



1) Sensing surface, 2) Tightening torque



Basic features

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

Electrical data

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

Environmental conditions

Ambient temperature	-25...70 °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 per DIN 40050	IP68 IPx9K

Functional Characteristics

Memory type	FRAM
UID serial number, read-only	8 Byte
User data, read/write	2000 Byte

Functional safety

MTTF (40 °C)	1535 a
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Material

Housing material	Steel PA 12, GF30
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Mechanical data

Application weight	18 g
Dimension	Ø 19 x 21 mm
Installation	metal-free (clear zone) on metal flush in metal

HF (13.56 MHz)
BIS M-143-02/A-M10
Order Code: BIS0188

BALLUFF

Remarks

Time specification includes data check.

We recommend lightly oiling the data carrier screws and storing in a dry location at room temperature.

For installation requirements see corresponding read/write head.

Lubricate screw before installing.

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

Values are under rated conditions unless otherwise specified.

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.