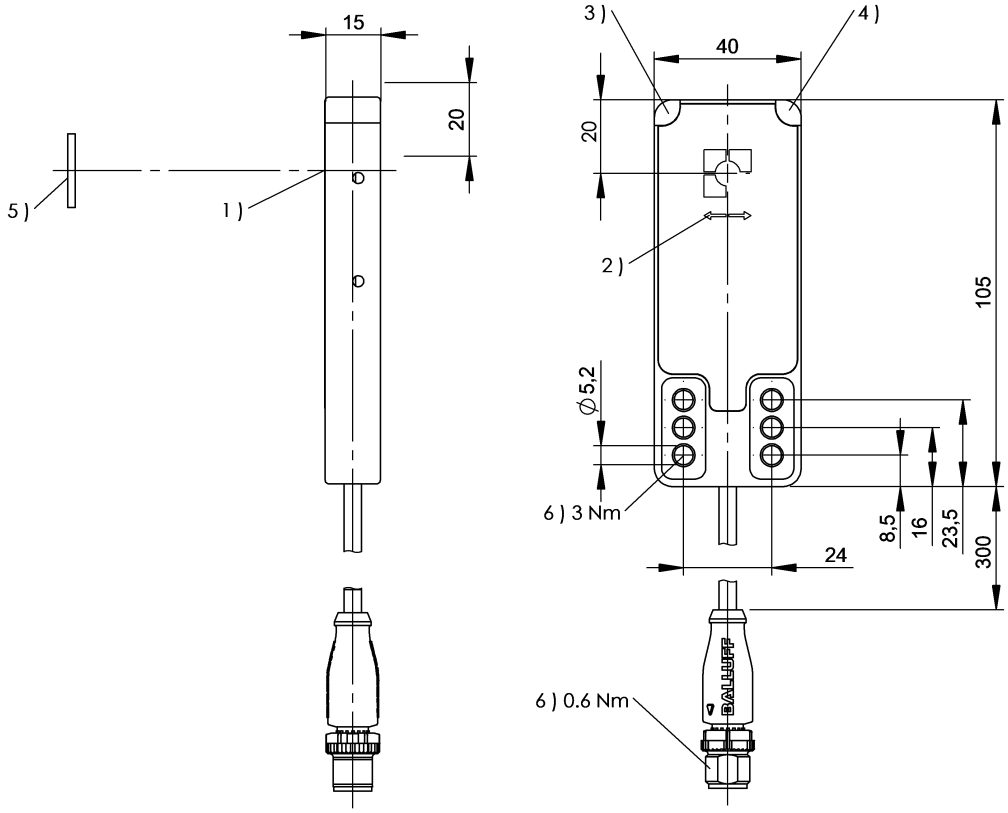
HF (13.56 MHz)

BIS M-458-045-001-07-S4
Order Code: BIS014K



1) Sensing surface, 2) Read/write axis, 3) LED Power, 4) LED (CP), 5) Data carrier, 6) Tightening torque

Basic features

Antenna type	Rod
Approval/Conformity	CE UKCA FCC Part 15 IC (Radio) WEEE MIC KC NBTC IMDA
Principle of operation	Read/write head

Display/Operation

Function indicator	CP (Code tag present), LED yellow Power (ON), LED green Operating, LED green flashing

Electrical connection

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

Electrical data

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

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

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Functional Characteristics

Supported data carrier types	DIN ISO 14443 DIN ISO 15693

IO-Link

IO-Link Profil IDs	N/A

Interface

Interface	IO-Link 1.1
Process data IN	10 bytes

Material

Housing material	Zinc, Die casting, nickel-plated
Housing material, surface protection	nickel-plated

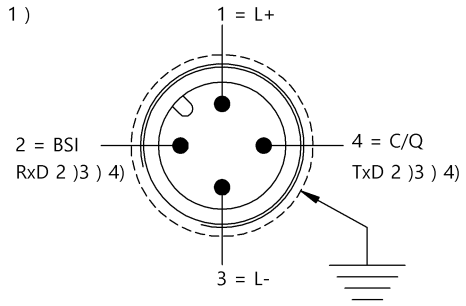
Mechanical data

Application weight	360.00 g
Dimension	40 x 15 x 105 mm

Remarks

For basic equipment: Accessories see www.balluff.com
Values are under rated conditions unless otherwise specified.
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.

