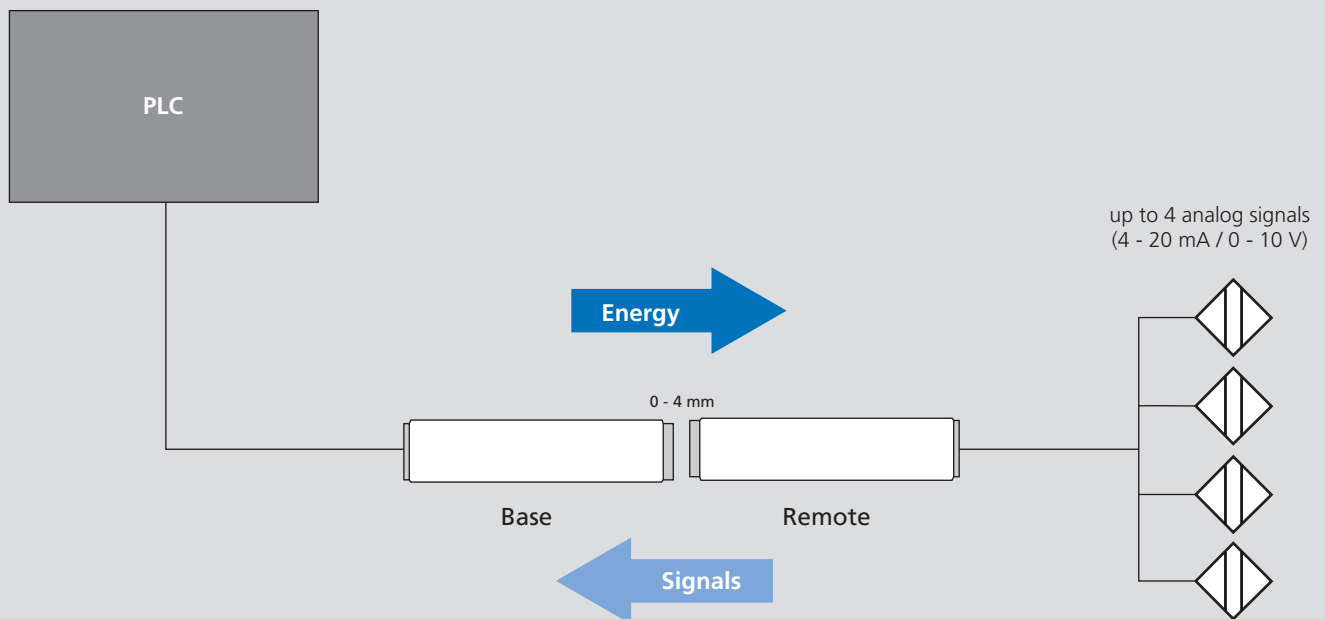
### Technical features

- Mounting: M30 x 1.5
- Operating voltage: 24 V  $\pm$  10%
- Transmission distance: 0 - 4 mm
- Transmission of energy: 24 V / 6 W (250 mA)
- Transmission of signals: 4 analog signals (4 - 20 mA / 0 - 10 V)
- Inverse-polarity protection (base), short-circuit proof (remote)
- Ports: Base male connector M12 (12-pin), remote female connector M12 (12-pin)
- Protection class: IP67

### Standard equipment

Inductive coupler base or remote

### Block diagram

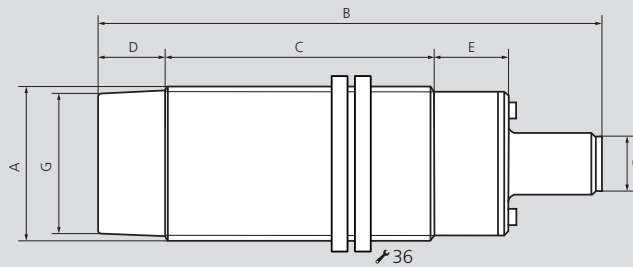


Subject to technical changes.  
For more detailed information please ask our customer service.

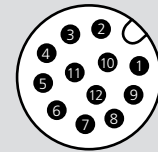
- Stationary Unit - Base
- Mobile Unit - Remote

Axial coupler

Base / Remote:

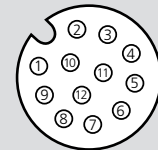


Base



Male connector 12-pin  
M 12 x 1

Remote



Female connector 12-pin  
M 12 x 1

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

## Inductive coupling system M30-4A

Type		Base 0 ... 10 V	Remote 0 ... 10 V	Base 4 ... 20 mA	Remote 4 ... 20 mA
Id. No.		0E010958	0E010959	0E010960	0E010961
A	mm	M30 x 1.5			
B	mm	98			
C	mm	52			
D	mm	13			
E	mm	14.5			
F	mm	M12	M12 / Female connector	M12	M12 / Female connector
G	mm	Ø 27			

Housing material	CuZn, PA66, PC GF 30%				
Protection class	IP67				
Operating temperature	0° C ... +60° C				
Storage temperature	-10 °C ... +80° C				
Transmission distance	0 mm ... 4 mm				
Weight	kg	0.21	0.23	0.21	0.23
Operating voltage		24 V ± 10% DC	-	24 V ± 10% DC	-
Output voltage		-	24V ± 10% DC	-	24 V ± 10% DC
Power consumption (Base)		< 500 mA	-	< 500 mA	-
Power output (Remote)		-	250 mA	-	250 mA
Overload protection / short circuit protection		✓	✓	✓	✓
Residual ripple		-	< 200 mV	-	< 200 mV
Reverse polarity protection		✓	-	✓	-
Data-Valid Output		max. 100 mA	-	max. 100 mA	-
Data-Valid Visual		✓	-	✓	-
Operational readiness		< 100 ms			

PIN assignment	PIN	Signal Base	Signal Remote	Signal Base	Signal Remote
Supply voltage	1	+24 V IN	+24 V OUT	+24 V IN	+24 V OUT
Analog signal 1	2	CH 1 0 ... 10 V OUT	CH 1 0 ... 10 V IN	CH 1 4 ... 20 mA OUT	CH 1 4 ... 20 mA IN
Ground connection 1	3	AGND-CH1*	AGND-CH1*	AGND-CH1*	AGND-CH1*
Analog signal 2	4	CH 2 0 ... 10 V OUT	CH 2 0 ... 10 V IN	CH 2 4 ... 20 mA OUT	CH 2 4 ... 20 mA IN
Ground connection 2	5	AGND-CH2*	AGND-CH2*	AGND-CH2*	AGND-CH2*
Analog signal 3	6	CH 3 0 ... 10 V OUT	CH 3 0 ... 10 V IN	CH 3 4 ... 20 mA OUT	CH 3 4 ... 20 mA IN
Ground connection 3	7	AGND-CH3*	AGND-CH3*	AGND-CH3*	AGND-CH3*
Analog signal 4	8	CH 4 0 ... 10 V OUT	CH 4 0 ... 10 V IN	CH 4 4 ... 20 mA OUT	CH 4 4 ... 20 mA IN
Ground connection 4	9	AGND-CH4*	AGND-CH4*	AGND-CH4*	AGND-CH4*
Ground	10	GND	GND	GND	GND
	11	NC	NC	NC	NC
**0 = no remote detected / 24 V = remote detected	12	**Data-Valid OUT	NC	NC	NC

\* AGND = Analog Ground (galvanically isolated from GND)

\*\* Only with inductive coupler M30-4A Base 0 ... 10 V