Ratings
Voltage: 24 Vdc
Current: 7 A

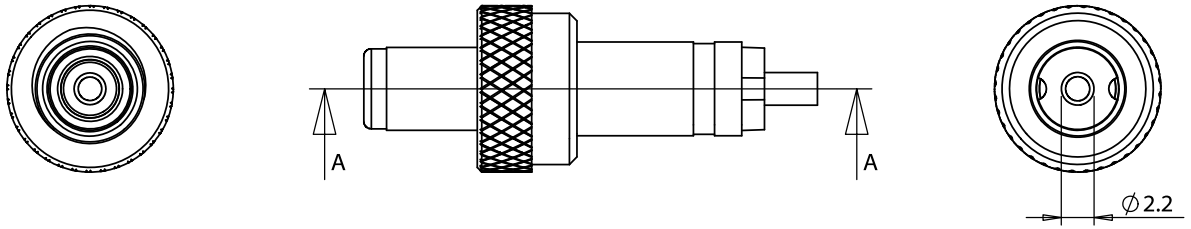
Operating Temperature Range
-25° to 70° C, relative humidity of 85% or less

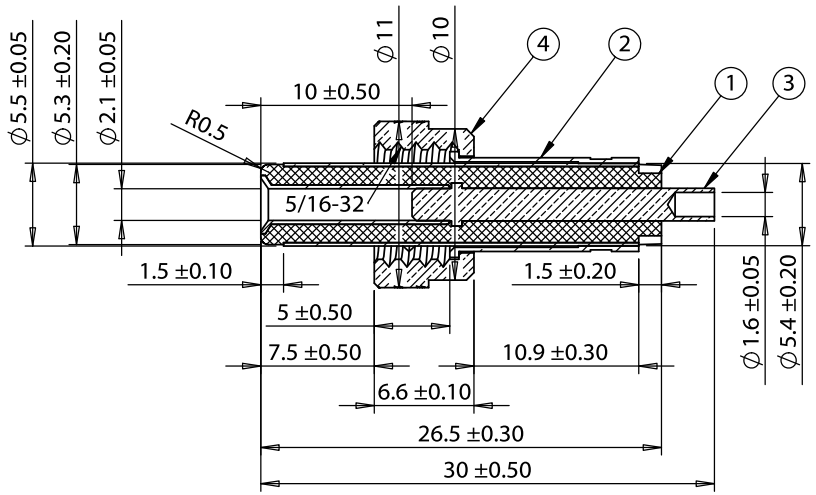
Materials
1. Insulator: PBT + 15% GF, black
2. Shell: C3604 brass, 2 µm nickel plated
3. Pin: C2680 brass, 2 µm nickel plated
4 Nut: C3604 brass, 2 µm nickel plated

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
Life cycle: 5000 mating cycles while maintaining 0.3-2 kgf min. insertion force, 0.2-1.5 kgf min. withdrawal force and less than 100 mΩ contact resistance.

Environmental Requirements
Heat test: 70 °C, relative humidity 70-85% for 96 hours without deformation while maintaining contact resitance after test 100 mohms or less, and insulation resistance 50 Mohms/500 Vdc minimum
Humidity test: 40 °C, relative humidity 90-100% for 96 hours without deformation while maintaining dielectric strength 500 Vac/1 minute, insulation resistance 50 Mohms/500 Vdc minimum, and contact resistance 100 mohms or less
Salt spray test: 35±2 °C, relative humidity 90-95%, 5% NaCl mist for 24 hrs. Wash parts after test. Maintain mechanical requirements and a contact resistance of less than 80 mΩ.





SECTION A-A

Revision:	Date:	Description:
A	5/19/2009	Initial release
A1	11/11/2015	Modified insulator material
A2	11/20/2017	Updated specifications

Prepared: AG
Digitally signed by AG
Date: 2017.11.27 14:58:34 -08'00'

Verified: PS
Digitally signed by PS
Date: 2017.11.27 16:53:39 -08'00'

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

Notes:
RoHS compliant
Function test: no open, no short circuit, no intermittent

Description:
Connector, dc plug, 5.5x2.1xBL7.5xL30 locking style, brass nickel plated, threaded nut 5/16-32

TENSILITY
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fax 1.541.323.4202 web tensility.com

Size: A
Part number: 50-00010
Scale: 2:1
Sheet 1 of 1

5 4 3 2 1