#### Materials

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

## **Electrical requirements**

Dielectric strength: 1 min @ 500 Vac Insulation resistance: 100 M $\Omega$  @ 500 Vdc Contact resistance: 30 m $\Omega$  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 m $\Omega$  contact resistance.

## **Environmental requirements**

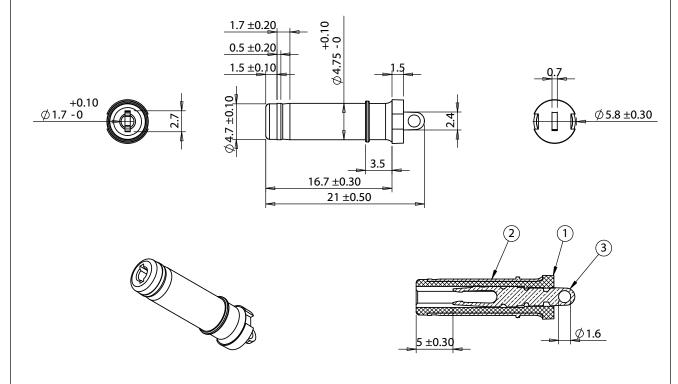
Damp test: 40 °C, RH 90-100% for 96 hrs. Cool to ambient and recover for 2 hours. Maintain dielectric strength of 500 Vac for 1 min, insulation resistance of 50 M $\Omega$  @ 500 Vdc minimum and a contact resistance of 100 m $\Omega$  or less.

Dry test: 70 °C, RH 70-85% for 96 hrs. Cool to ambient and recover for 2 hours. Maintain insulation resistance of 50 M $\Omega$  @ 500 Vdc minimum and a contact resistance of 100 m $\Omega$  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 m $\Omega$ .

## Operating range

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



Revision	Date 11/7/2012	Description Initial release	Notes RoHS compliant Function test: no open, no short circuit, no INT			20802 Sockeye Place #130 Bend, OR 97701 USA te/ 541.323.3228 fax 541.323.4202 800 877.670.7118 www.tensility.com			
			DIMENSIONS ARE IN MILLIMETERS TOLERANCES: X: ± 0.5 mm X.X: ± 0.3 mm X.XX: ± 0.05 mm	DESCRIPTION: Connector, dc plug, 4.75x1.7xL21mm, b nickel plated, molding type, white insul	1.7xL21mm, brass, be, white insulators	SIZE A	Part number 50-00316		
						SCALE	: 2:1	WEIGHT:	SHEET 1 OF 1

3