

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

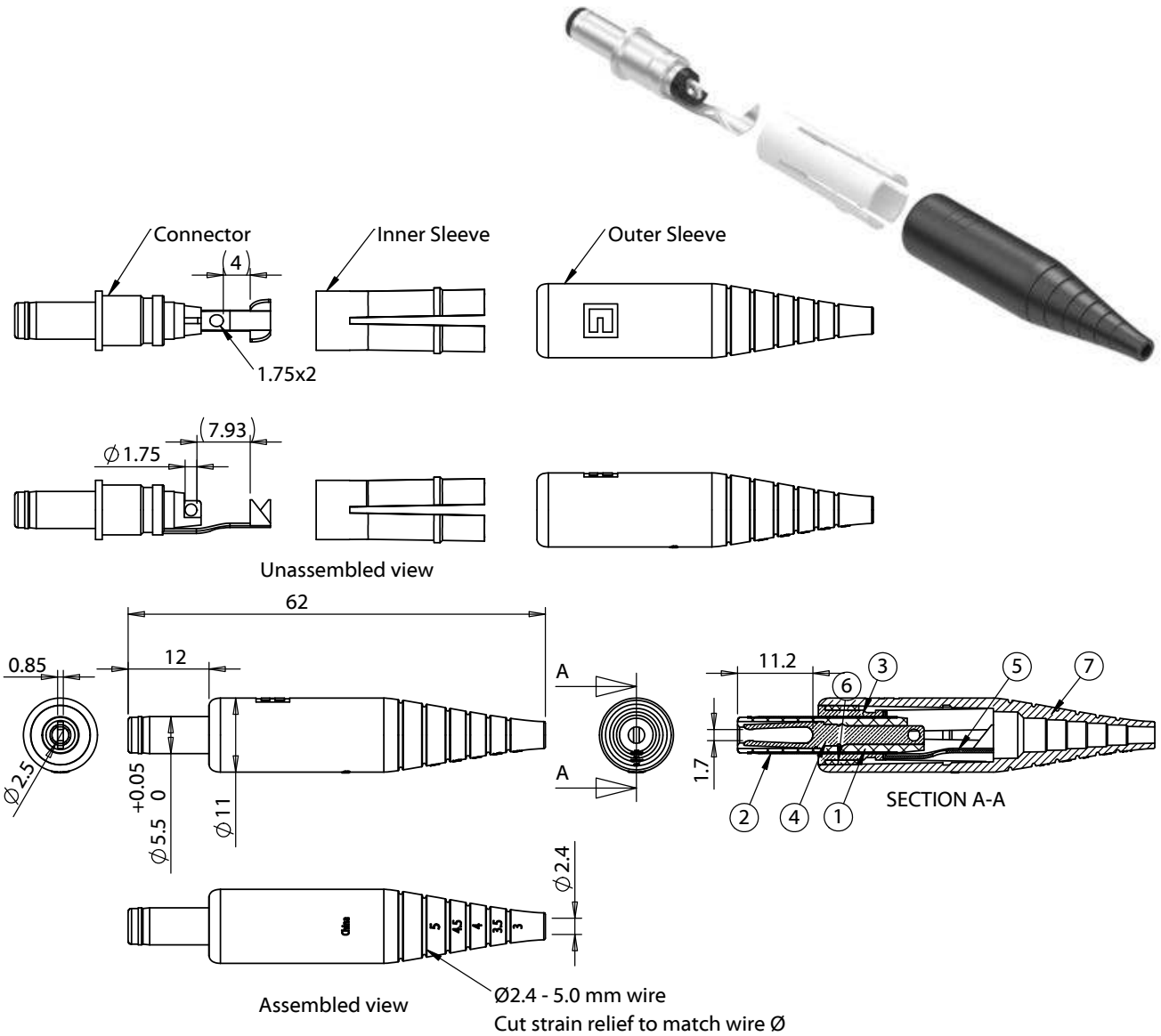
Dielectric strength: 1 min @ 500 Vac
 Insulation resistance: 100 MΩ @ 500 Vdc
 Contact resistance: 30 mΩ or less

Mechanical requirements

Insertion force: 0.3~3 kgf
 Withdrawal force: 0.3~3 kgf
 Durability: 5000 mating cycles while maintaining;
 0.3~3 kgf insertion force, 0.3~3 kgf withdrawal force and a
 less than 100 mΩ 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.



