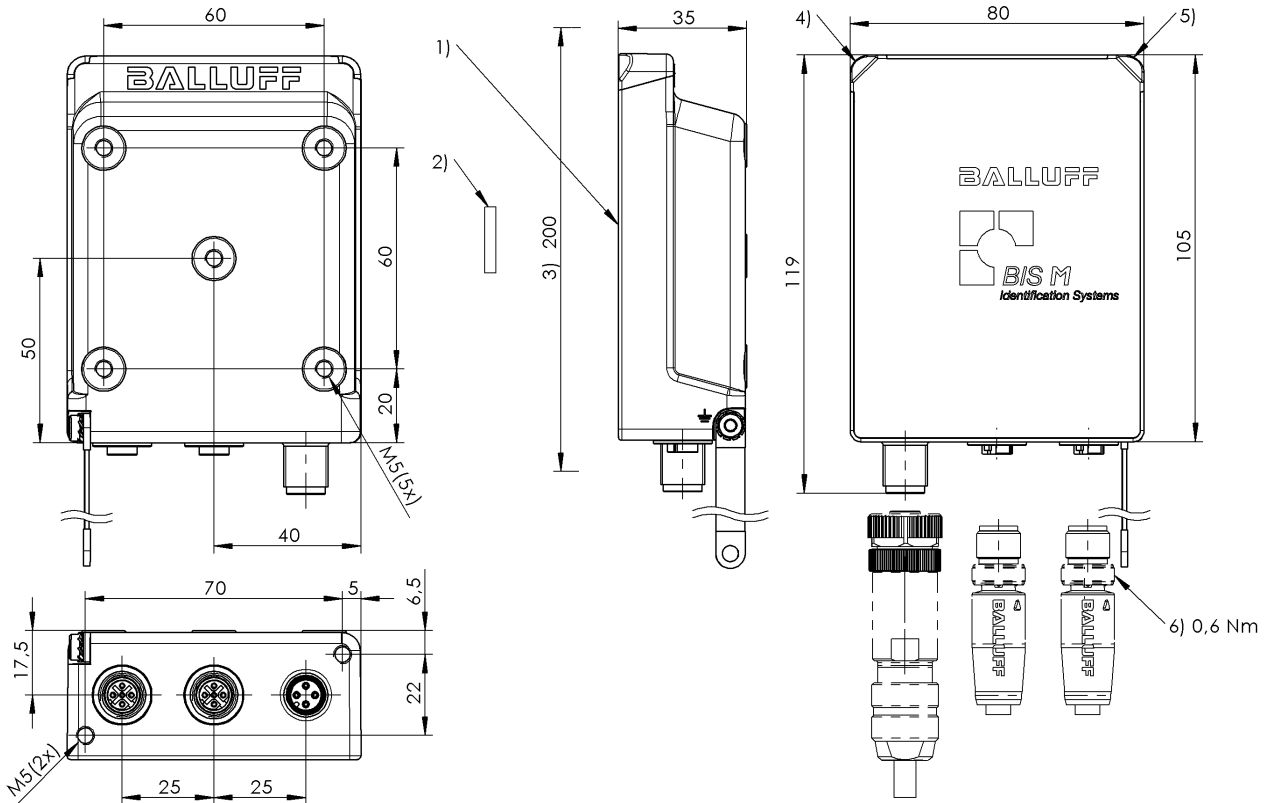


HF (13.56 MHz)  
 BIS M-4008-048-001-ST4  
 Order Code: BIS0179

# BALLUFF



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



## Basic features

Antenna type	round
Approval/Conformity	CE UKCA WEEE
Principle of operation	Read/write device

## Display/Operation

Function indicator	CP (Code tag present), LED yellow Link Port 1, LED green Link Port 2, LED green Activity Port 1, LED yellow Activity Port 2, LED yellow BUS Failure Status, LED red System Failure Status, LED red Power, LED green
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## Electrical connection

