

1) Sensing surface, 2) Data carrier, 3) Clear zone, 4) Clear zone surrounding, 5) Tightening torque



### Basic features

<b>Antenna type</b>	round
<b>Approval/Conformity</b>	CE cULus EAC WEEE
<b>EN 55011</b>	Size 1, Cl. A
<b>Principle of operation</b>	Read/write device

### Display/Operation

<b>Function indicator</b>	COM field, LED yellow RF field, LED red Power (ON), LED green
---------------------------	---

### Electrical connection

<b>Connection</b>	USB: M12x1-Male, 5-pin
-------------------	------------------------

### Electrical data

<b>Current consumption max. at 5 V DC</b>	500 mA
<b>EN 300330-1</b>	Power Class 5
<b>Nominal voltage</b>	5 VDC
<b>Operating voltage <math>U_b</math></b>	5 V DC
<b>Residual ripple max.</b>	included

### Environmental conditions

<b>Ambient temperature</b>	-20...50 °C
<b>Continuous shock load</b>	yes
<b>EN 60068-2-27, Shock</b>	yes
<b>EN 60068-2-32 Free fall</b>	yes
<b>EN 60068-2-6, Vibration</b>	yes
<b>IP rating</b>	IP67
<b>Storage temperature</b>	-20...70 °C

HF (13.56 MHz)  
**BIS M-410-068-001-09-S72**  
Order Code: BIS00W4

# BALLUFF

## Functional Characteristics

Supported data carrier types	DIN ISO 14443 DIN ISO 15693
------------------------------	--------------------------------------

## Material

Housing material	PC, With PU potting
------------------	---------------------

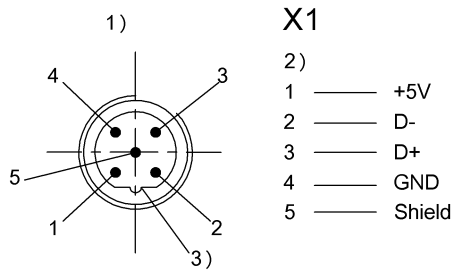
## Mechanical data

Application weight	66.00 g
Dimension	40 x 24 x 56 mm
Installation	metal-free (clear zone)

## Output/Interface

Interface	USB 2.0
-----------	---------

## Connector Drawings

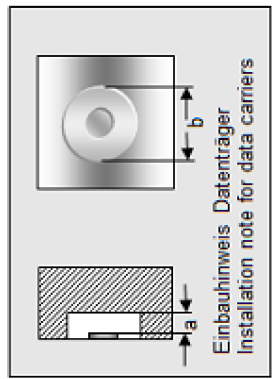


- 1) View towards connector
- 2) Male 5-pin/ Function
- 3) Coding B

## Help Views

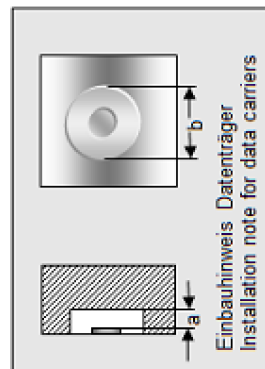
**BIS M-410-\_\_**

	BIS M-130-03/L	BIS M-130-07/L	BIS M-131-10/L	BIS M-132-03/L	BIS M-132-03/L-HT
passende Datenträger Appropriate data carriers					
Abstand Datenträger zu Metall in mm ( a ) Data carrier distance to metal in mm	>10	>10	>10	>25	>25
Freizone Datenträger in mm ( b ) Data carrier clear zone in mm	>60	>60	>60	>100	>100
Schreibabstand in mm Write distance in mm	0-17	0-12	0-5	0-48	0-40
Leseabstand in mm Read distance in mm	0-17	0-12	0-5	0-48	0-40
Versatz in mm bei Abstand von	0 ±15	±12	±10	±30	±25
	2 ±15	±12	±10	±30	±25
	4 ±15	±12	±7.5	±30	±25
	5 ±15	±12	±5	±30	±25
	10 ±14	±10		±30	±25
	12 ±12	±5		±25	±20
	15 ±12			±25	±20
	17 ±7			±25	±20
	20			±25	±20
	25			±25	±20
	30			±25	±20
	35			±20	±12
	40			±20	±12
	45			±12	±12
	48			±12	±12
	75				
	80				
	85				
	90				
	95				
	100				



