Materials

Connector: 50-00590

- (1) Insulator, PBT + 15% glass fiber, UL94 V-0, black
- (2) Shell, H65, nickel plated(3) Tray, C3602, nickel plated
- (4) Center contact, C5191 phosphor bronze, nickel plated
- (5) Ground contact, brass, nickel plated

Inner Sleeve: 56-00002

(6) Inner sleeve, Nylon UL 94V-0

Outer Sleeve: 56-00003 (7) Outer sleeve, TPU, black

Electrical requirements

Dielectric strength: 1 min @ 500 Vac Insulation resistance: 100 M Ω @ 500 Vdc Contact resistance: 30 m Ω or less

Mechanical requirements

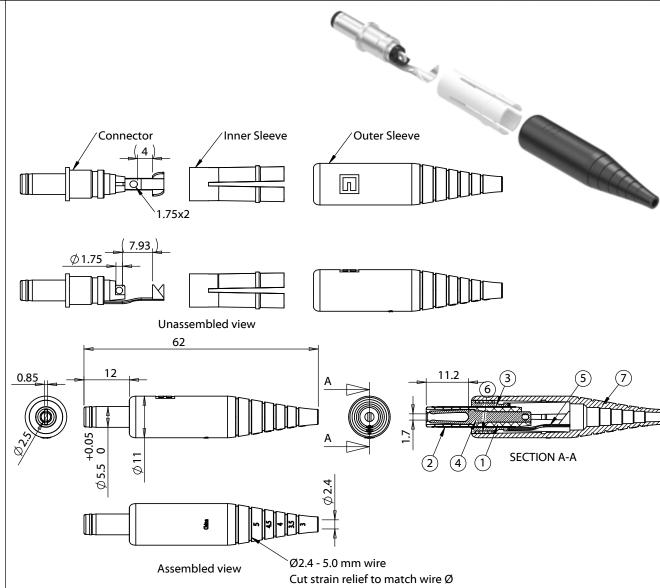
Insertion force: 0.3~3 kgf Withdrawal force: 0.3~3 kgf

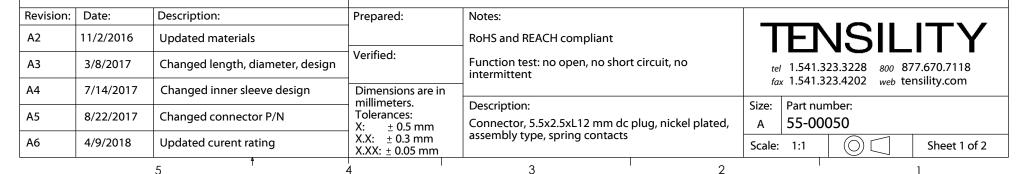
Durability: 5000 mating cycles while maintaining; $0.3\sim3$ kgf insertion force, $0.3\sim3$ kgf withdrawal force and a less than $100 \text{ m}\Omega$ contact resistance.

Environmental requirements

Cold test: -25 ± 3 °C for 48 hours without deformation Heat test: 70 ± 2 °C for 48 hours without deformation Humidity test: 40 ± 2 °C and humidity between 90 and 98 % for 96 hours without deformation

Salt spray test: 35 °C, RH 90-95%, 5% NaCl mist for 24 hrs. Wash parts after test. Maintain mechanical and electrical requirements.

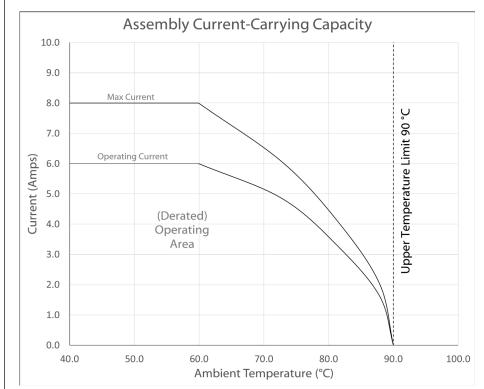




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Ratings Rated voltage: 48 V Rated current: 6 A

Operating range -25 to 90°C, relative humidity of 85% or less



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:	Notes:					
A2	11/2/2016	Updated materials		RoHS and REACH compliant		L	NSIL	ITY	
А3	3/8/2017	Changed length, diameter, design	Verified:	Function test: no open, no short circuit, no intermittent		tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com			
A4	7/14/2017	Changed inner sleeve design	Dimensions are in millimeters.						
A5	8/22/2017	Changed connector P/N	Tolerances:	Description: Connector, 5.5x2.5xL12 mm dc plug, nickel plated, assembly type, spring contacts	Size: Part number: A 55-00050				
A6	4/9/2018	Updated curent rating	X.X: ± 0.3 mm X.XX: ± 0.05 mm		Scale:	1:1		Sheet 2 of 2	

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