Inductive Coupling System

Axial coupler

■ Contact free transmission of energy and signals

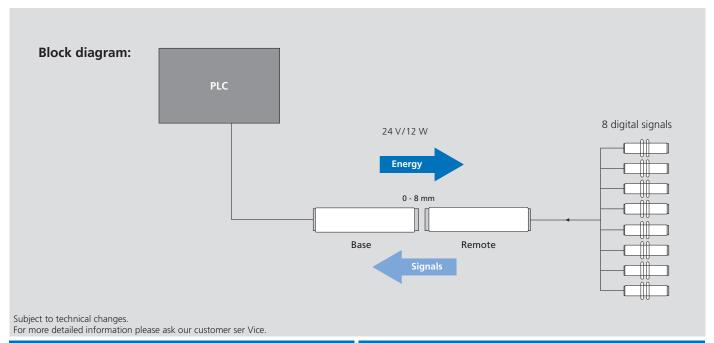


Application/customer benefits

- 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
- Protection functions: Temperature monitoring, foreign object detection, reverse polarity protection
- Multilevel LED function display with good Visibility

Technical features

- Mounting M30 x 1.5
- Operating voltage 24 V (18 ... 30 V)
- Transmission distance 0 8 mm
- Transmission of energy: 24 V / 12 W (500 mA)
- Transmission of signals: 8 digital signals (PNP)
- Connection: Remote female connector M12 (12-pin), base male connector M12 (12-pin)
- Protection class IP 67
- Id. No. Base: 0E011602, Id. No. Remote: 0E011603



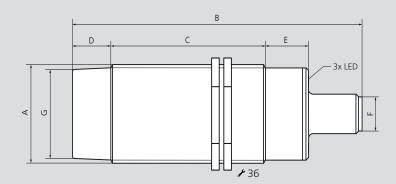
Function Base					
Green / red					
Off » Unit not supplied with Voltage (or under Voltage)					
On (green) » 24 V ok and mobile unit has been detected					
Flashes 2 HZ green » 24 V ok but no mobile unit detected					
Flashes 1 HZ green / red » Incompatible mobile unit detected					
Flashes 2 HZ red » Foreign object detected					
Flashes 5 HZ red » Internal error					
LED Data Valid					
Yellow					
Off » No mobile unit detected					
On » Mobile unit detected and signals are transmitted					
2 HZ » Short circuit on at least one of the outputs					
Flashes 5 HZ » O Verload Voltage output mobile unit					

Function Remote						
LED Coupling						
Color	Green / red					
Function	Off » Unit not connected					
	On (green) » Unit connected, Voltage output DC 24 V ok					
	Flashes 2 HZ red » Unit connected but short circuit at DC 24 V					
	Flashes 5 HZ red » Internal error					

■ 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 M30-8					
SMW-electronics Type		Base	Remote		
ld. No.		0E011602	0E011603		
Α	mm	M30 x 1.5			
В	mm	98			
С	mm	52			
D	mm	13			
E	mm	14.5			
F	mm	M12 x 1 / Male	M12 x 1 / Female		
G	mm	Ø	27		
Housing material		1.4301/PA 66 GF30			
Protection class		IP 67			
Operating temperature		-20°C +80°C			
Storage temperature		-20°C +80°C			
Transmission distance		0 mm 8 mm			
Operating voltage		24 V (18 30 V)	-		
Output voltage		-	24 V ± 10% DC		
Power consumption (Base)		< 1,5 A	-		
Power output (Remote)		-	< 100 mA		
Overload protection / short circuit protection		✓	✓		
Residual ripple		-	< 200 mV		
Reverse polarity protection		✓	-		
Temperature monitoring		✓	✓		
Data-Valid Output		150 mA	-		
Ready delay		< 300 ms			
PIN assignment	PIN	Signal Base	Signal Remote		
Supply voltage	1	24 V IN	24 V OUT		
Digital signal 1	2	0/24 V OUT	0/24 V IN		
Digital signal 2	3	0/24 V OUT	0/24 V IN		
Digital signal 3	4	0/24 V OUT	0/24 V IN		
Digital signal 4	5	0/24 V OUT	0/24V IN		
Digital signal 5	6	0/24 V OUT	0/24 V IN		
Digital signal 6	7	0/24 V OUT	0/24 V IN		
Digital signal 7	8	0/24 V OUT	0/24 V IN		
Digital signal 8	9	0/24 V OUT	0/24 V IN		
Ground	10	GND	GND		
Data-Valid	11	DAV 24 V	-		
-	12	-	-		