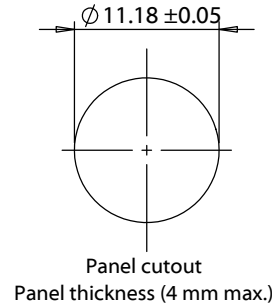
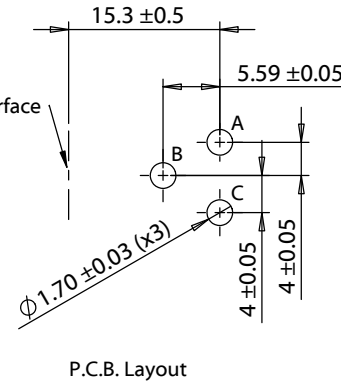


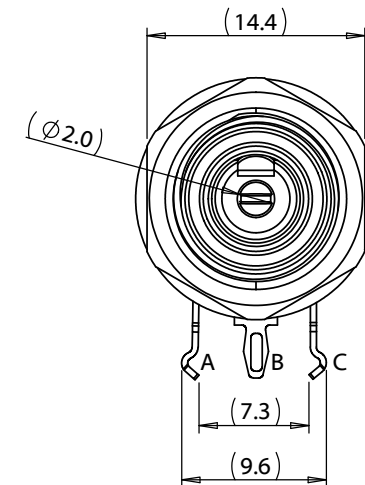
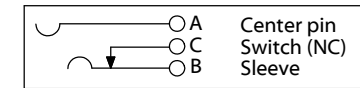
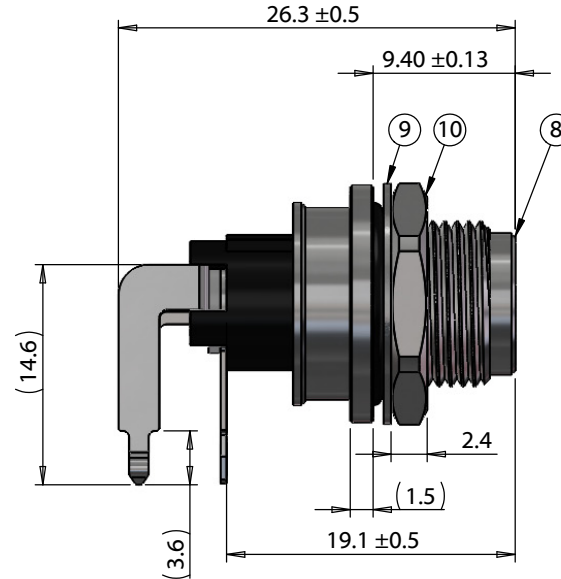
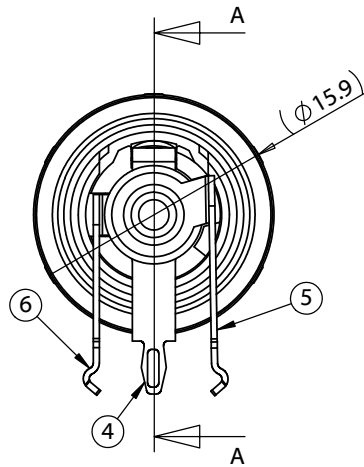
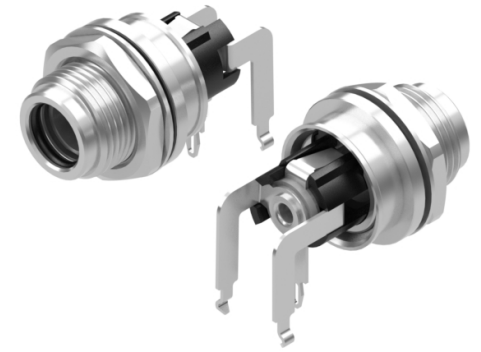
SECTION A-A

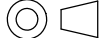


Panel surface



P.C.B. Layout



|           |            |                 |  |  |   |
|-----------|------------|-----------------|--|--|---|
| Revision: | Date:      | Description:    | Prepared:  | Notes:   | <h1>TENSILITY</h1><br>tel 1.541.323.3228 800 877.670.7118<br>fax 1.541.323.4202 web tensility.com             |
| A         | 02/25/2025 | Initial release | Verified:  | RoHS compliant<br>Function test: no open, no short circuit, no intermittent  |   |
|           |            |                 | Dimensions are in millimeters.<br>Tolerances:<br>X: $\pm 0.5$ mm<br>X.X: $\pm 0.3$ mm<br>X.XX: $\pm 0.05$ mm | Description:<br>Connector, dc jack, 5.5x2.0xL26.30 mm, panel mount, thru hole, 90°, solder eyelet, nickel plated, IP68, threaded, nut and washer | Size: A<br>Part number: 54-00414  |
|           |            |                 |  |  | Scale: 2:1  Sheet 1 of 2 |

