

1) Sensing surface, 2) Data carrier, 3) Clear zone, 4) LED (Power), 5) LED (TP), 6) Tightening torque



Basic features

Antenna type	round
Approval/Conformity	CE UKCA FCC Part 15 IC (Radio) cULus WEEE MIC KC NBTC IMDA MCMC
EN 55022	Gr. 1, Cl. A
Principle of operation	Processor unit

Display/Operation

Function indicator	LED yellow TP (Tag Present) Green LED Power (ON)
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Electrical connection

Connection	M12x1-Male, 4-pin, A-coded
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Electrical data

Current consumption max. at 24 V DC	150 mA
Operating voltage U_b	18...30 VDC Supports only LPS/ Class 2
Residual ripple max.	1.3 Vpp
Transfer rate	COM2 (38.4 kBaud)

HF (13.56 MHz)
BIS M-401-072-001-07-S4
Order Code: BIS0102

BALLUFF

Environmental conditions

Altitude max.	2000 m
Ambient temperature	0...70 °C
Area of operation	Indoor
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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Functional safety

MTTF (40 °C)	154.5 a
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IO-Link

IO-Link Profil IDs	N/A
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Interface

Interface	IO-Link 1.1
Process data IN	32 bytes

Material

Housing material	PBT
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Mechanical data

Application weight	380.00 g
Dimension	80 x 40 x 84.5 mm
Installation	metal-free (clear zone)

Remarks

For basic equipment see IO-Link catalog.

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

Values are under rated conditions unless otherwise specified.

Order accessories separately.

For installation in metal: Observe clear zone.

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.

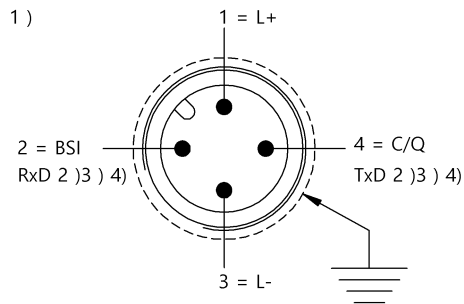
- Check fastening and tighten if necessary.

The product is maintenance-free.

For more information about MTTF and B10d see MTTF / B10d Certificate

Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values also do not extend the expiration period for defect claims or affect it in any way.

Connector Drawings

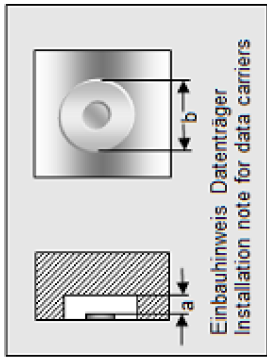


- 1) View towards connector
- 2) BSI service interface
- 3) Do not connect power
- 4) (Only for Balluff Service)

Help Views

BIS M-401-__

	BIS M-111-02/L	BIS M112-02/L	BIS M-140-02/A	BIS M-142-02/A xx
passende Datenträger Appropriate data carriers				
Abstand Datenträger zu Metall in mm (a) Data carrier distance to metal in mm	>50 >30	>50 >30	>0	>0
Freizone Datenträger in mm (b) Data carrier clear zone in mm	>200 >100	>200 >100	>100	>100
Schreibabstand in mm Write distance in mm	0-40 0-25	0-60 0-35	0-32	0-16
Leseabstand in mm Read distance in mm	0-40 0-25	0-60 0-35	0-32	0-16
Versatz in mm bei Abstand von	0 ±30 ±20	±35 ±25	±25	±24
	5 ±30 ±20	±25	±25	±24
	9 ±30 ±20	±35 ±25	±25	±20
	12 ±25 ±20	±35 ±25	±25	±14
	15 ±25 ±18	±35 ±25	±25	±4
	16 ±25 ±18	±35 ±25	±25	±4
	18 ±25 ±16	±35 ±25	±25	
	20 ±25 ±14	±35 ±25	±25	
	22 ±20 ±12	±35 ±22	±20	
	25 ±20 ±10	±35 ±22	±20	
	30 ±20	±35 ±22	±15	
	32 ±15	±35 ±22	±15	
	35 ±15	±35 ±20		
	40 ±15	±35		
	43	±25		
	45	±25		
	50	±25		
	52	±25		
	60	±25		
	65			
	70			



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	BIS M-132-03/L- HT	BIS M135-03/L- HT				
passende Datenträger Appropriate data carriers						
Abstand Datenträger zu Metall in mm (a) Data carrier distance to metal in mm	>50	>50				
Freizone Datenträger in mm (b) Data carrier clear zone in mm	>200	>200				
Schreibabstand in mm Write distance in mm	0-50	0-75				
Leseabstand in mm Read distance in mm	0-50	0-75				
Versatz in mm bei Abstand von	0 ±30 5 ±30 10 ±30 15 ±30 20 ±30 25 ±28 30 ±28 35 ±28 40 ±28 45 ±10 50 ±10 55 60 65 70 75 80 85 90 95 100	±50 ±50 ±50 ±50 ±50 ±50 ±50 ±50 ±50 ±50 ±50 ±50 ±50 ±50 ±50 ±45 ±45 ±45 ±45 ±35 ±35 ±35				
Offset in mm at distance						

