Materials

- 1. Spring contact, beryllium copper, 2 μm nickel plated
- 2. Insulator, PBT + 15% glass fiber, black
- 3. Pin, C3604 brass, 2 µm nickel plated
- 4. Shell, C3604 brass, 2 µm nickel plated

Electrical requirements

Dielectric strength: 1 min @ 500 Vac Insualtion resistance: 100 M Ω @ 500 Vdc Contact resistance: 30 m Ω or less

Rated voltage: 24 Vdc Rated current: 6 A

Mechanical requirements

Insertion force: 0.3-3 kgf Withdrawl force: 0.3-3 kgf

Durability: 5000 mating cycles while maintaining; 0.3 kgf min. insertion force, 0.2 kgf min. withdrawl 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.

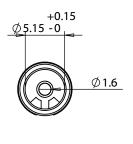
Dry test: 70 °C, RH 70-85% for 96 hrs. Cool to ambient and recover for 2 hours. Maintain insulation resistance of 50 M Ω @ 500 Vdc minimum and a contact resistance of 100 m Ω or less.

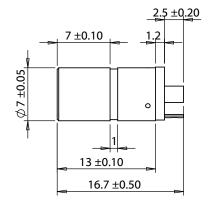
Salt spray test: 35 ± 2 °C, RH 90-95%, 5% NaCl mist for 24 hrs. Wash parts after test. Maintain mechanical requirements and a contact resistance of less than 80 m Ω .

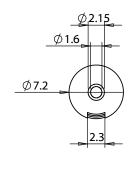
Operating range

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

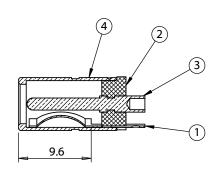
5











Revision	Date	Description	Prepared:	Notes:		TENSILITY				
Α	9/2/2009	Initial release		RoHS and REACH compliant						
A1	12/8/2011	updated measurements to match standards	Verified:	Function test: no open, no short circuit, no INT			20802 Sockeye Place #130 Bend, OR 97701 USA tel 541.323.3228 fax 541.323.4202			
A2	12/22/2011	updated description	DIMENSIONS ARE IN MILLIMETERS TOLERANCES:		800 877.670.7118 www.tensility.com					
A3	11/9/2012	Added test data		DESCRIPTION: Connector, dc jack, 4.75x1.7xL16.7 mm, brass, nickel	SIZE Part number A 50-00029					
A4	2/10/2015 Updated rating, insulator material, and description		X: ± 0.5 mm X.X: ± 0.3 mm X.XX: ± 0.05 mm	plated, molding style	SCALE	2:1	WEIGHT:	SHEET 1 OF 1		
		Δ		•	-		l'			

3