



1) Sensing surface, 2) Clear zone, 3) see corresponding R/W head, 4) Tightening torque



### Basic features

Antenna type	round
Approval/Conformity	CE WEEE
EN 55011	Size 1, Cl. A
EN 55022	Size 1, Cl. B
Principle of operation	Data carrier

### Electrical data

Data retention time/years	≥ 10
Memory organization	48 × 4 bits
Programming cycles	≥ 100.000
Programming time	for 4 bytes: 0.305s
Read cycles	Unlimited
Read time	for 4 bytes: 0.18 s

### Environmental conditions

Ambient temperature	-25...85 °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	IP67, 1 m, 30 min
Storage temperature	-40...95 °C

### Functional Characteristics

Memory type	EEPROM
UID serial number, read-only	4 Byte
User data, read/write	192 Byte

### Material

Housing material	Epoxy-resin/fiberglass, GF
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### Mechanical data

Application weight	6.50 g
Dimension	Ø 50 x 1.6 mm
Installation	metal-free (clear zone) on metal flush in metal

LF (125 kHz)  
**BIS L-102-05/L**  
**Order Code: BIS003A**

**BALLUFF**

#### Remarks

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Values are under rated conditions unless otherwise specified.

Only when used together with the appropriate read/write head.

For installation requirements see corresponding read/write head.

Time specification includes data check.

Torsional, bending and impact loading is not permitted.

a) Hygroscopicity The hygroscopicity of the cured material depends heavily on the ambient temperature. Saturation in water at +20 °C / 6 days = 0.3 %

Saturation in water at +70 °C / 3 days = 3.0 %

For installation in metal: Observe clear zone.

Recommended screw: M4, 8.8