



1) Sensing surface, 2) Clear zone



**Basic features**

<b>Antenna type</b>	round
<b>Approval/Conformity</b>	CE UKCA WEEE
<b>EN 55022</b>	Size 1, Cl. B
<b>Principle of operation</b>	Data carrier

**Electrical data**

<b>Data retention time/years</b>	≥ 10 at 55 °C
<b>Memory organization</b>	256 × 32 bits
<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>	for 16 bytes: 0.03 s User ID for 8 bytes: 0.02 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>IP rating</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>	8192 Byte

**Material**

<b>Housing material</b>	PBT, GF
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**Mechanical data**

<b>Application weight</b>	27.00 g
<b>Dimension</b>	32 x 11 x 52 mm
<b>Installation</b>	metal-free (clear zone) on metal

HF (13.56 MHz)  
**BIS M-108-20/A**  
**Order Code: BIS0111**

**BALLUFF**

**Remarks**

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For installation in metal: Observe clear zone.  
Time specification includes data check.  
For installation requirements see corresponding read/write head.  
Only when used together with the appropriate read/write head.  
Values are under rated conditions unless otherwise specified.  
Impact loading not permitted.