

F100-2IOL

Axial coupler

Inductive Coupling System

■ 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: Robotic (End of Arm Tooling), Automation, Mechanical engineering
- Substitution of slip ring / connector
- Dynamic Pairing
- Wear and maintenance free
- Protective functions: temperature monitoring, foreign object detection, reverse polarity protection
- Status LED with good visibility

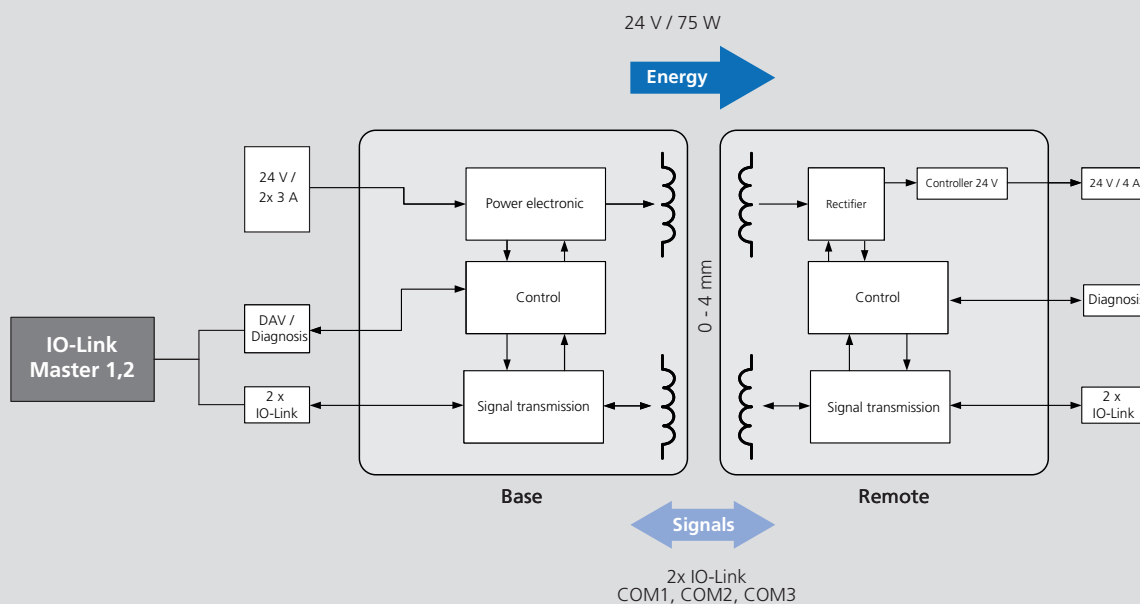
Technical features

- Diameter 100 mm / Through hole 50 mm
- Operating voltage 24 V / max. 6 A
- Transmission distance 0 - 4 mm
- Transmission of energy 24 V / 75 W
- Transmission of signals: 2 x IO-Link (COM 1, COM 2, COM 3)
- Connections: Base: 2x M12 x 1 male 5-pin, Remote: 2x M12 x 1 female 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.

IO-Link

Inductive coupling system F100-2IOL

Type	Base	Remote
Id. No.	0E012330	0E012331
Operating temperature (housing surface)	-20 °C ... +60 °C	
Storage temperature	-20 °C ... +60 °C	
Transmission distance	0 mm ... 4 mm	
Operating voltage	24 V	-
Output voltage	-	24 V (75 W)
Signal transmission	2x IO-Link (COM2, COM 2, COM 3)	
LED	2 LEDs 2-color	
Current consumption (Base)	6 A (24 V)	-
Overload protection / short circuit protection	✓	✓
Residual ripple	-	< 50 mV
Reverse polarity protection	✓	-
Data-Valid output	max. 100 mA	
Ready delay	< 1 s	

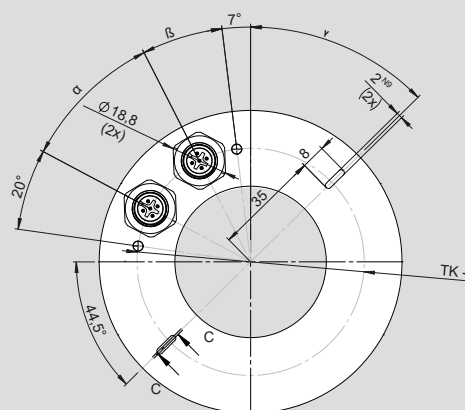
Inductive Coupling System

F100-2IOL

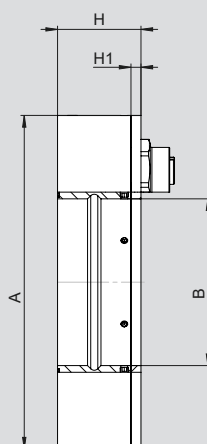
- Stationary unit - Base
- Mobile unit - Remote

Axial coupler

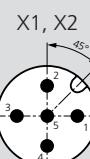
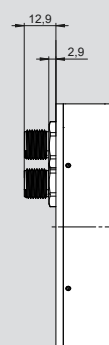
Base / Remote:



Base / Remote:

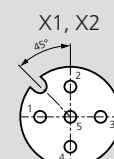
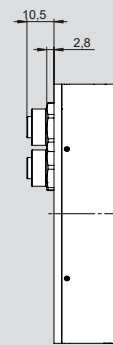