Connection (COM 1)	Port 1: M12x1-Female, 4-pin, D-coded
Connection (COM 2)	Port 2: M12x1-Female, 4-pin, D-coded
Connection (supply voltage IN)	M12x1-Male, 4-pin, A-coded

## Electrical data

Current consumption max. at 24 V DC	150 mA
Nominal voltage	24 VDC
Operating voltage Ub	19.2...28.8 VDC LPS Class 2
Residual ripple max.	10 %

## Environmental conditions

Altitude max.	2000 m
Ambient temperature	0...70 °C
Area of operation	Indoor
Contamination scale	2
EN 60068-2-27, Shock	yes
EN 60068-2-32 Free fall	yes
EN 60068-2-6, Vibration	yes
IP rating	IP67, with connector
Relative humidity	0...90 %, non-condensing
Storage temperature	-20...85 °C

## Functional Characteristics

Supported data carrier types	DIN ISO 15693 DIN ISO 15693 (High Memory)
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## Functional safety

MTTF (40 °C)	68 a
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## Interface

Interface	Profinet I/O (IRT) Profinet I/O (IRT) 2-port switch
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## Material

Housing material	Zinc, Die casting
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## Mechanical data

Application weight	410.00 g
Dimension	80 x 35 x 119 mm
Installation	metal-free (clear zone) on metal flush in metal

## Remarks

Only for data carriers acc. to ISO 15693.

For basic equipment: Accessories see [www.balluff.com](http://www.balluff.com)

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

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 product is maintenance-free.

The device can be cleaned with a slightly damp cloth.

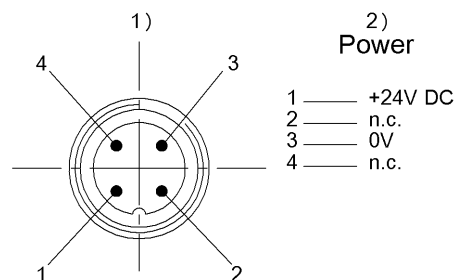
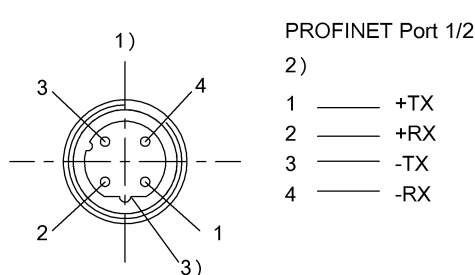
The devices must be installed permanently.

Check the function of the device and all associated components regularly by visual and functional testing. - In the event of malfunctions, take the device out of operation. - Secure the system against unauthorized use. - Check fastening and tighten if necessary. 1 Determine suitable mounting position. 2. Fasten the device with suitable mounting material.

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



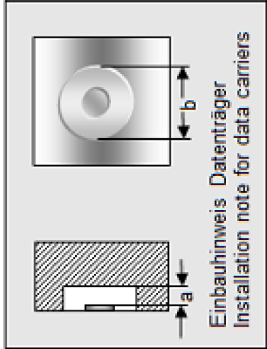
HF (13.56 MHz)  
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**BALLUFF**

