



1) Sensing surface, 2) Clear zone, 3) see R/W head table



Basic features

| | |
|------------------------|--------------------|
| Antenna type | round |
| Approval/Conformity | CE UKCA 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 | 47 × 16 bits |
| Programming cycles | ≥ 100.000 |
| Programming time | for 16 bytes: 0.040s |
| Read cycles | Unlimited |
| Read time | for 16 bytes: 0.02 s User ID for 4 bytes: 0.02s |

Environmental conditions

| | |
|-------------------------------|------------------------------------|
| Ambient temperature | -40...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 | IP68 |
| IP rating per DIN 40050 | IPx9K |
| Storage temperature temporary | -40...220 °C 1x1500 h, 1500x30 min |

Functional Characteristics

| | |
|------------------------------|---------------------|
| Memory type | EEPROM |
| Supported data carrier types | DIN ISO 14443 |
| UID serial number, read-only | 4 Byte |
| User data, read/write | 736 Byte |

Functional safety

| | |
|--------------|--------|
| MTTF (40 °C) | 1248 a |
|--------------|--------|

Material

| | |
|------------------|-----|
| Housing material | PPS |
|------------------|-----|

Mechanical data

| | |
|--------------------|-------------------------|
| Application weight | 20.00 g |
| Dimension | Ø 49.8 x 5.3 mm |
| Installation | metal-free (clear zone) |

HF (13.56 MHz)
BIS M-137-10/L-HT
Order Code: BIS018P

BALLUFF

Remarks

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 installation in metal: Observe clear zone.
Storage temperature 1500 h or 1500 cycles à 30 min.
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.