Base:



2x Male connector 5-pin
M12 x 1

Remote:



2x Female connector 5-pin
M12 x 1

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

Inductive coupling system F100-2IOL

Type		Base	Remote
Id. No.		0E012330	0E012331
A	mm	100	
B	mm	50	
C	mm	1	
H	mm	25	
H1	mm	3	
α	degree	35	
β	degree	20	
γ	degree	45.5	
Housing material		Al, GFK	
Protection class		IP67	
Weight	kg	0,224	0,237

Function LED IO-Link Base (X1, X2)

LED Power	
Color	Yellow / red
Function	Yellow » SIO mode active and SIO signal is high
	Flash yellow (1000 ms on, 100 ms off), » IO-Link communication active, power is on, Remote was detected
	Flashing 2 Hz yellow » no IO-Link device detected, power on, no Remote detected
	Flashing 2 Hz red » Short circuit on IO-Link PIN
	Flashing 5 Hz red » Overload voltage output Remote

Function LED IO-Link Remote (X1, X2)

LED Power	
Color	Yellow / red
Function	Yellow » SIO mode active and SIO signal is high
	Flash yellow (1000 ms on, 100 ms off), » IO-Link communication active, power is on, Base has been detected
	Flashing 2 Hz yellow » No IO-Link communication, power on, no Base detected
	Flashing 2 Hz red » Short circuit on IO-Link PIN
	Flashing 5 Hz red » Overload voltage output Base

PIN assignment	PIN	X1 Base	X2 Base	X1 Remote	X2 Remote
Supply voltage	1	24 V IN	24 V IN	24 V OUT	24 V OUT
Data-Valid	2	DAV 24 V	-	-	-
Ground	3	GND	GND	GND	GND
IO-Link Signal	4	IO-Link CQ	IO-Link CQ	IO-Link CQ	IO-Link CQ
-	5	-	-	-	-

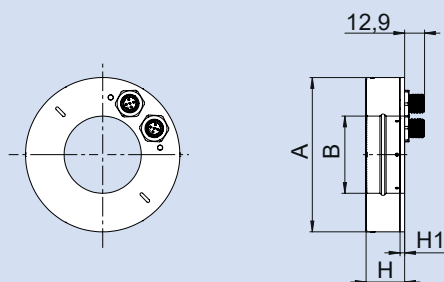
F100-2IOL F100- ETH

Axial coupler

Inductive Coupling Systems

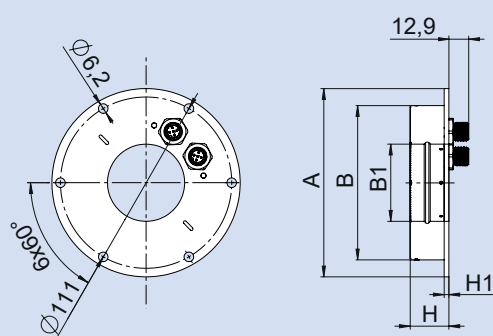
■ Ordering overview flange

Standard flange



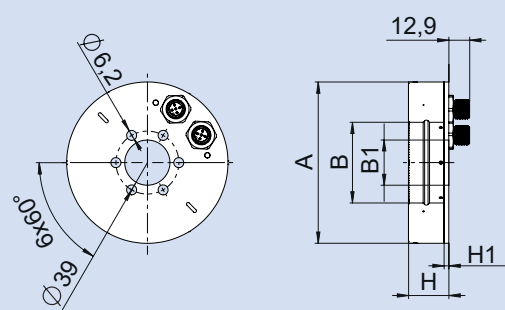
Type	IC-Base F100-2IOL D100/050	IC-Base F100-ETH D100/050
Id.-No.	0E012330	0E011420
A	100	
B	50	
B1	-	
B2	-	
H	25	
H1	3	

Outer flange with feed-through



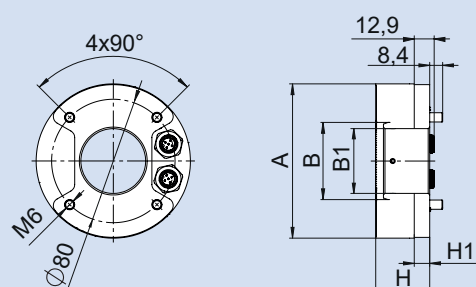
Type	IC-Base F100-2IOL D122/050	IC-Base F100-ETH D122/050
Id.-No.	0E012332	0E012320
A	122	
B	100	
B1	50	
B2	-	
H	25	
H1	3	

Inner flange with feed-through



Type	IC-Base F100-2IOL D100/028	IC-Base F100-ETH D100/028
Id.-No.	0E012334	0E012322
A	100	
B	50	
B1	28	
B2	-	
H	25	
H1	3	

Flangering with feed-through



Type	IC-Base F100-2IOL D100/042	IC-Base F100-ETH D100/042
Id.-No.	0E012336	0E012324
A	100	
B	50	
B1	42	
B2	-	
H	25	
H1	10	

FURTHER OPTIONS AVAILABLE ON REQUEST!

- Outer flange without feed-through
- Inner flange without feed-through
- Threaded sleeve with without feed-through