Inductive Coupling System

Axial coupler

Block diagram

■ Contact free transmission of energy and signals



Application/customer benefits

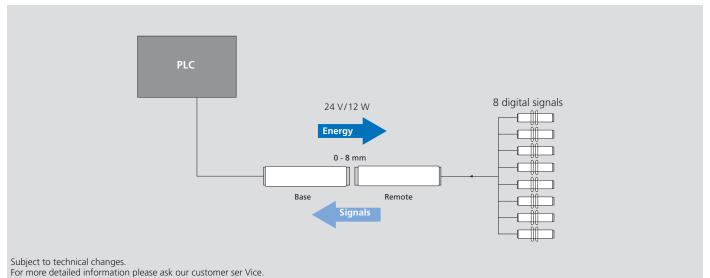
- Contact free transmission of energy and signals between moving / rotating and stationary components
- Application examples: Supply of sensors, supply and monitoring of remote systems
- Dynamic Pairing
- Wear and maintenance free
- Protection functions: Temperature monitoring, foreign object detection, 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), digital ouput 50 mA
- Connection: Remote female connector M12 (12-pin), base male connector M12 (12-pin)
- Protection class: IP67

Lieferumfang

Induktiv Koppler Base oder Remote



To more detailed information please ask our customer ser vice.					
LED Function display Base					
LED Power					
Color	Green/red				
Function	Off green » Unit not supplied with voltage				
	Flashes green for 3 s/0.5 s » Device supplied with voltage $18~V < U < 30~V$				
	On green » Voltage ok and mobile unit detected				
	Flashes 2 Hz red/green » Alternately U in > 30 V, remote overload				
	Flashes 2 Hz red » Base overtemperature				
	Flashes red for 3 s/0.5 s » Foreign object detected				
LED Signal 1					
Color	Yellow/red				
Function	Off yellow » No mobile unit detected				
	On yellow » Mobile unit detected, no IOL mode				
	Flashes 900 ms/100 ms yellow » IOL mode (COM1, COM2, COM3)				
	2 Hz red » Signal overload (C/Q, DO, DAV)				
LED Signal 2					
Color	Yellow				
Function	Off yellow » Digital channel not switched (low)				
	On yellow » Digital channel switched (high)				
Data Valid Output					
Function	ON » Handset has been recognized and there is no error				
	OFF » The data at the output is not valid because the handset is not recognized, overload at the output, handset power supply				

LED Function display Remote				
LED Coupling				
Color	Green/red			
Function	Off green » Device is not coupled			
	On green » Device is coupled and 24 V out ok			
	2Hz red/green » Overload at 24 V out or insufficient power supply			
	2Hz red » Overtemperature			
	2Hz rot » Overload cut-off at 24 V out			
LED Signal 1				
Color	Yellow/red			
Function	Off yellow » No stationary part detected			
	On yellow » Stationary part detected, no IOL mode			
	Flashes 900 ms/100 ms yellow » IOL mode (COM1, COM2, COM3)			
	2 Hz red » Signal overload (C/Q)			
LED Signal 2				
Color	Yellow			
Function	Off yellow » Digital channel not switched (low)			
	On yellow » Digital channel not switched (high)			

overloaded.

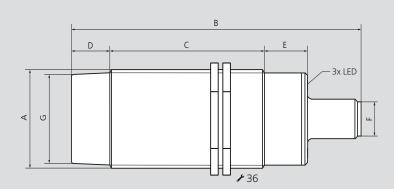
Inductive Coupling System

M30-8

■ 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					
Туре		Base	Remote		
ld. No.		0E011602	0E011603		
Α	A mm		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		
Weight	kg	0.13	0.13		
Operating voltage		24 V ± 10% DC	-		
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	-		
Digital output		50 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	-			