

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: 56-00034

- ⑧ Sleeve, TPV, black
- Wire outer diameter range: 3.9 - 4.5 mm

Electrical Requirements

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

Mechanical Requirements

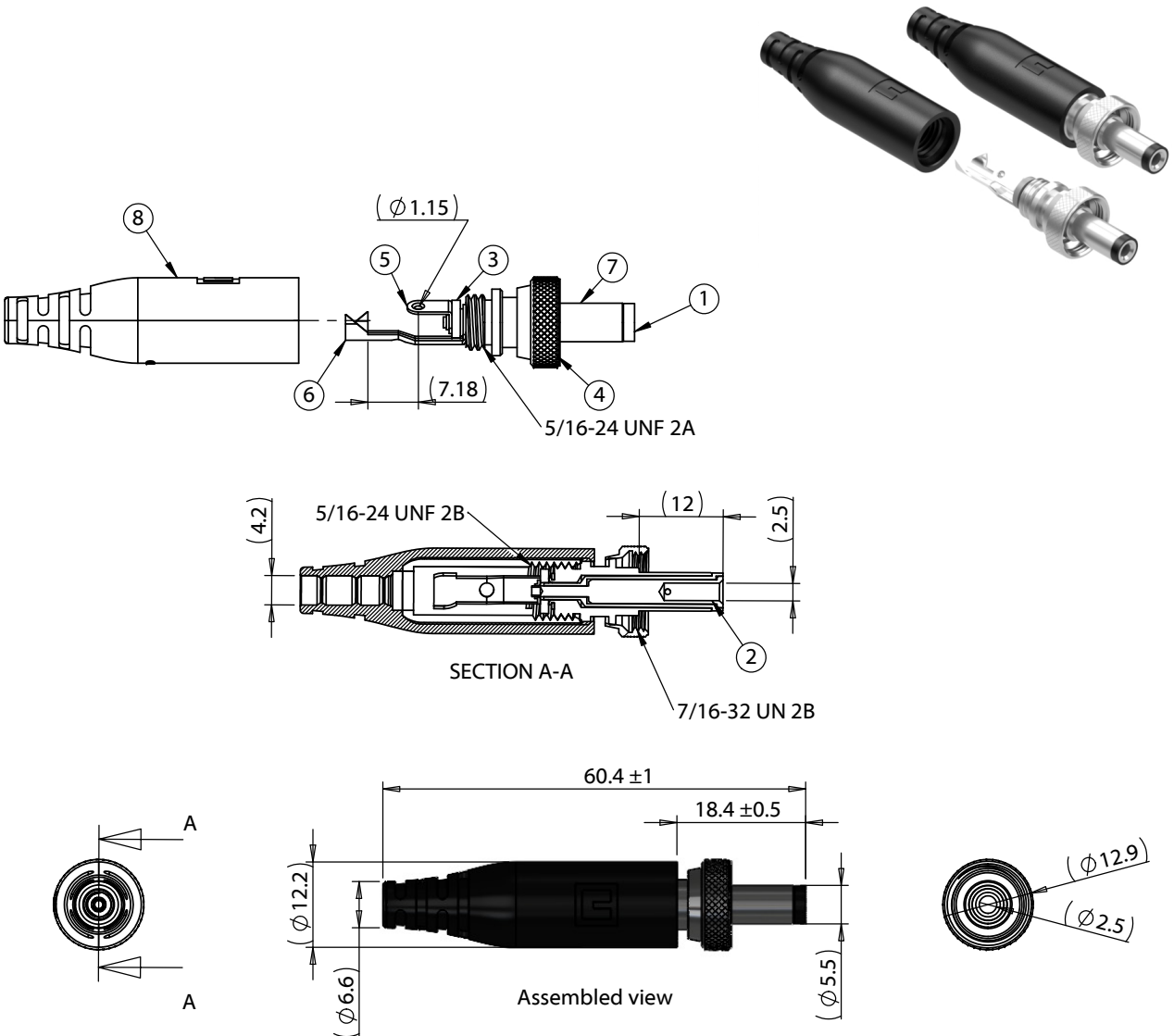
Life cycle: 5,000 mating cycles minimum
Insertion force: 0.3-4 kgf
Withdrawal force: 0.3-4 kgf