Revision:	Date:	Description:
A2	11/2/2016	Updated materials
A3	3/8/2017	Changed length, diameter, design
A4	7/14/2017	Changed inner sleeve design
A5	8/22/2017	Changed connector P/N
A6	4/9/2018	Updated current rating

Prepared:
JC
 Digitally signed by JC
 Date: 2022.01.27
 13:42:07 -08'00'

Verified:
AG
 Digitally signed by AG
 Date: 2022.01.27
 13:56:05 -08'00'

Dimensions are in
 millimeters.
 Tolerances:
 X: ± 0.5 mm
 X.X: ± 0.3 mm
 X.XX: ± 0.05 mm

Notes:
 RoHS and REACH compliant
 Function test: no open, no short circuit, no
 intermittent
 Description:
 Connector, 5.5x2.5x12 mm dc plug, nickel plated,
 assembly type, spring contacts

TENSILITY

tel 1.541.323.3228 800 877.670.7118
 fax 1.541.323.4202 web tensility.com

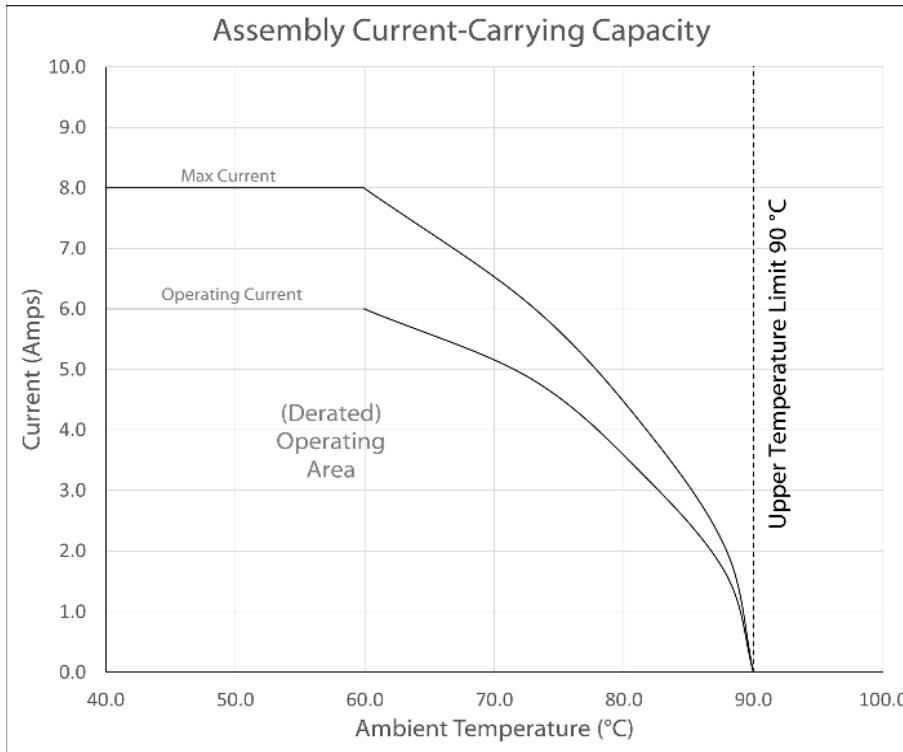
Size: A	Part number: 55-00050
Scale: 1:1	Sheet 1 of 2

Ratings

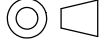
Rated voltage: 48 V
 Rated current: 6 A

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: JC <small>Digitally signed by JC Date: 2022.01.27 13:55:37 -08'00'</small>	Notes:	<h1>TENSILITY</h1> <p>tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com</p>
A2	11/2/2016	Updated materials	Verified: AG <small>Digitally signed by AG Date: 2022.01.27 13:56:30 -08'00'</small>	RoHS and REACH compliant	
A3	3/8/2017	Changed length, diameter, design	Dimensions are in millimeters. Tolerances: X: ± 0.5 mm X.X: ± 0.3 mm X.XX: ± 0.05 mm	Function test: no open, no short circuit, no intermittent	
A4	7/14/2017	Changed inner sleeve design		Description:	Size: A
A5	8/22/2017	Changed connector P/N		Connector, 5.5x2.5xL12 mm dc plug, nickel plated, assembly type, spring contacts	Part number: 55-00050
A6	4/9/2018	Updated current rating			Scale: 1:1  Sheet 2 of 2