

# Inductive coupler M30-4A

Axial coupler

## Contact free transmission of energy and signals

- Stationary unit - Base
- Mobile unit - Remote

### Application/customer benefits

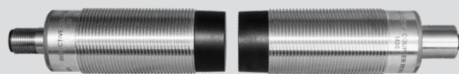
- Contact free axial transmission of energy and signals between stationary and moved components
- Application examples: Process monitoring edibles, manufacturing of plastic, test engineering, machine tools
- Dynamic Pairing
- Free from wear and maintenance
- Operating display

### Technical features

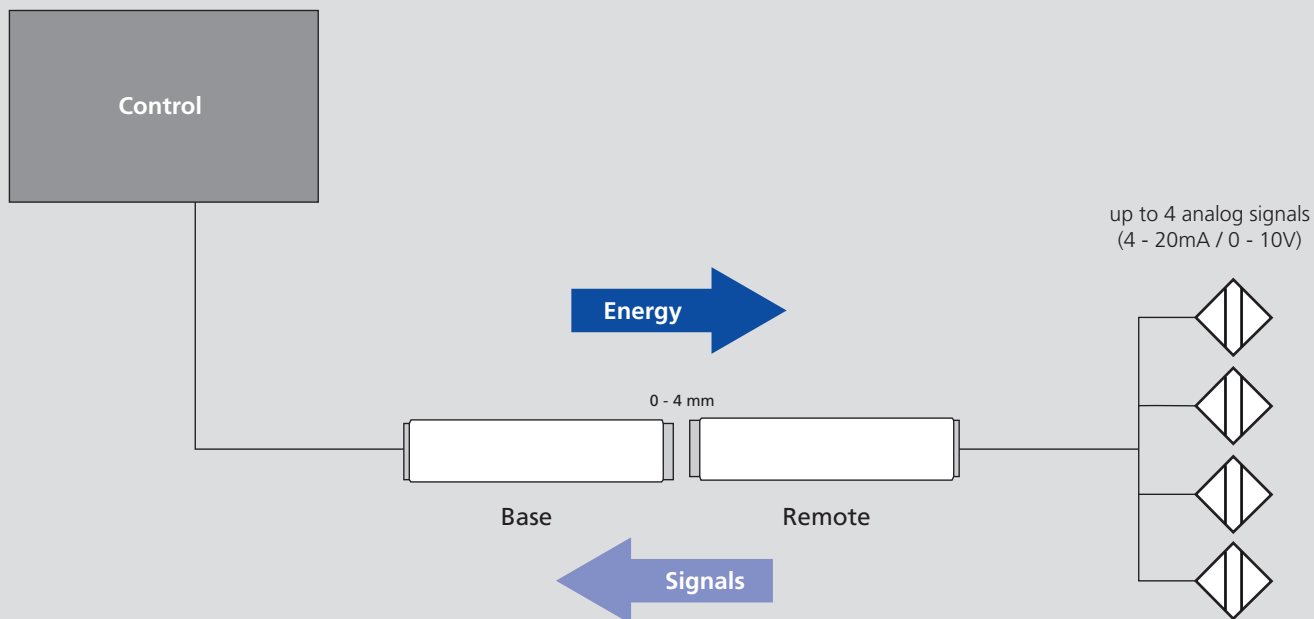
- Mounting M30 x 1.5
- Supply voltage 24 V  $\pm$  10%
- Transmission distance 0 - 4 mm
- Transmission of energy: 24V / 6W (250mA)
- Transmission of signals: 4 analog signals (4 - 20mA / 0 - 10V)
- Inverse-polarity protection (base), short-circuit proof (remote)
- Interface: Base male connector M12 (12-pin), remote female connector M12 (12-pin)
- Protection class: IP 67
- LED interface (base)

color:	green
slow flashing:	power on
static:	in position
fast flashing:	overload / short circuit

- Id. No. Base (4 x 0 - 10V): OE010958
- Id. No. Remote (4 x 0 - 10V): OE010959
- Id. No. Base (4 x 4 - 20mA): OE010960
- Id. No. Remote (4 x 4 - 20mA): OE010961



### Block diagram:

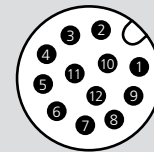
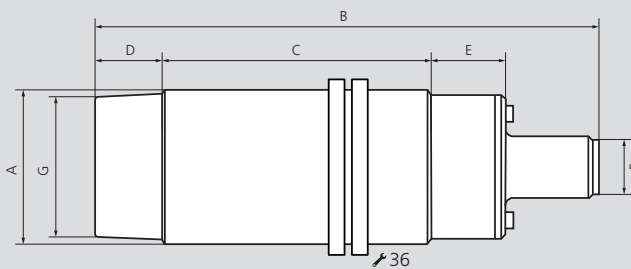


Subject to technical changes.  
For more detailed information please ask our customer service.

