

Materials

- 1. Insulator, PBT + 15% glass fiber, white
- 2. Shell, C2700 brass, 2 µm nickel plated
- 3. Spring contact, C5191 phosphor bronze, 2 µm nickel plated

Electrical requirements

Dielectric strength: 1 min @ 500 Vac
Insulation resistance: 100 MΩ @ 500 Vdc
Contact resistance: 30 mΩ or less
Rated voltage: 20 Vdc
Rated current: 6 A

Mechanical requirements

Insertion force: 0.5-3 kgf
Withdrawal force: 0.4-2 kgf
Durability: 5000 mating cycles while maintaining; 0.3-2 kgf insertion force, 0.2-1.5 kgf withdrawal force and a less than 100 mΩ contact resistance.

Environmental requirements

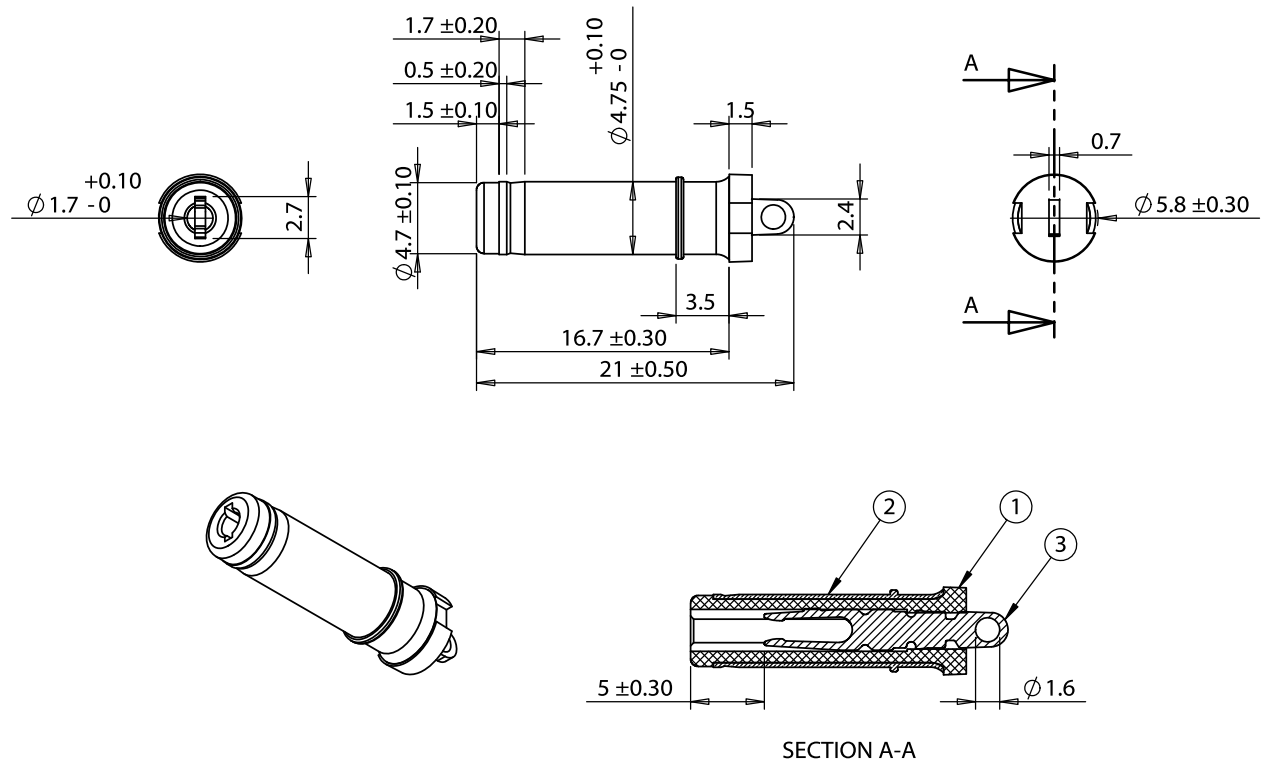
Damp test: 40 °C, RH 90-100% for 96 hrs. Cool to ambient and recover for 2 hours. Maintain dielectric strength of 500 Vac for 1 min, insulation resistance of 50 MΩ @ 500 Vdc minimum and a contact resistance of 100 mΩ or less.

Dry test: 70 °C, RH 70-85% for 96 hrs. Cool to ambient and recover for 2 hours. Maintain insulation resistance of 50 MΩ @ 500 Vdc minimum and a contact resistance of 100 mΩ or less.

Salt spray test: 35 °C, RH 90-95%, 5% NaCl mist for 24 hrs. Wash parts after test. Maintain mechanical requirements and a contact resistance of less than 80 mΩ.

Operating range

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



Revision:	Date:	Description:	Prepared:	Notes:	<div>TENSILITY</div> <div>tel 1.541.323.3228 800 877.670.7118</div> <div>fax 1.541.323.4202 web tensility.com</div>		
A	11/7/2012	Initial release	GL	RoHS compliant			
			Verified:	Function test: no open, no short circuit, no intermittent	Size:	Part number:	
			LA	Description:	A	50-00316	
			Dimensions are in millimeters.	Connector, dc plug, 4.75x1.7xL21mm, brass, nickel plated, molding type, white insulators	Scale:	2:1	Sheet 1 of 1
			Tolerances:				
			X: ± 0.5 mm				
			X.X: ± 0.3 mm				
			X.XX: ± 0.05 mm				