Materials

Connector: 50-01077

1. Insulator, nylon + 15% glass fiber, UL94 V-0, black
2. Center pin, C3604 brass, nickel plated
3. Insulation ring, fiberglass
4. Locking ring, C3604 brass, nickel plated
5. Center pin terminal, C2680 brass, tin plated
6. Cable clamp sleeve terminal, C2680 brass, tin plated
7. Outer shell, C3604 brass, nickel plated

Sleeve: 56-00035

8. Sleeve, TPV, black

Wire outer diameter range: 3.2 - 3.8 mm

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

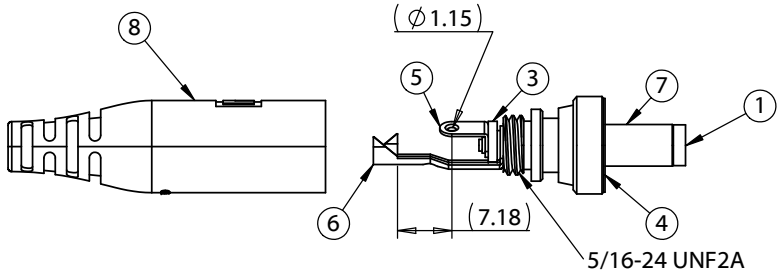
Heat Test: 70±2°C, relative humidity 70-85% for 48 hours without deformation.

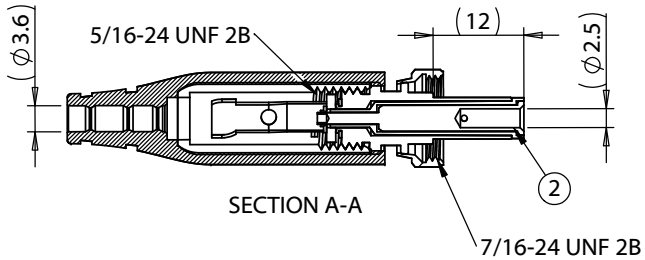
Humidity Test: 40±2°C, relative humidity 90-95% for 48 hours without deformation.

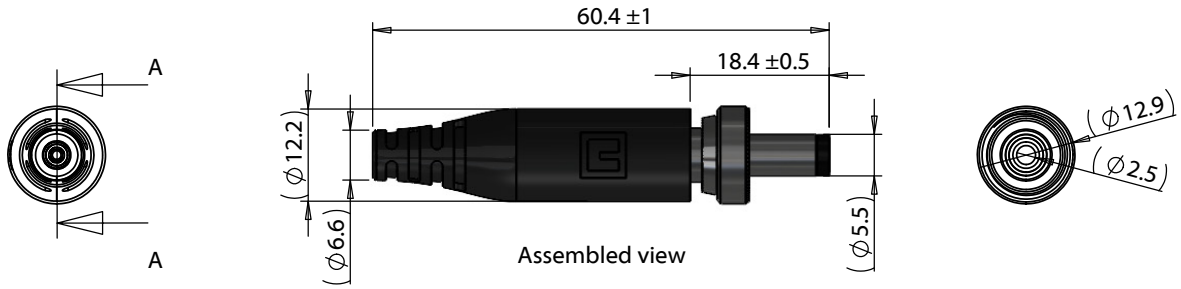
Salt spray test: 5% salt water (PH 6.5-7.2) for 48 hours without deformation.

