# Ratings

Voltage: 24 Vdc Current: 8 A

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

### Materials

- 1. Insulator: PBT +15% GF, black
- 2. Center pin: C2680 brass, 2 µm nickel plated
- 3. Shell: C3604 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:  $30 \text{ m}\Omega$  or less

## **Mechanical Requirements**

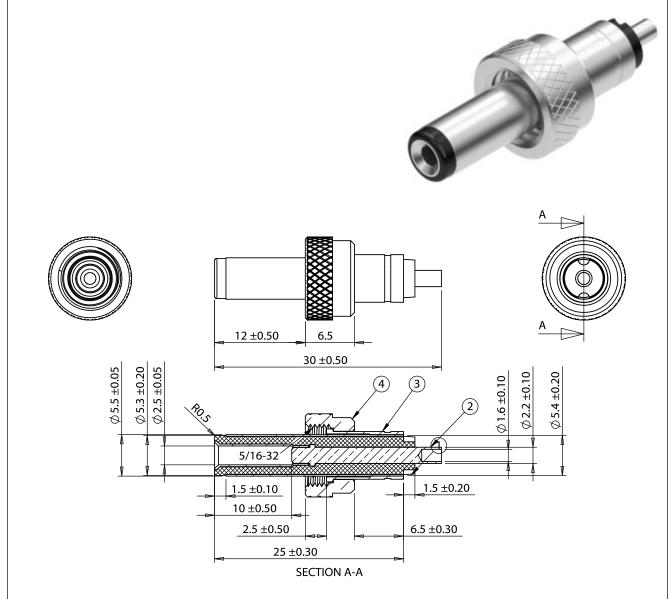
Insertion force: 0.3-3 kgf Withdrawal force: 0.3-3 kgf Life cycle: 5000 mating cycles while maintaining 0.3-2 kgf insertion force, 0.2-1.5 kgf withdrawal force and less than 100 m $\Omega$  contact resistance.

## **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 m $\Omega$ .



Revision:	Date:	Description:	Prepared:	Notes:						
А	8/16/2010	Initial release	AG Digitally signed by AG Date: 2017.11.27 15:45:53 -08'00'	RoHS compliant			TENSILITY			
A1	8/30/2016	Changed insulator material	Verified: PS Digitally signed by PS Date: 2017.11.27 16:55:00	Function test: no open, no short circuit, no intermittent  Description: Connector, dc plug, 5.5x2.5xBL12xL30 locking style,		tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com				
A2	11/20/2017	Updated specifications	Dimensions are in							
			- millimeters. Tolerances: X: ± 0.5 mm			Size: Part number: A 50-00104				
				brass nickel plated, threaded nut 5/16-32		Scale:	2:1		Sheet 1 of 1	

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