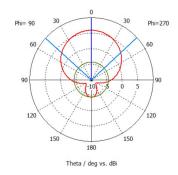




XPLORER SCREW

Technical Specifications

- RF protocol EPC global Class 1 Gen 2
- Frequency 902-928 MHz (US); 865-868 MHz (EU)
- IC type (chip)¹ NXP UCODE 9
- Chip memory 96 bits EPC; 96 bits TID
- Read range fixed² Up to 16.40 ft (5 m)
- Read range handheld² Up to 9.84 ft (3 m)
- Polarization Linear
- Radiation pattern in metal



Key Features

- + Embeddable: designed to be embedded in metal
- + HT or HP: withstand up to 220°C, or 22,000 psi pressure
- + **Screw-in:** easy installation and replacement
- + **5m:** superior read range when embedded in metal
- + IP69K: waterproof and dust-tight

Applications

- Workover rigs
- OCTG tubulars
- LNG
- Offshore wind farms
- Dredging pipes
- Seabed/deepwater equipment
- Manufacturing autoclave
- Construction and civil engineering

Environmental Specifications

Temperatures



Operational -40°C to +85°C

Survival -40°C to +220°C

Å

Chemicals³

- 168h H₂SO₄ (10% sulfuric acid)
- 168h NaOH (10% sodium hydroxide)

- **IP** rating IP68, IP69K
- Liquid Pressure 22,000 psi (150 MPa)
- Shock 3 ft (1 m) to concrete/granite
- Vibration MIL-STD-810G
- Warranty 1 year

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³The chemical resistance is based on the concentration of solutions and application environment. Please contact Xerafy for further details on chemical resistance.



 $^{1 \}over 1$ The chip data retention is up to 50 years, based on chip operating under general environment conditions.

² In metal. Performance based on standard testing methodologies. Performance may vary depending on environmental factors and reader output power.



Physical Specifications

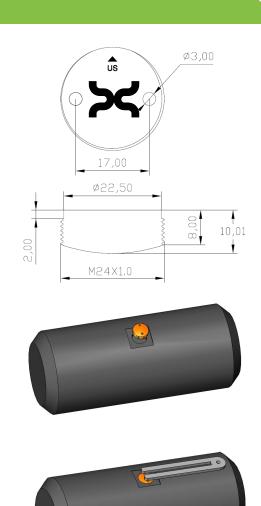
- Material High-performance engineered polymer
- **Dimensions (in)**¹ ø 0.94 x 0.39, hole: ø 0.12
- **Dimensions (mm)**¹ ø 24 x 10.01, hole: ø 3
- Weight 0.23 oz (6.60 g)

Mounting Systems

· Screw in, embedded

Installation Instructions

- 1. Drill a M24 hole in the asset surface. The hole size should be controlled in \emptyset 21 mm \times 8 mm \pm 0.30 mm. Suggest to use the drill bit with 21 mm diameter.
- 2. Use a thread tapping wrench to perform a M24 x 1 mm thread tapping procedure.
- 3. Put the tag in the hole and use an adjustable face spanner wrench to screw the tag in.
- 4. Adjust the tag's direction according to the object size. The \triangle mark on the tag indicates the recommended installation direction to ensure the tag's polarization direction is parallel with the length of the metal asset, in order to get the best read range performance.



Industry Compliance

















Order Information

XPLORER Screw US: X1116-US120-U9

XPLORER Screw EU: X1116-EU120-U9

Customization Options

Encoding

Laser Marking

Version No: 25 08 05

ATEX Certified Version

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¹ Tolerance: +/- 0.004; +/- 0.100