

### Materials

1. Shell, C3604 brass, 2 µm nickel plated
2. Insulator, PBT + 15% glass fiber, black
3. Center contact, C5191 phosphor bronze, 2 µm nickel

### Electrical requirements

Dielectric strength: 1 min @ 500 Vac  
Insulation resistance: 100 MΩ @ 500 Vdc  
Contact resistance: 30 mΩ or less  
Rated voltage: 24 Vdc  
Rated current: 5 A

### Mechanical requirements

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

### Environmental requirements

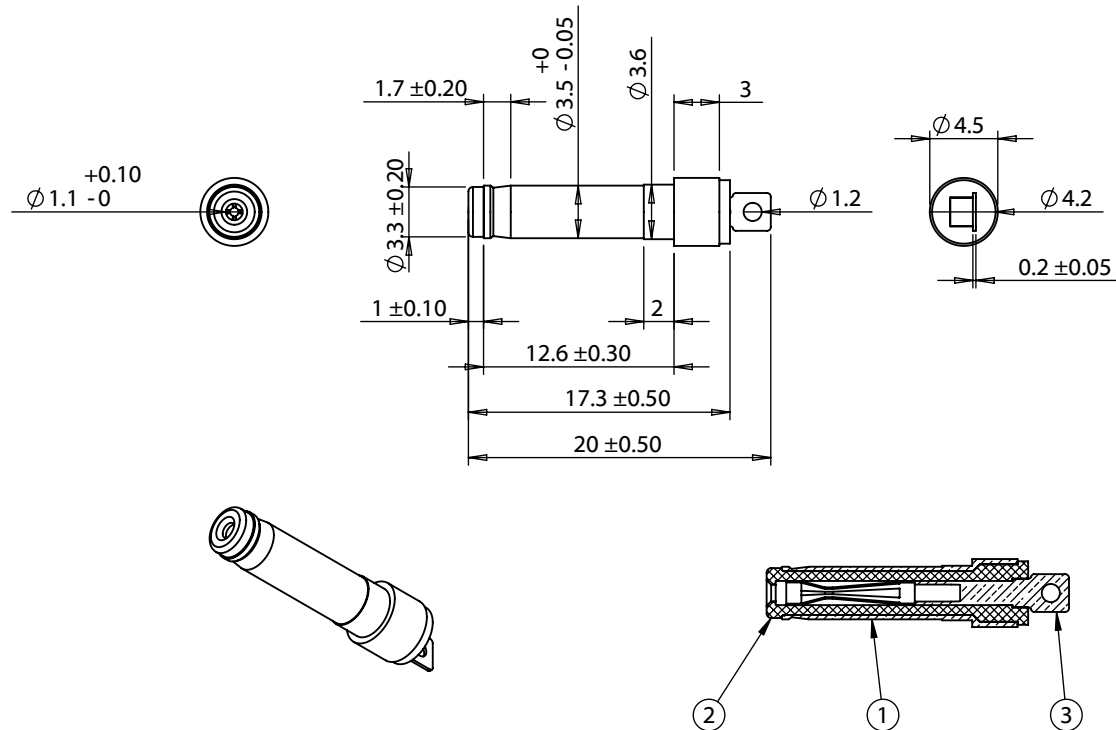
Damp test: 40 °C, RH 90-100% for 96 hrs. Cool to ambient and recover for 2 hours. Maintain dielectric strength of 500 Vac for 1 min, insulation resistance of 50 MΩ @ 500 Vdc minimum and a contact resistance of 100 mΩ or less.

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	<h1>TENSILITY</h1> <p>20802 Sockeye Place #130 Bend, OR 97701 USA tel 541.323.3228 fax 541.323.4202 800 877.670.7118 www.tensility.com</p>		
A	1/29/2009	Initial release	VERIFIED:	RoHS compliant			
A1	8/16/2012	Added temperature range		Function test: no open, no short circuit, no INT			
A2	10/29/2012	added further mechanical and electrical specifications	DIMENSIONS ARE IN MILLIMETERS  TOLERANCES: X: $\pm 0.5$ mm X.X: $\pm 0.3$ mm X.XX: $\pm 0.05$ mm	DESCRIPTION: Connector, dc plug, 3.5x1.1xL20 mm, molding style, spring contacts	SIZE	PART NUMBER	
A3	3/13/2013	Updated spec format			A	50-00001	
					SCALE: 2:1		WEIGHT:
							SHEET 1 OF 1