

Application / customer benefits

- Contact free, safe transmission of energy and signals between moving / rotating and stationary components
- Application examples: Supply of sensors, supply and monitoring of remote systems
- Dynamic Pairing
- Wear and maintenance free
- Protective function: Temperature monitoring, foreign object detection, reverse polarity protection
- Multi-level LED with good visibility

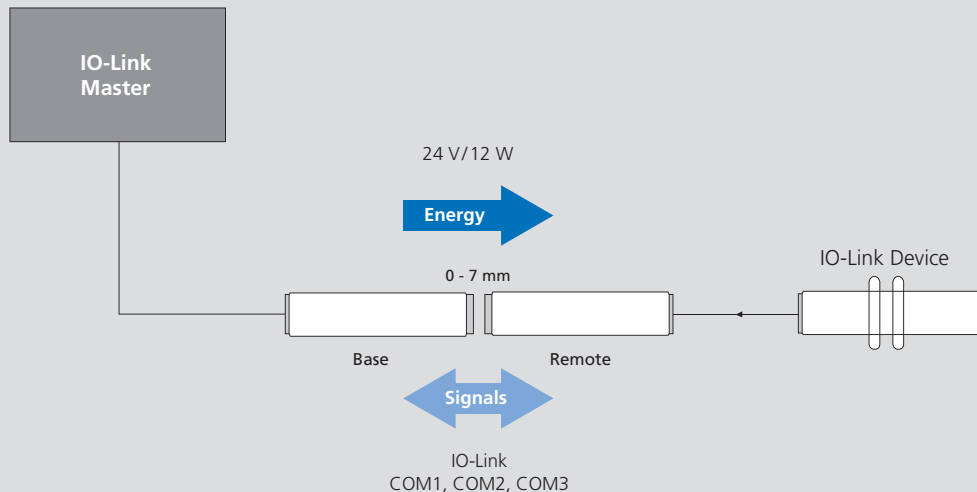
Technical features

- Mounting: M30 x 1.5
- Operating voltage: 24 V $\pm$ 10 %
- Transmission distance: 0 - 7 mm
- Transmission of energy: 24 V / 12 W
- Transmission of signals: IO-Link (COM1, COM2, COM3), 1 digital signal
- Connection: Base male connector M12 x 1 (5-pin), remote female connector M12 x 1 (5-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.



LED Function display Base

LED Power	
Color	Green
Function	Off green » Unit not supplied with voltage
	Flashes green for 3 s/0.5 s » Device is supplied with voltage, remote coupler not detected
	On green » Voltage ok and remote coupler detected
	Flashes 2 Hz green » Alternately U in > 30 V, remote overload
	Flashes 2 Hz green » Base coupler overtemperature
	Flashes 2 Hz green » Foreign object detected
LED IO-Link	
Color	Yellow
Function	Off yellow » No remote coupler detected
	On yellow » Remote coupler detected, no IOL mode
	Flashes 1 s/100 ms yellow » IOL mode (COM1, COM2, COM3)
LED Signal	
Color	Yellow
Function	Off yellow » Digital channel not switched (low)
	On yellow » Digital channel switched (high)
	Flashes 2 Hz yellow » Digital output overload base coupler

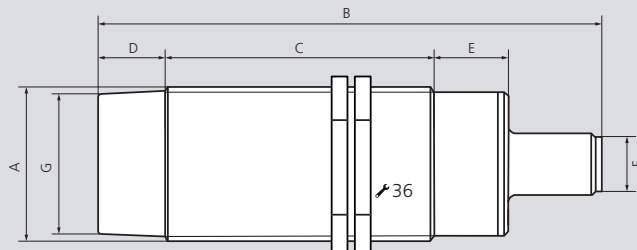
LED Function display Remote

LED Coupling	
Color	Green
Function	Off green » Device is not coupled
	On green » Device is coupled and 24 V out ok
	2 Hz green » Overload at 24 V out or insufficient power supply
	2 Hz green » Overtemperature
LED IO-Link	
Color	Yellow
Function	Off yellow » No base coupler detected
	On yellow » Base coupler detected, no IOL mode
	Flashes 1 s/100 ms yellow » IOL mode (COM1, COM2, COM3)
LED Signal	
Color	Yellow
Function	Off yellow » Digital channel not switched (low)
	On yellow » Digital channel switched (high)

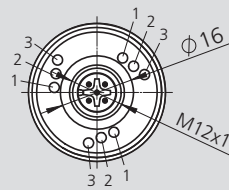
- Stationary Unit – Base
- Mobile Unit – Remote

Axial coupler

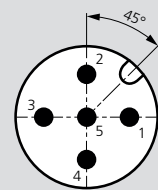
Base / Remote



Display Base LED

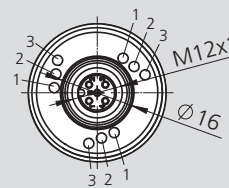


Base

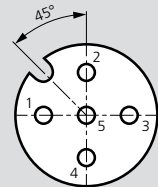


Male connector 5-pin
M12 x 1

Display Remote LED



Remote



Female connector 4-pin
M12 x 1

Number	LED	Color
1	Power LED	Green
2	Signal LED	Yellow
3	IOL LED	Yellow

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

Inductive coupling system M30-IOL

Type		Base	Remote
Id. No.		0E014400	0E014401
A	mm	M30 x 1.5	
B	mm	79.5	77
C	mm	41.1	
D	mm	12.9	
E	mm	12	
F	mm	M12 x 1 / Male	M12 x 1 / Female
G	mm	Ø 27	
Housing material		X5CrNi18-10, PA6-30GF	
Protection class		IP67	
Operating temperature		-20 °C ... +50 °C	
Storage temperature		-20 °C ... +80 °C	
Transmission distance		0 mm ... 7 mm	
Weight	kg	0.15	0.14
Operating voltage		V _{in} 21.6 V - 26.4 V	
Output voltage		-	24 V V _{in} ± 10 %
Power consumption (Base)		1500 mA	-
Power output (Remote)		-	500 mA (peak 1250 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	0/24 V OUT	0/24 V IN
Ground	3	GND	GND
IO-Link Signal	4	IO-Link CQ	IO-Link CQ
Data-Valid	5	DAV 24 V	-

* V_{in} = 21.6 V - 26.4 V

**V_{out} = V_{in} ± 10 %