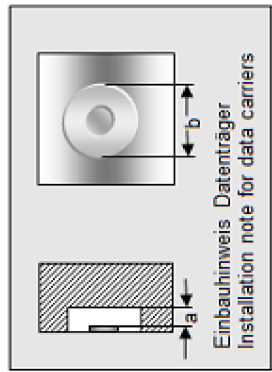
**BIS M-410-\_\_**

	BIS M-132-10/L	BIS M-132-10/L- HT	BIS M-133-02/A	BIS M-134-10/L	BIS M-134-10/L- HT
passende Datenträger Appropriate data carriers					
Abstand Datenträger zu Metall in mm ( <b>a</b> ) Data carrier distance to metal in mm	>25	>25	>25	>50	>50
Freizone Datenträger in mm ( <b>b</b> ) Data carrier clear zone in mm	>100	>100	>100	>150	>150
Schreibabstand in mm Write distance in mm	0-15	0-15	0-32	0-32	0-36
Leseabstand in mm Read distance in mm	0-15	0-15	0-32	0-32	0-36
Versatz in mm bei Abstand von	0 ±15	±15	±20	±22	±25
	5 ±15	±15	±20	±22	±25
	10 ±12	±12	±20	±22	±25
	15 ±8	±8	±16	±20	±25
	20		±16	±20	±25
	25		±10	±12	±20
	30		±10	±12	±20
	32		±8	±8	±12
	36				±12
	40				
	45				
	50				
	55				
	60				
	65				
	68				
	75				
	80				
	85				
	90				
	95				



**BIS M-410-\_\_**

	BIS M-135-02/L	BIS M-135-03/L	BIS M-135-03/L- HT	BIS M-135-07/L	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	>50
Freizone Datenträger in mm ( b ) Data carrier clear zone in mm	>150	>150	>150	>150	>150
Schreibabstand in mm Write distance in mm	0-60	0-68	0-70	23-46	23-46
Leseabstand in mm Read distance in mm	0-60	0-68	0-70	23-46	23-46
Versatz in mm bei Abstand von Offset in mm at distance	0 5 10 15 20 23 30 32 35 40 46 50 55 60 65 68 70 80 85 90 95	±35 ±40 ±40 ±40 ±40 ±44 ±32 ±32 ±32 ±32 ±32 ±24 ±24 ±16 ±16 ±15 ±15	±44 ±44 ±44 ±44 ±44 ±32 ±32 ±32 ±32 ±32 ±32 ±25 ±25 ±15 ±15	±44 ±44 ±44 ±44 ±44 ±24 ±24 ±18 ±18 ±18 ±18 ±10	±44 ±44 ±44 ±44 ±44 ±24 ±24 ±18 ±18 ±18 ±10



**BIS M-410-\_\_**

	BIS M-108-02/L				
passende Datenträger Appropriate data carriers					
Abstand Datenträger zu Metall in mm ( a ) Data carrier distance to metal in mm	>25				
Freizone Datenträger in mm ( b ) Data carrier clear zone in mm	>120				
Schreibabstand in mm Write distance in mm	0-40				
Leseabstand in mm Read distance in mm	0-40				
Versatz in mm bei Abstand von	0 ±22				
	5 ±22				
	10 ±22				
	15 ±22				
	20 ±22				
	25 ±20				
	30 ±20				
	35 ±20				
	40 ±10				
	45				
	50				
	55				
	60				
	65				
	70				
	75				
	80				
	85				
	90				
	95				
	100				

