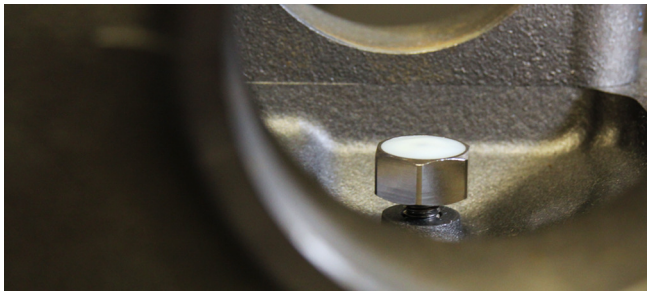
PRODUCT DATASHEET

Confidex X-Bolt™



RFID tag with high chemical resistance and 360 degrees reading performance for manufacturing control applications.

ELECTRICAL SPECIFICATION

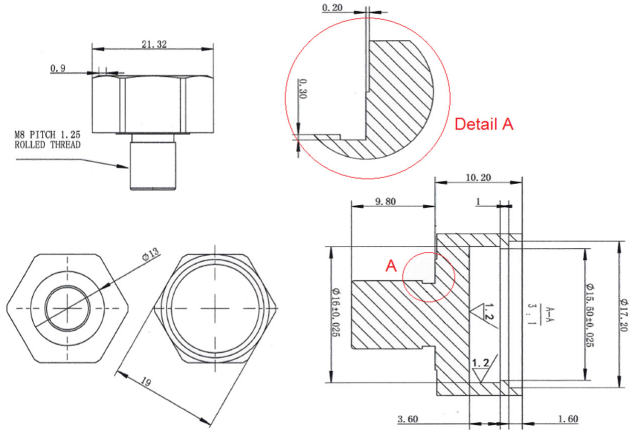
Device type
Class 1 Generation 2 passive UHF RFID transponder
Air interface protocol
EPCGlobal Class1 Gen2 ISO 18000-6C
Operational frequency
ETSI 865-869 MHz
FCC 902-928 MHz
IC type
Impinj Monza 4QT™
Impinj Monza 4E™ (upon special request)
Memory configuration
With Monza 4QT™: EPC 128 bit; User 512 bit; TID 96 bit
With Monza 4E™: EPC 496 bit; User 128 bit; TID 96 bit
EPC memory content
Unique number encoded as a default
Antenna orientation
Circular polarized, 360° turn orientation insensitive
Read range (2W ERP)*
Up to 2 m / 7 ft
Applicable surface materials*
Any material

* Read ranges are theoretical values that are calculated for non-reflective environment, in where antennas with optimum directivity are used with maximum allowed operating power according to ETSI EN 302 208 (2W ERP). Different surface materials may have an effect on performance.

MECHANICAL SPECIFICATION

Tag materials
Metallic bolt, manufactured according to ISO2768 Class C.
Ceramic tag component protected with epoxy adhesive.
Weight
21 g
Delivery format
In box

Tag dimensions
Reference dimensions below (in mm). Please contact Confidex in case tag is needed with other dimensions.



All tolerances are according to ISO 2768 Class C. Epoxy filling may add max 1mm on top of total height of bolt.

ENVIRONMENTAL RESISTANCE

Operating temperature
-20°C to +70°C / -4°F to +158°F
Peak temperature
-20°C to +100°C / -4°F to +212°F for 15 minutes
Ambient temperature
-20°C to +70°C / -4°F to +158°F
Water resistance
IP68
Chemical resistance
No physical or performance changes in exposure of:

- 168h Salt water (salinity 10%)
- 168h NaOH (10%, pH 13)
- 168h Motor oil
- 24h Water solvent metal machining fluids
- 24h Cutting and grinding fluid
- 24h Neutral industrial cleaning agent
- 24h Cleaning agent for metal machining
- 24h Siloxane based antifoam agent
- 24h PH adjuster
- 1h Acetone

Expected lifetime
Product is designed for long life cycle in manufacturing control applications. Expected lifetime is years in normal usage.

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 Confidex for more specific information.

06-2016
contact@confidex.com www.confidex.com

PERSONALIZATION OPTIONS

Pre-encoding

- Customer specific encoding of EPC or user memory. Locking permanently or with password.

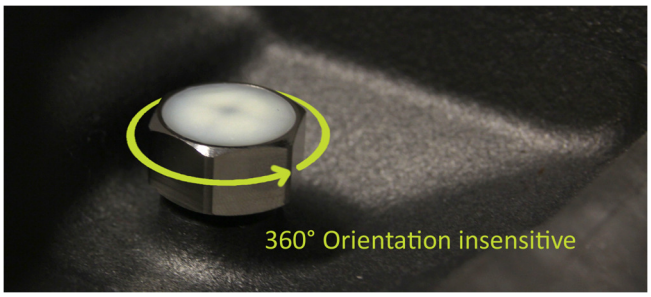
Customized laser engraving

- Customer specific layout with small amount of characters. Can be numbers that correlates with written RFID memory

INSTALLATION INSTRUCTIONS

Confidex X-Bolt™ can be attached by screwing it to M8 thread. Please contact Confidex in case other thread is needed. It is also possible to modify the bolt mechanics in case needed for automatic application machines.

Circular polarization of tag ensures that Confidex X-Bolt™ can be identified in all orientations with constant power level. This helps the installation as the orientation does not affect the read range.



ORDER INFORMATION

Product number: 3001395
Product name: Confidex X-Bolt™ M8 M4QT ETSI

Product number: 3001396
Product name: Confidex X-Bolt™ M8 M4QT FCC

Following products are available upon special request:

Product number: 3001535
Product name: Confidex X-Bolt™ M8 M4E ETSI

Product number: 3001536
Product name: Confidex X-Bolt™ M8 M4E FCC

CONFIDEX

PRODUCT DATASHEET

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contact@confidex.com www.confidex.com