5

↑

4

3

2

1

**Materials**

- ① Insulator, nylon + 15% glass fiber, UL94 V-0, black
- ② Center pin, C3604 brass, nickel plated
- ③ Insulation ring, fiberglass
- ④ Sleeve, C2680 brass, nickel plated
- ⑤ Center pin terminal, C2680 brass, tin plated
- ⑥ Sleeve shunt, C2680 brass, nickel plated
- ⑦ Inner shell, C3604 brass, nickel plated
- ⑧ Outer shell, C3604 brass, nickel plated
- ⑨ Flat washer, C3604 brass, nickel plated
- ⑩ Hex nut, C3604 brass, nickel plated
- ⑪ O-ring, nitrile rubber

**Ratings**

Voltage: 48V  
Current: 9.5A

**Operating Temperature**

-40°C ~ 95°C

**Electrical Requirements**

Dielectric strength: 1 min @ 500 Vac  
Insulation resistance: 100 MΩ @ 500 Vdc  
Contact resistance: 30 mΩ or less

**Mechanical Requirements**

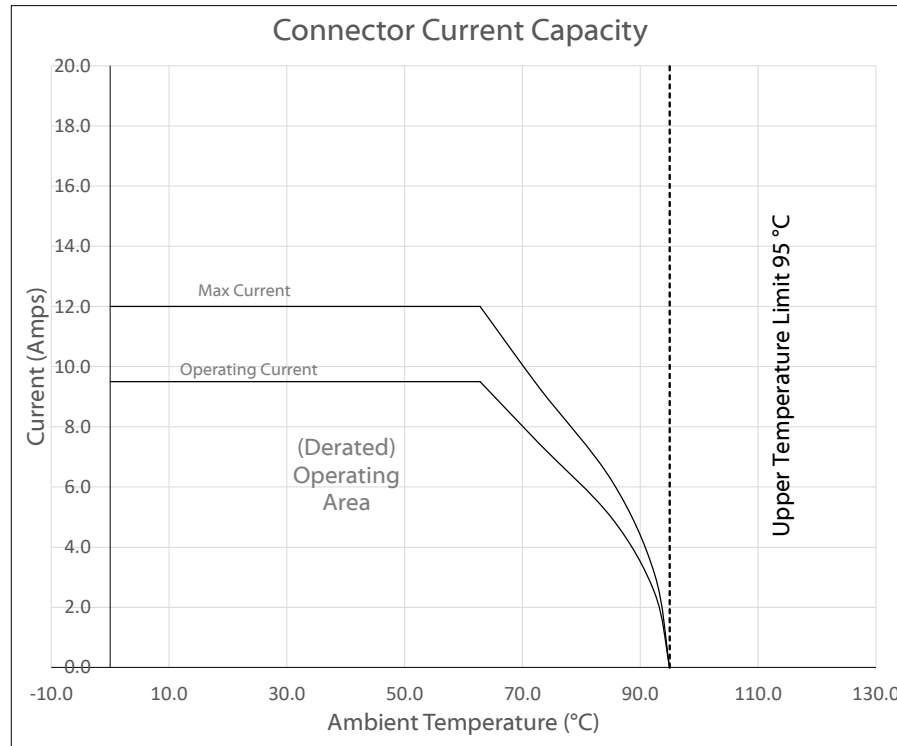
Life cycle: 5000 mating cycles minimum  
Insertion force: 0.3~4 kgf  
Withdrawal force: 0.3~4 kgf

**Environment Requirements**

Heat Test: 70±2°C, relative humidity 70-85% for 48 hours without deformation.  
Humidity Test: 40±2°C, relative humidity 90-95% for 48 hours without deformation.  
Salt spray test: 5% salt water (PH 6.5-7.2) for 48 hours without deformation.

**Assembly Info**

Wire gauge: 22 AWG max



Testing based on IEC 60512-5-2. Max current curve generated with isolated test article under controlled environmental conditions, and does not take into account external factors such as housings, mating cables, or other circuitry. Operating current curve (derated by 20% of maximum values) accounts for external factors, and manufacturing variation.

**Mating connectors**

| Assembly type | Wire OD   |
|---------------|-----------|
| 55-00200      | 4.6 - 5.3 |
| 55-00201      | 3.9 - 4.5 |
| 55-00202      | 3.2 - 3.8 |

|           |            |                 |   |  |  |
|-----------|------------|-----------------|---|--|--|
| Revision: | Date:      | Description:    | Prepared:                                       | Notes:   | <h1>TENSILITY</h1> <p>tel 1.541.323.3228 800 877.670.7118<br/>fax 1.541.323.4202 web tensility.com</p> |
| A         | 02/25/2025 | Initial release | Verified:                                       | RoHS compliant   |  |
|           |            |                 | Dimensions are in millimeters.                  | Function test: no open, no short circuit, no intermittent  |  |
|           |            |                 | Tolerances:                                     | Description:   |  |
|           |            |                 | X: ± 0.5 mm<br>X.X: ± 0.3 mm<br>X.XX: ± 0.05 mm | Connector, dc jack, 5.5x2.0xL26.30 mm, panel mount, thru hole, 90°, solder eyelet, nickel plated, IP68, threaded, nut and washer |  |
|           |            |                 |   | Size: A  | Part number: 54-00414  |
|           |            |                 |   | Scale: 2:1   | Sheet 2 of 2   |