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.
Ingress protection: IP68, tested at 1.8 m for 30 minutes

Recommended Wires

Tensility P/N	AWG
30-00555	16
30-00558	18
30-01901	20
30-00689	22
30-00692	24
30-03064	26



Revision:	Date:	Description:	Prepared:	Notes:	TENSILITY tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com		
A	02/27/2025	Initial release	CR	RoHS compliant			
			Verified:	Function test: no open, no short circuit, no intermittent	Size:	Part number:	
			KW	Description:	A	55-00204	
			Dimensions are in millimeters.	Connector, dc plug, 5.5x2.5xL60.4 mm, 4.5 mm SR, locking style, assembly type, IP68, threaded	Scale:	1:1	Sheet 1 of 2
			Tolerances:				
			X: ± 0.3 mm				
			X.X: ± 0.1 mm				
			X.XX: ± 0.05 mm				

Ratings

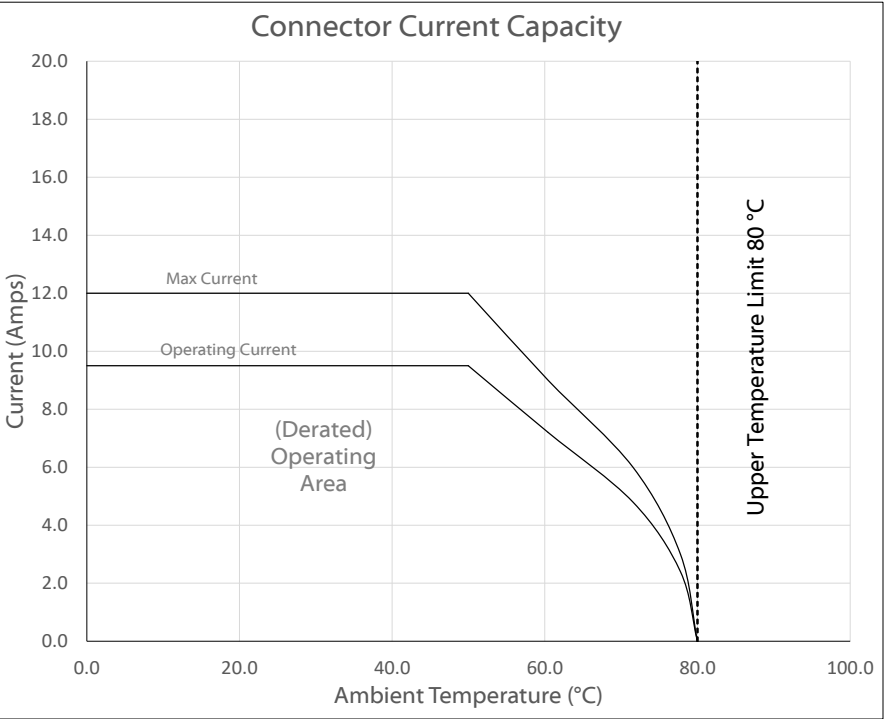
Voltage: 48 V
Current: 9.5 A
Ingress: IP68 (when mated with appropriate size wire)

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:	Prepared: CR Digitally signed by CR Date: 2026.09.29 14:23:48 -07'00'	Notes:	TENSILITY tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com	
A	02/27/2025	Initial release	Verified: KW Digitally signed by KW Date: 2026.09.30 14:56:25 -07'00'	RoHS compliant		
			Dimensions are in millimeters. Tolerances: X: ± 0.3 mm X.X: ± 0.1 mm X.XX: ± 0.05 mm	Function test: no open, no short circuit, no intermittent	Size:	Part number:
				Description:	A	55-00204
				Connector, dc plug, 5.5x2.5xL60.4 mm, 4.5 mm SR, locking style, assembly type, IP68, threaded	Scale: 1:1	Sheet 2 of 2