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 M Ω @ 500 Vdc Contact resistance: 30 m Ω 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 Ω 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 Ω @ 500 Vdc minimum and a contact resistance of 100 m Ω or less.

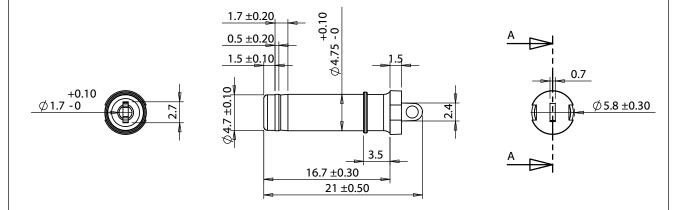
Dry test: 70 °C, RH 70-85% for 96 hrs. Cool to ambient and recover for 2 hours. Maintain insulation resistance of 50 M Ω @ 500 Vdc minimum and a contact resistance of 100 m Ω or less.

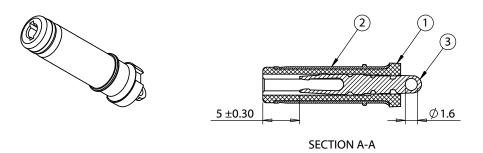
Salt spray test: 35 °C, RH 90-95%, 5% NaCl mist for 24 hrs. Wash parts after test. Maintain mechanical requirements and a contact resistance of less than 80 m Ω .

Operating range

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

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

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