

1) Sensing surface, 2) Data carrier, 3) Tightening torque, 4) LED function indicator, 5) LED function indicator



## Basic features

<b>Antenna type</b>	round
<b>Approval/Conformity</b>	CE UKCA FCC Part 15 IC (Radio) WEEE Ecolab cULus
<b>Principle of operation</b>	Read/write head
<b>Secondary features for condition monitoring</b>	Vibration monitoring Inclination monitoring and installation aid Internal temperature monitoring

## Display/Operation

<b>Function indicator</b>	Power (ON) Green LED TP (Tag Present) LED yellow
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## Electrical connection

<b>Connection</b>	M12x1-Male, 4-pin, A-coded
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## Electrical data

<b>Current consumption max. at 24 V DC</b>	150 mA
<b>Current consumption max. at 24 V DC without load</b>	40 mA
<b>Current consumption max., note</b>	Output (Pin2) may be loaded with a maximum of 100mA
<b>Operating voltage U<sub>b</sub></b>	18...30 VDC Supports only LPS/ Class 2
<b>Residual ripple max.</b>	1.3 V <sub>pp</sub>
<b>Transfer rate</b>	COM3 (230.4 kBaud)

Smart Automation and Monitoring System  
 HF (13.56 MHz)  
**BIS M-4A9-082-401-07-PU1-0,3**  
 Order Code: **BIS01E2**



**Environmental conditions**

Ambient temperature	0...70 °C
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	IP68, IP69K
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)	349.9 a
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**IO-Link**

IO-Link Profil IDs	0x0030 BLOB 0x0031 BLOB FW-Update 0x4000 Identification and Diagnosis
Supported IO-Link Profiles	Common Profile BLOB Profile FW-Update Profile

**Interface**

Interface	IO-Link 1.1
Process data IN	10 bytes

**Material**

Housing material	ABS, ABS-GF16
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**Mechanical data**

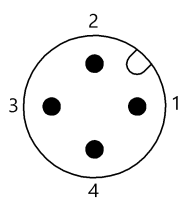
Application weight	56.00 g
Dimension	25 x 10 x 50 mm
Installation	metal-free (clear zone) on metal flush in metal

**Remarks**

Only for data carriers acc. to ISO 15693.  
 For basic equipment: Accessories see [www.balluff.com](http://www.balluff.com)  
 Values are under rated conditions unless otherwise specified.  
 When installing, the technical standards and regulations of the corresponding countries must be observed.  
 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) 2)  
 IO-Link  
 1 — L+ (24 V)  
 2 — I/Q  
 3 — L- (GND)  
 4 — C/Q