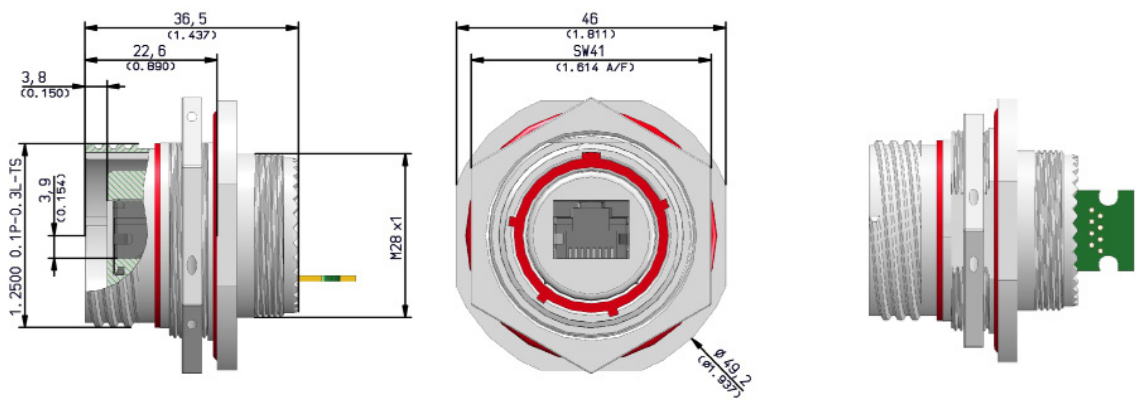


# X1-SERIES - RUGGED ETHERNET CONNECTIONS

## RJ45 CAT6A PCB – JAM NUT RECEPTACLE X1-9887



### INFORMATION

All dimensions in  
mm (inch) unless  
otherwise specified.

Shell derived from D38999

PN: X1-9887

Datasheet Version: 2.0

### CATALOG:

Harsh Environment  
Data Connectivity Solutions



### Table A: Material & Plating

| Material & Plating Code | Technical Design                                                                                                                               | ROHS-/REACH Compliant | Electrically Conductive | Salt Spray Resistance according to MIL spec. | Salt Spray Resistance according to VG spec. |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------------|----------------------------------------------|---------------------------------------------|
| V                       | <b>Tin-Zinc grey</b><br>Base material: Al-alloy<br>Tin-Zinc over electroless Nickel                                                            | Yes                   | Yes                     | 500 hrs                                      | 5 day cyclic                                |
| 5                       | <b>Electroless Nickel</b><br>Base material: Al-alloy                                                                                           | Yes                   | Yes                     | 48 hrs                                       | n.a.                                        |
| 2                       | <b>Zinc-Nickel black</b><br>Coupling ring: Al-alloy, black anodized<br>Shell: Zinc-Nickel black chromate over electroless Nickel               | Yes                   | Yes                     | 500 hrs                                      | n.a.                                        |
| 6                       | <b>Cadmium olive drab</b><br>Coupling ring: Al-alloy, olive drab anodized<br>Shell: Al-alloy Cadmium plated olive drab over electroless Nickel | No                    | Yes                     | 500 hrs                                      | 5 day cyclic                                |
| 9                       | <b>Marine Bronze</b><br>Base material: Marine Bronze<br>CuAl10Ni5Fe4 (CW307G)<br>Shotblast, nonreflective                                      | Yes                   | Yes                     | n.a.                                         | n.a.                                        |
| 1                       | <b>Stainless Steel</b> / passivated                                                                                                            | Yes                   | Yes                     | n.a.                                         | n.a.                                        |

## Performance

|                   |                        |
|-------------------|------------------------|
| Voltage rating AC | 35 V                   |
| Voltage rating DC | 50 V                   |
| Temperature       | -40 °C to +120 °C      |
| Mating cycles     | >500                   |
| Data transmission | 10 Gbit/s (500 Mhz)    |
| Pin mapping       | 1:1 (e.g. Pin1 : Pin1) |

Ground of RJ45s connected to housing.

## Materials

|                     |                         |
|---------------------|-------------------------|
| RJ45 housing        | Thermoplastic UL94 V-0  |
| RJ45 shield plating | Tin or Nickel           |
| RJ45 shield         | Copper alloy            |
| Contacts plating    | Selective Gold (1,27µm) |
| Contacts            | Copper alloy            |
| Housing             | See option material     |
| PCB                 | FR4, UL94V-0            |

For details about keyway polarization and RJ45 orientation see table 1 and 2 in the full „Harsh Environment Data Connectivity Solutions“ catalog on page 28/29.

## How to order

**Table** X1-9887 19 5 N 0

Basic part number

Shell size

Material & plating code

Keyway polarization

RJ45 orientation

A

1

2

### ORDER EXAMPLE

**X1-9887-19-5 N 0**

CAT6A PCB - JAM NUT

SIZE 19

ELECTROLESS NICKEL

KEYWAY = N (STANDARD)

RJ45 POSITION = 0°

### EMCA CONNECTOR SOLUTIONS GMBH

X1-9887 | Datasheet Version 2.0

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