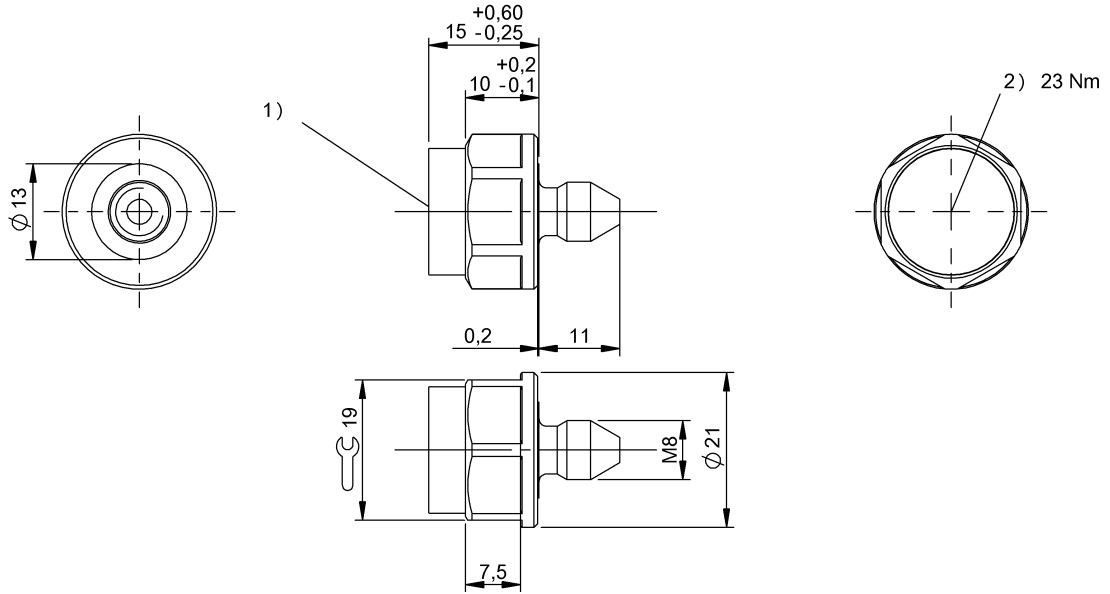


HF (13.56 MHz)  
 BIS M-142-02/A-M8-SA2  
 Order Code: BIS01AP

**BALLUFF**



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)	1900 a
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### Material

Housing material	Steel, Data carrier: PA 12-GF30, coated
Housing material, surface protection	coated

### Mechanical data

Application weight	16.00 g
Dimension	Ø 21 x 26 mm

HF (13.56 MHz)  
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**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.  
Lubricate screw before installing.  
We recommend lightly oiling the data carrier screws and storing in a dry location at room temperature.  
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.