- Stationary unit - Base
- Mobile unit - Remote

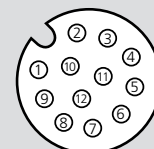
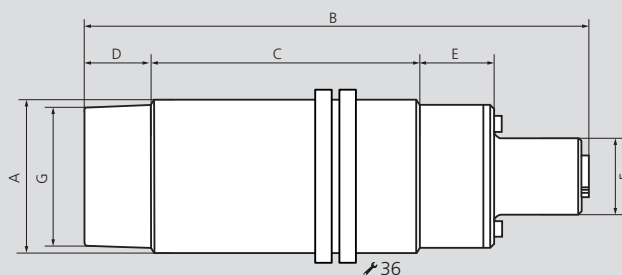
Axial coupler

Base:



Male connector 12 pin

Remote:



Female connector 12 pin

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

Inductive coupler M30-4A

SMW-electronics Type		Base 0 ... 10V	Remote 0 ... 10V	Base 4 ... 20mA	Remote 4 ... 20mA	
Id. No.		0E010958	0E010959	0E010960	0E010961	
<b>A Thread</b>	mm	M30 x 1.5	M30 x 1.5	M30 x 1.5	M30 x 1.5	
<b>B</b>	mm	98	98	98	98	
<b>C</b>	mm	52	52	52	52	
<b>D</b>	mm	13	13	13	13	
<b>E</b>	mm	14.5	14.5	14.5	14.5	
<b>F</b>	mm	M12	M12 / Female connector	M12	M12 / Female connector	
<b>G</b>	mm	Ø 27	Ø 27	Ø 27	Ø 27	
<b>Housing material</b>		CuZn, PA66, PC GF 30%	CuZn, PA66, PC GF 30%	CuZn, PA66, PC GF 30%	CuZn, PA66, PC GF 30%	
<b>Protection class</b>		IP 67	IP 67	IP 67	IP 67	
<b>Operating temperature</b>		0°C ... +60°C	0°C ... +60°C	0°C ... +60°C	0°C ... +60°C	
<b>Storage temperature</b>		-10° ... +80°C	-10° ... +80°C	-10° ... +80°C	-10° ... +80°C	
<b>Coupling distance</b>		0 mm ... 4 mm	0 mm ... 4 mm	0 mm ... 4 mm	0 mm ... 4 mm	
Operating voltage		24V ± 10% DC	-	24V ± 10% DC	-	
Output voltage		-	24V ± 10% DC	-	24V ± 10% DC	
Power consumption (Base)		< 500mA	-	< 500mA	-	
Power output (Remote)		-	250mA	-	250mA	
Overload protection / short circuit protection		✓	✓	✓	✓	
Residual ripple		-	< 200mV	-	< 200mV	
Reverse polarity protection		✓	-	✓	-	
Data-Valid Output		max. 100mA	-	max. 100mA	-	
Data-Valid Visual		✓	-	✓	-	
Operational readiness		< 100 ms	< 100 ms	< 100 ms	< 100 ms	
PIN assignment		PIN	Signal Base (V)	Signal Remote (V)	Signal Base (mA)	Signal Remote (mA)
Supply voltage		1	+24V IN	+24V OUT	+24V IN	+24V OUT
Analog signal 1		2	CH 1 0 ... 10V OUT	CH 1 0 ... 10V IN	CH 1 4 ... 20mA OUT	CH 1 4 ... 20mA IN
Ground connection		3	GND	GND	GND	GND
Analog signal 2		4	CH 2 0 ... 10V OUT	CH 2 0 ... 10V IN	CH 2 4 ... 20mA OUT	CH 2 4 ... 20mA IN
Ground connection		5	GND	GND	GND	GND
Analog signal 3		6	CH 3 0 ... 10V OUT	CH 3 0 ... 10V IN	CH 3 4 ... 20mA OUT	CH 3 4 ... 20mA IN
Ground connection		7	GND	GND	GND	GND
Analog signal 4		8	CH 4 0 ... 10V OUT	CH 4 0 ... 10V IN	CH 4 4 ... 20mA OUT	CH 4 4 ... 20mA IN
Ground connection		9	GND	GND	GND	GND
Ground connection		10	GND	GND	GND	GND
		11	NC	NC	NC	NC
*0 = no remote detected / 24V = remote detected		12	*Data-Valid OUT	NC	NC	NC

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