Connector Drawings



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

Help Views

BALLUFF

BIS M-458-045-001-

passende Datenträger Appropriate data carriers	BIS M-150-02/A		BIS M-151-02/A		BIS M-150-02/A		BIS M-151-02/A		
Freizone Datenträger in mm (**a**)									
Data carrier clear zone in mm	>200	>200	>200	>200	>200	>200	>200	>200	
Freizone Datenträger in mm (**b**)									
Data carrier clear zone in mm	>200	>200	>200	>200	>200	>200	>200	>200	
Datenträger Metall-Montagefläche 40x22									
Data carrier metal mounting surface 40x22	0-38	0-38	0-38	0-38					
Datenträger Metall-Montagefläche ≥ 200x200									
Data carrier metal mounting surface ≥ 200x200					0-42	0-42	0-34	0-34	
Schreibabstand in mm									
Write distance in mm	0-38	0-38	0-38	0-38	0-42	0-42	0-34	0-34	
Leseabstand in mm									
Read distance in mm	0-38	0-38	0-38	0-38	0-42	0-42	0-34	0-34	
Versatz in mm	X	Y	Y	X	X	Y	Y	X	
bei Abstand von									
0	±43	±18	±40	±20	±45	±21	±35	±17	
5	±43	±18	±40	±20	±45	±21	±35	±17	
10	±43	±18	±40	±20	±45	±21	±35	±17	
15	±40	±17	±35	±18	±43	±20	±33	±15	
20	±40	±17	±35	±18	±43	±20	±33	±15	
30	±35	±15	±30	±15	±40	±18	±28	±13	
34	±18	±5	±10	±5	±24	±12	±10	±5	
38	±18	±5	±10	±5	±24	±12			
40					±24	±12			
42					±15	±8			
50									
60									
70									
80									
90									
100									

Offset in mm
at distance

Einbauhinweis Datenträger
Installation note for data carriers

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passende Datenträger Appropriate data carriers	BIS M-152-03/A		BIS M-153-02/A		BIS M-153-02/A		BIS M-154-03/A			
Freizone Datenträger in mm (**a**)										
Data carrier clear zone in mm	>200	>200	>240	>240	>240	>240	>200	>200		
Freizone Datenträger in mm (**b**)										
Data carrier clear zone in mm	>200	>200	>480	>480	>480	>480	>200	>200		
Freizone Datenträger in mm (**c**)										
Data carrier clear zone in mm	>50	>50	>50	>50	>0	>0	>50	>50		
Schreibabstand in mm										
Write distance in mm	0-18	0-18	0-54	0-54	0-54	0-54	0-16	0-16		
Leseabstand in mm										
Read distance in mm	0-18	0-18	0-54	0-54	0-54	0-54	0-16	0-16		
Versatz in mm	X	Y	X	Y	X	Y	X	Y		
bei Abstand von										
0	±22	±12	±60	±30	±60	±30	±20	±10		
5	±22	±12	±60	±30	±60	±30	±20	±10		
Offset in mm										
10	±21	±10	±60	±30	±60	±30	±19	±9		
at distance										
15	±16	±8	±55	±27	±55	±27	±14	±7		
16	±5	±2	±55	±27	±55	±27	±5	±2		
18	±5	±2	±55	±27	±55	±27				
30			±55	±27	±55	±27				
35			±50	±25	±50	±25				
40			±50	±25	±50	±25				
45			±35	±17	±35	±17				
50			±35	±17	±35	±17				
54			±15	±7	±15	±7				
56										
60										
70										
80										

Einbauhinweis Datenträger
Installation note for data carriers

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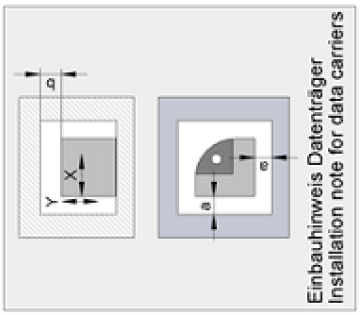
BIS M-458-045-001-

passende Datenträger Appropriate data carriers	BIS M-191-02/A					
Freizone Datenträger in mm (**a**) Data carrier clear zone in mm	>27 >27					
Freizone Datenträger in mm (**b**) Data carrier clear zone in mm	>27 >27					
Schreibabstand in mm Write distance in mm	0-25 0-25					
Leseabstand in mm Read distance in mm	0-25 0-25					
Versatz in mm bei Abstand von Offset in mm at distance	X Y 0 ±30 ±20 5 ±30 ±20 10 ±30 ±20 15 ±25 ±15 20 ±15 ±10 25 ±5 ±5 27 35 40 42 50 57 60 65 70 75					



Einbauhinweis Datenträger
Installation note for data carriers