



1) Sensing surface



**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
<b>Memory organization</b>	47 × 16 bits
<b>Programming cycles</b>	≥ 100.000
<b>Programming time</b>	for 16 bytes: 0.040s
<b>Read cycles</b>	Unlimited
<b>Read time</b>	User ID for 4 bytes: 0.02s for 16 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>	EEPROM
<b>Supported data carrier types</b>	DIN ISO 14443
<b>UID serial number, read-only</b>	4 Byte
<b>User data, read/write</b>	752 Byte

**Functional safety**

<b>MTTF (40 °C)</b>	1248 a
---------------------	--------

**Material**

<b>Housing material</b>	PA 12, PU potted
-------------------------	------------------

**Mechanical data**

<b>Application weight</b>	0.57 g
<b>Dimension</b>	∅ 10 x 4.5 mm
<b>Installation</b>	metal-free (clear zone)

HF (13.56 MHz)  
**BIS M-122-01/A**  
**Order Code: BIS0048**

**BALLUFF**

#### Remarks

---

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.  
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.