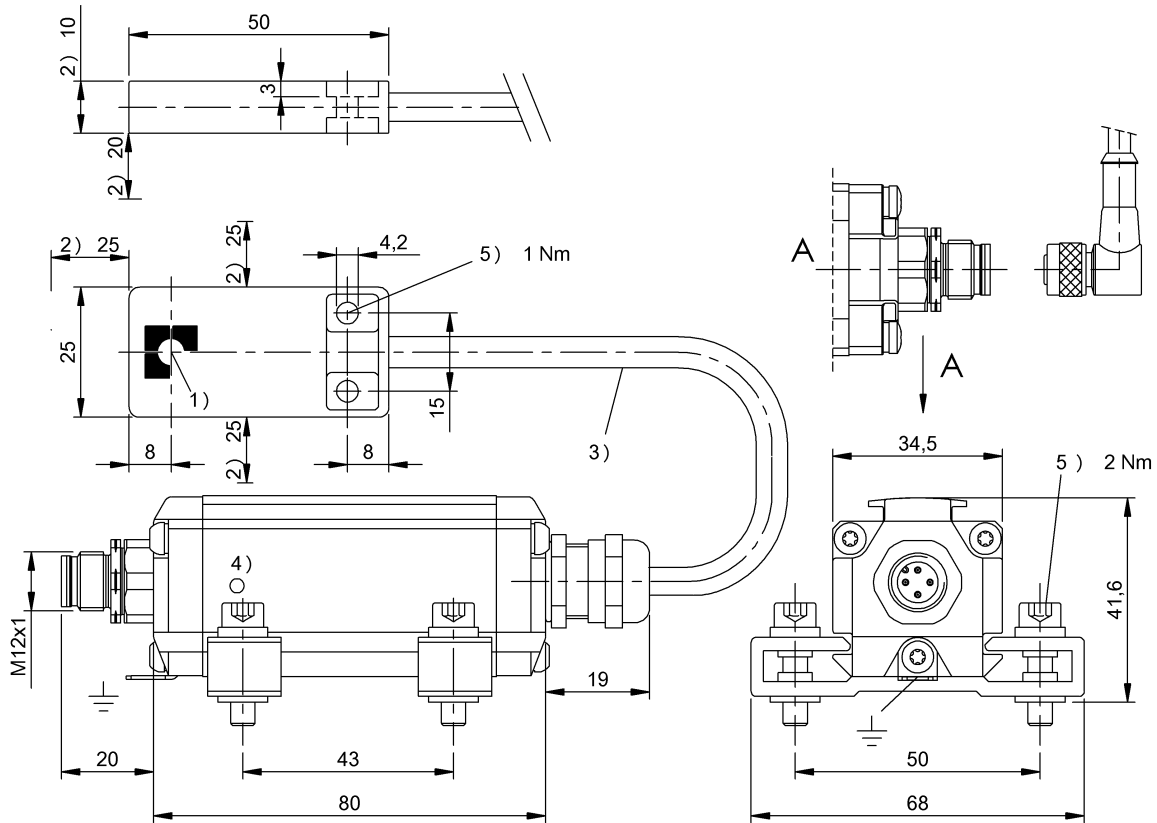


HF (13.56 MHz)  
 BIS M-402-045-004-07-S4  
 Order Code: BIS00M1

**BALLUFF**



1) Sensing surface, 2) Clear zone, 3) Cable length see text, 4) LED function indicator, 5) Tightening torque



**Basic features**

Antenna type	round
Approval/Conformity	CE UKCA cULus WEEE MIC FCC IC (Radio) KC NBTC IMDA
EN 55022	Gr. 1, Cl. A
Principle of operation	Read/write device

**Display/Operation**

IO-Link active	Green LED, flashing
Power (ON)	Green LED

**Electrical connection**

Bending radius min., fixed cable	5 x D
Bending radius min., flexible cable	10 x D
Cable diameter D	5.40 mm
Cable length L	0.5 m
Cable, bending cycles min.	2 mil.
Connection	M12x1-Male, 4-pin, A-coded
Connection type	Connector, 0.50 m, PU

**Electrical data**

Current consumption max. at 24 V DC	150 mA
Operating voltage U <sub>b</sub>	18...30 VDC Supports only LPS/ Class 2
Residual ripple max.	1.3 V <sub>pp</sub>
Transfer rate	COM2 (38.4 kBaud)

HF (13.56 MHz)  
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# BALLUFF

## Environmental conditions

Altitude max.	2000 m
Ambient temperature	0...70 °C
Area of operation	Indoor
Cable temperature, drag chain	-25...60 °C
Cable temperature, fixed routing	-50...80 °C
Contamination scale	2
Continuous shock load	yes
EN 60068-2-27, Shock	yes
EN 60068-2-32 Free fall	yes
EN 60068-2-6, Vibration	yes
IP rating	IP67
Relative humidity	0...90 %, non-condensing
Storage temperature	-20...85 °C

## Functional Characteristics

Supported data carrier types	DIN ISO 14443 DIN ISO 15693
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## Remarks

Use included fastening clamps for installation.

For installation in metal: Observe clear zone.

Order accessories separately.

Values are under rated conditions unless otherwise specified.

When installing, the technical standards and regulations of the corresponding countries must be observed.

This device is intended to be supplied by a UL-listed or CSA-certified power supply unit with "Class 2" or LPS power source.

The devices must be installed permanently.

1. Determine a suitable mounting position.

2. Fasten the device with suitable mounting material.

The device can be cleaned with a slightly damp cloth.

Regularly check the function of the device and all associated components through visual and functional tests.

- Shut down the device in the event of malfunctions.

- Secure the system against unauthorized use.

- Check fastening and tighten if necessary.

The product is maintenance-free.

## IO-Link

IO-Link Profil IDs	N/A
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## Interface

Interface	IO-Link 1.1
Process data IN	10 bytes

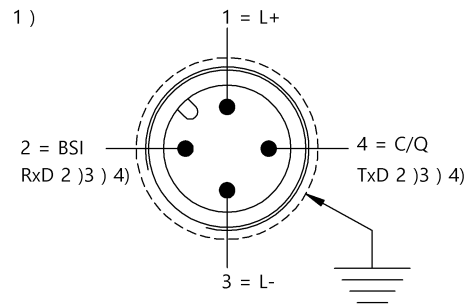
## Material

Housing material	ABS, GF16, Interface aluminum
Material jacket	PU

## Mechanical data

Application weight	238.00 g
Dimension	25 x 10 x 50 mm
Installation	metal-free (clear zone)

## Connector Drawings



- 1) View towards connector
- 2) BSI service interface
- 3) Do not connect power
- 4) (Only for Balluff Service)

## Help Views



**BIS M-402-xxx-004-**

	BIS M-143-02/A- xx				
passende Datenträger Appropriate data carriers					
Abstand Datenträger zu Metall in mm ( <b>a</b> ) Data carrier distance to metal in mm	>0				
Freizone Datenträger in mm ( <b>b</b> ) Data carrier clear zone in mm	>100				
Schreibabstand in mm Write distance in mm	0-9				
Leseabstand in mm Read distance in mm	0-9				
Versatz in mm bei Abstand von	0 ±6				
	5 ±6				
	7 ±6				
	9 ±4				
Offset in mm at distance	12				
	16				
	18				
	20				
	22				
	25				
	30				
	32				
	35				
	40				
	43				
	45				
	50				
	52				
	60				
	65				
	70				

