

Product Datasheet

BEONTAG STEELWAVE HF



Description

Flexible NFC and HF RFID label option for metallic assets. With its industrial grade materials Steelwave HF is a reliable solution for more harsh manufacturing environment.



Electrical specifications

Device type

UHF RFID / EPCglobal Gen2v2
SLIX2: NFC Forum Type 5

Air interface protocol

NTAG213: ISO/IEC 14443A
SLIX2: ISO/IEC 15693

Operational frequency

13,56 MHz

IC options and memory configurations

NXP NTAG213
- User memory 144 bytes
NXP ICODE SLIX2
- User memory 2528 bits

Read range (2W ERP)*

NXP NTAG213
- Mobile phone up to 1,5 cm
- Fixed reader up to 3 cm
NXP ICODE SLIX2
- Mobile phone up to 2,5 cm
- Fixed reader up to 16 cm

Applicable surface materials*

Metal

* Read ranges are measured in laboratory environment and there can be some variation in real application. Also used surface material and IC type might affect the read range.



Personalization options

Pre-encoding

Customer-specific encoding

Visual marking

- Variable printing of customer-specific content (such as QR-code, barcode, serial number)
- Color artwork, branding



Mechanical specifications

Tag materials

Printable white PET, resin ribbon recommended.

Background adhesive

High tack adhesive with excellent adhesion to all surfaces including low surface energy plastics and painted metal

Weight

< 1 g

Delivery format

500 pcs / reel

Pitch on reel

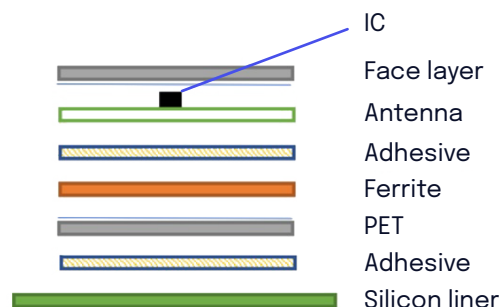
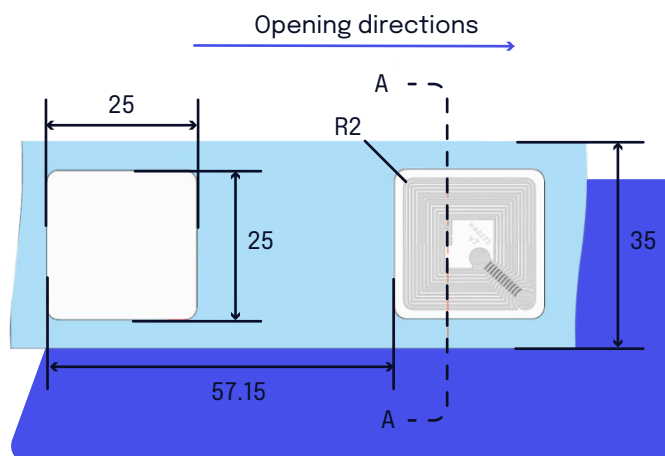
57,15 mm / 2.25 in

Reel core inner diameter

76 mm / 3"

Tag dimensions

25 x 25 x 0,46 mm /
0.98 x 0.98 x 0.018 in





Environmental resistance

Operating temperature

-35°C to +85°C / -31°F to +185°F

Ambient temperature

-35°C to +90°C / -31°F to +194°F

IP classification

Good, tested 5 hours in 1m deep water (IP68)

Chemical resistance

No physical or performance changes in:

- 168h Salt water (salinity 10%) exposure
- 168h Motor oil exposure
- 24h Sulfuric acid (10%, pH 2) exposure
- 24h NaOH (10%, pH 13) exposure
- 20min acetone exposure

Storage condition

1 year in +20°C / 50% RH (shelf life for adhesive)

Expected lifetime

Years in normal operating conditions

Expected lifetime

Years in normal operating conditions

Values in the table are the best recommendations; resistance against environmental conditions depends on the combination of all influencing factors, exposure duration and chemical concentrations. Thus, product's final suitability for certain environmental conditions is recommended to be tested. Contact Beontag for more specific information.



Installation instructions

Ideal installation conditions are +20°C (+68°F) / 50% RH. For exceptional conditions, please contact Beontag. Bond strength can be improved with firm application pressure. Always ensure clean surface for obtaining the maximum bond strength. During attachment to the identified item, please avoid touching the background adhesive. If the location on the asset needs to be changed, please use a new tag instead of re-placing the used one; the adhesion will suffer from the re-placement. Minimum bending diameter of the Beontag Steelwave HFTM is defined to be 50mm. Do not bend the label below the limit. Never touch on the location of the IC. IC is a sensitive electrical component and can be damaged if unexpected pressure is applied on it.



Printer compatibility

The Beontag Steelwave HF labels are designed and verified to work with the SATO CL4NX HF printer. For additional information and technical support, contact Beontag.



Order information

Product number: **3003272**

Product Name: **Beontag Steelwave HF NTAG213**

Product number: **3003273**

Product Name: **Beontag Steelwave HF SLIX2**

For other versions, additional information and technical support please contact Beontag.

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From the science of graphic and label materials, RFID and wireless IoT enablers, we create solutions across the value chain to deliver digital transformation for businesses around the world.

Sustainability is at the core of what we do and we strongly believe that by substituting non-renewable materials and innovating through more sustainable and renewable products, we act as an ESG enabler for our customers' value chain.

Beontag is one of the world's leading providers of RFID and wireless IoT solutions, being present in more than 40 countries with 7 R&D centers and 2,000 employees, in constant development of technological and sustainable solutions designed to connect items, and gain efficiency and end-to-end traceability

CONTACT US FOR
MORE INFORMATIONS:
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