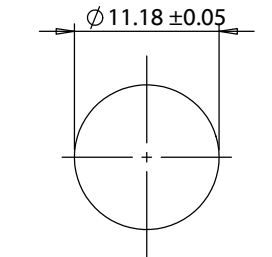
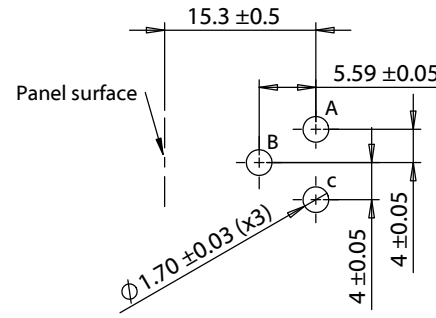


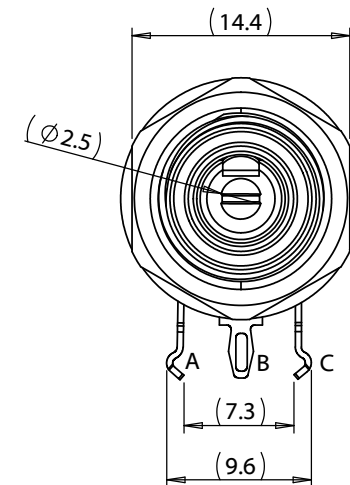
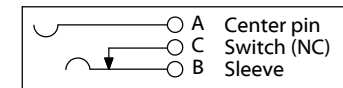
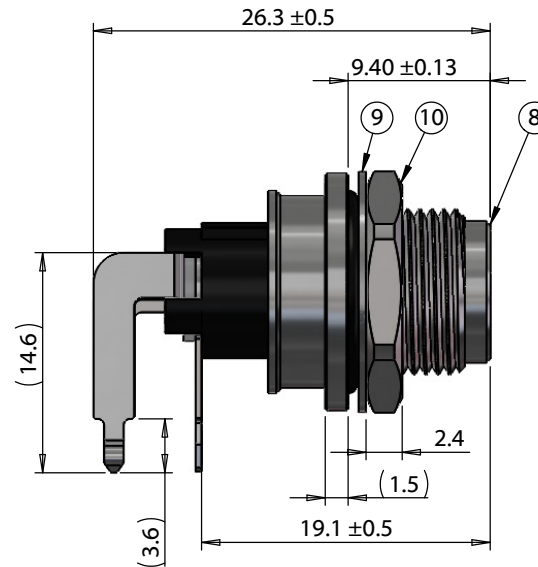
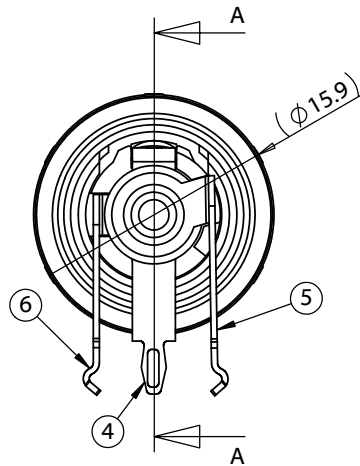
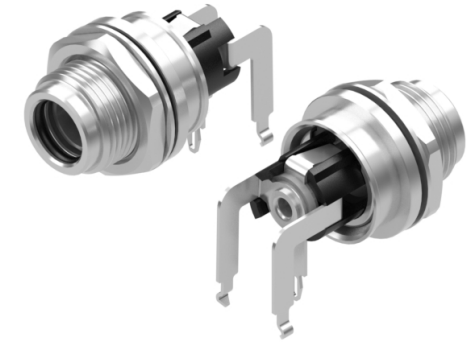
SECTION A-A




Panel cutout
Panel thickness (4 mm max.)



P.C.B. Layout



Revision:	Date:	Description:	Prepared:	Notes:	<h1>TENSILITY</h1> <p>tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com</p>
A	02/25/2025	Initial release	Verified:	RoHS compliant Function test: no open, no short circuit, no intermittent	
			Dimensions are in millimeters. Tolerances: X: ± 0.5 mm X.X: ± 0.3 mm X.XX: ± 0.05 mm	Description: Connector, dc jack, 5.5x2.5xL26.30 mm, panel mount, thru hole, 90°, solder eyelet, nickel plated, IP68, threaded, nut and washer	Size: Part number: A 54-00413
					Scale: 2:1  Sheet 1 of 2

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

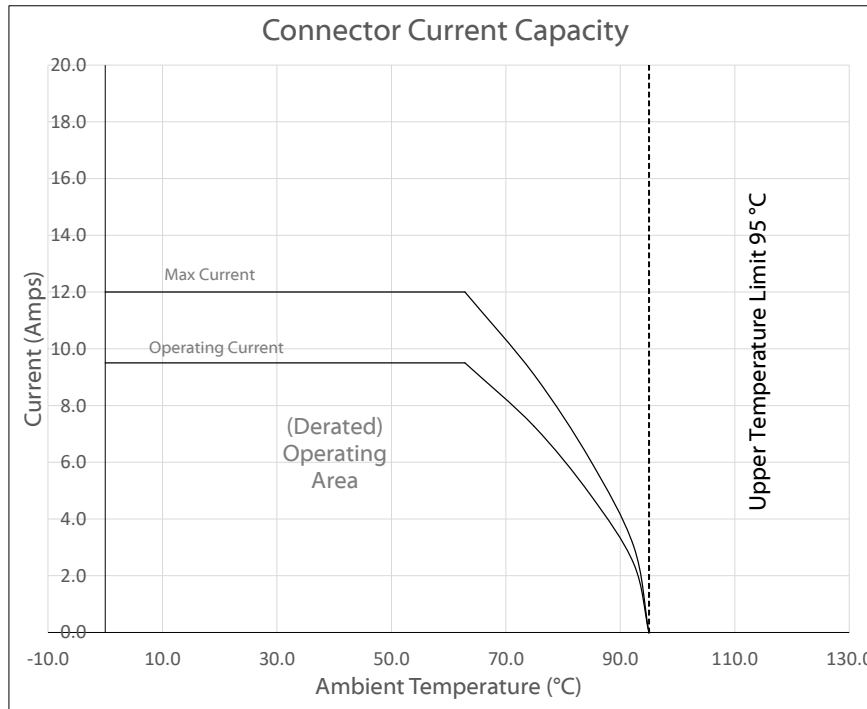
Life cycle: 5000 mating cycles minimum
Insertion force: 0.3~4 kgf
Withdrawal force: 0.3~4 kgf

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
55-00203	4.6 - 5.3
55-00204	3.9 - 4.5
55-00205	3.2 - 3.8

Revision:	Date:	Description:	Prepared:	Notes: RoHS compliant	<h1>TENSILITY</h1> <p>tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com</p>
A	02/25/2025	Initial release	Verified:		
			Dimensions are in millimeters. Tolerances: X: ± 0.5 mm X.X: ± 0.3 mm X.XX: ± 0.05 mm	Description: Connector, dc jack, 5.5x2.5xL26.30 mm, panel mount, thru hole, 90°, solder eyelet, nickel plated, IP68, threaded, nut and washer	Size: A
					Part number: 54-00413
					Scale: 2:1
					Sheet 2 of 2