Help Views

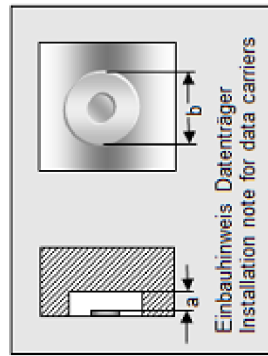
**BIS M-4008-001**

	BIS M-108-02/L	BIS M-108-1x/A	BIS M-111-02/L	BIS M-112-02/L
passende Datenträger Appropriate data carriers				
Abstand Datenträger zu Metall in mm ( a ) Data carrier distance to metal in mm	>50 >0 >0	>50 >0 >0	>50	>50
Freizone Datenträger in mm ( b ) Data carrier clear zone in mm	>200 >200 >0	>200 >200 >0	>200	>200
Schreibabstand in mm Write distance in mm	0-52 0-32 10-19	0-36 0-28 11-18	0-52	0-80
Leseabstand in mm Read distance in mm	0-52 0-32 10-19	0-36 0-28 11-18	0-52	0-80
Versatz in mm bei Abstand von	0 ±32 ±25 5 ±32 ±25 10 ±32 ±25 ±20 11 ±32 ±22 ±20 ±18 12 ±32 ±22 ±20 ±25 ±20 ±18 16 ±32 ±22 ±15 ±25 ±20 ±15 17 ±32 ±22 ±15 ±25 ±20 ±2 18 ±32 ±22 ±8 ±25 ±20 ±2 19 ±32 ±22 ±8 ±25 ±20 20 ±32 ±22 ±25 ±20 25 ±28 ±15 ±22 ±15 28 ±28 ±15 ±22 ±1 30 ±28 ±15 ±22 32 ±28 ±10 ±5 36 ±28 ±5	±27 ±22 ±27 ±22 ±27 ±22 ±25 ±20 ±18 ±25 ±20 ±18 ±25 ±20 ±15 ±25 ±20 ±2 ±25 ±20 ±2 ±25 ±20 ±25 ±20 ±22 ±15 ±22 ±1 ±5 ±5	±32 ±32 ±32 ±32 ±32 ±32 ±32 ±32 ±32 ±32 ±28 ±28 ±28 ±28 ±38 ±38 ±38 ±38 ±20 ±5	±42 ±42 ±42 ±42 ±42 ±42 ±42 ±42 ±42 ±42 ±42 ±42 ±42 ±38 ±38 ±38 ±38 ±20 ±5
Offset in mm at distance				



**BIS M-4008-001**

	BIS M-142-02/A BIS M-142-20/A	BIS M-142-1x/A- Mx	BIS M-143-02/A- Mx
passende Datenträger Appropriate data carriers			
Abstand Datenträger zu Metall in mm ( a ) Data carrier distance to metal in mm	>0	>0	>0
Freizone Datenträger in mm ( b ) Data carrier clear zone in mm	>100	>100	>100
Schreibabstand in mm Write distance in mm	0-38	0-18	0-18
Leseabstand in mm Read distance in mm	0-38	0-18	0-18
Versatz in mm bei Abstand von	0 5 10 15 18 20 25 30 36 38 40 45 50 55 60 65 70 75 80 85 90 95	±22 ±22 ±20 ±16 ±5	±22 ±22 ±20 ±18 ±10
Offset in mm at distance			



**BIS M-4008-001**

	BIS M-132-03/L- HT	BIS M-133-02/A	BIS M-135-03/L- HT	BIS M-135-07/L- HT
passende Datenträger Appropriate data carriers				
Abstand Datenträger zu Metall in mm ( a ) Data carrier distance to metal in mm	>50	>50	>50	>50
Freizone Datenträger in mm ( b ) Data carrier clear zone in mm	>200	>200	>200	>200
Schreibabstand in mm Write distance in mm	0-60	0-55	0-90	0-65
Leseabstand in mm Read distance in mm	0-60	0-55	0-90	0-65
Versatz in mm bei Abstand von	0 ±35	0-55 ±32 ±27	0-90 ±50	0-65 ±36
Offset in mm at distance	10 ±35	±32 ±27	±50	±36
	20 ±35	±32 ±27	±50	±36
	30 ±30	±30 ±25	±50	±33
	40 ±30	±30 ±20	±45	±33
	45 ±20	±24 ±5	±45	±25
	50 ±20	±24	±45	±25
	55 ±20	±10	±45	±25
	60 ±10		±45	±25
	65		±30	±10
	70		±30	
	75		±30	
	80		±30	
	85		±20	
	90		±20	
	100			
	110			
	120			
	130			
	140			
	150			