Recommended Wires

Tensility P/N	AWG
30-00561	20
30-00564	22
30-01902	22
30-00567	24
30-01903	24







Revision:	Date:	Description:
A	02/27/2025	Initial release

Prepared: CR — Digitally signed by CR Date: 2026.02.03 09:41:41 -08'00'

Verified: KM — Digitally signed by KM Date: 2026.02.03 15:37:19 -08'00'

Dimensions are in millimeters.
Tolerances:
X: ± 0.3 mm
X.X: ± 0.1 mm
X.XX: ± 0.05 mm

Notes:

RoHS compliant

Function test: no open, no short circuit, no intermittent

Description:

Connector, dc plug, 5.5x2.5xL60.4 mm, 3.8 mm SR, locking style, assembly type, IP68, threaded

TENSILITY

tel 1.541.323.3228 *800* 877.670.7118
fax 1.541.323.4202 *web* tensility.com

Size: A

Part number: 55-00205

Scale: 1:1

5 4 3 2 1

Ratings

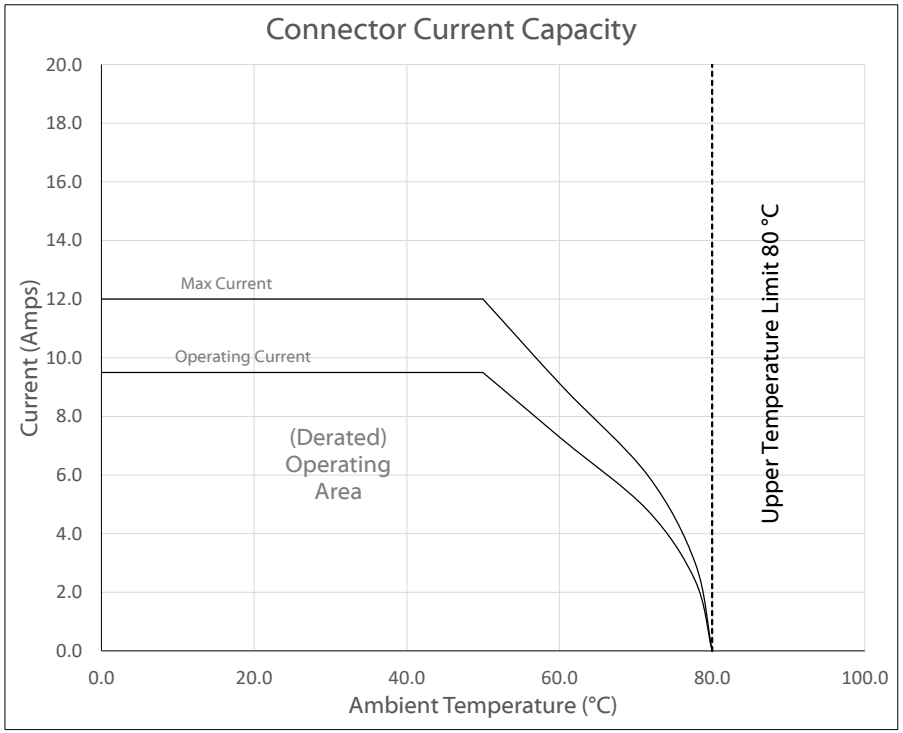
Voltage: 48V
Current: 9.5A
Ingress: IP68 (when mated with appropriate size wire)

Operating Temperature

-20°C ~ 80°C

Mating connectors

54-00411	Panel mount, thru hole, solder eyelet
54-00412	Panel mount, thru hole, pin
54-00413	Panel mount, thru hole, pin, solder eyelet,90°



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.

Revision:	Date:	Description:
A	02/27/2025	Initial release

Prepared: CR Digitally signed by CR Date: 2026.02.03 09:42:02 -08'00'

Verified: KM Digitally signed by KM Date: 2026.02.03 15:37:30 -08'00'

Dimensions are in millimeters.
Tolerances:
X: ± 0.3 mm
X.X: ± 0.1 mm
X.XX: ± 0.05 mm

Notes:

RoHS compliant

Function test: no open, no short circuit, no intermittent

Description:

Connector, dc plug, 5.5x2.5xL60.4 mm, 3.8 mm SR, locking style, assembly type, IP68, threaded

TENSILITY
tel 1.541.323.3228 800 877.670.7118
fax 1.541.323.4202 web tensility.com

Size: A
Part number: 55-00205
Scale: 1:1
Sheet 2 of 2

5 4 3 2 1