



1) Sensing surface, 2) Data carrier



## Basic features

<b>Antenna type</b>	round
<b>Approval/Conformity</b>	CE WEEE
<b>EN 55022</b>	Size 1, Cl. B

## Electrical data

<b>Data retention time/years</b>	≥ 10 at 55 °C
<b>Memory organization</b>	250 × 8 bytes
<b>Programming cycles</b>	≥ 10.000.000.000
<b>Programming time</b>	for 16 bytes: 0.060s
<b>Read cycles</b>	Unlimited
<b>Read time</b>	User ID for 8 bytes: 0.02 s for 16 bytes: 0.03 s

## Environmental conditions

<b>Ambient temperature</b>	-25...70 °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>Protection degree</b>	IP67
<b>Storage temperature</b>	-25...85 °C

## Functional Characteristics

<b>Memory type</b>	FRAM
<b>Supported data carrier types</b>	DIN ISO 15693
<b>UID serial number, read-only</b>	8 Byte
<b>User data, read/write</b>	2000 Byte

## Functional safety

<b>MTTF (40 °C)</b>	1900 a
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## Material

<b>Housing material</b>	PA 12 Cast aluminum
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## Mechanical data

<b>Application weight</b>	100 g
<b>Dimension</b>	40 x 23 x 28 mm
<b>Installation</b>	metal-free (clear zone) on metal flush in metal

HF (13.56 MHz)  
**BIS M-127-02/A-SA1**  
**Order Code: BIS0180**

**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.

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.