

Ratings

Voltage: 24 Vdc

Current: 7 A

Operating Temperature Range

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

Materials

1. Insulator: PBT + 15% GF, black

2. Shell: C3604 brass, 2 µm nickel plated

3. Pin: C2680 brass, 2 µm nickel plated

4 Nut: C3604 brass, 2 µm nickel plated

Electrical Requirements

Dielectric strength: 1 min @ 500 Vac

Insulation resistance: 100 MΩ @ 500 Vdc

Contact resistance: 30 mΩ or less

Mechanical Requirements

Insertion force: 0.3-3 kgf

Withdrawal force: 0.3-3 kgf

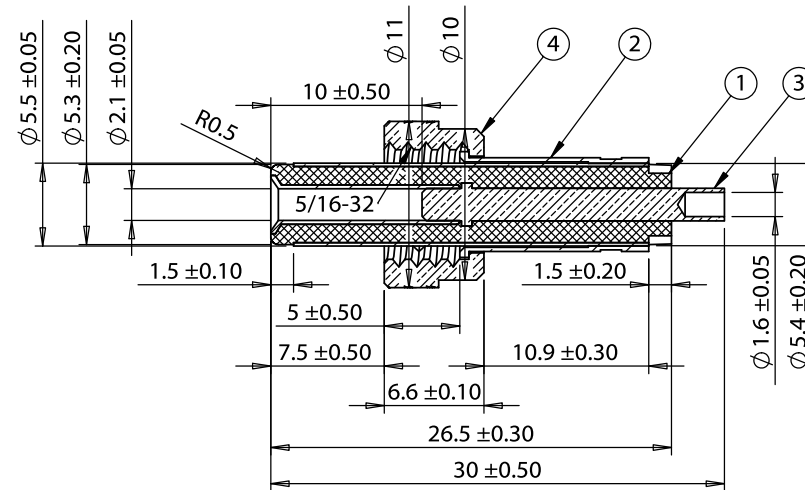
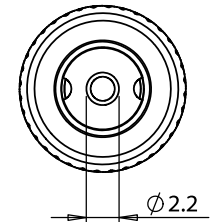
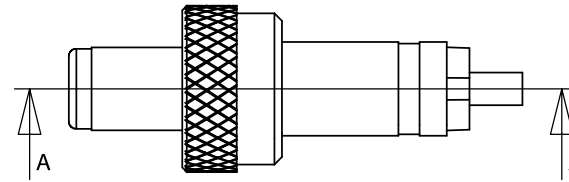
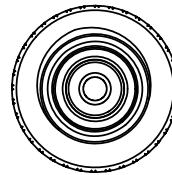
Life cycle: 5000 mating cycles while maintaining 0.3-2 kgf min. insertion force, 0.2-1.5 kgf min. withdrawal force and less than 100 mΩ contact resistance.

Environmental Requirements

Heat test: 70 °C, relative humidity 70-85% for 96 hours without deformation while maintaining contact resistance after test 100 mohms or less, and insulation resistance 50 Mohms/500 Vdc minimum

Humidity test: 40 °C, relative humidity 90-100% for 96 hours without deformation while maintaining dielectric strength 500 Vac/1 minute, insulation resistance 50 Mohms/500 Vdc minimum, and contact resistance 100 mohms or less

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



Revision:	Date:	Description:	Prepared:	Notes:	TENSILITY tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com		
A	5/19/2009	Initial release	AG	RoHS compliant			
A1	11/11/2015	Modified insulator material	Verified: PS	Function test: no open, no short circuit, no intermittent	Size: Part number: A 50-00010		
A2	11/20/2017	Updated specifications	Dimensions are in millimeters. Tolerances: X: ± 0.5 mm X.X: ± 0.3 mm X.XX: ± 0.05 mm	Description: Connector, dc plug, 5.5x2.1xBL7.5xL30 locking style, brass nickel plated, threaded nut 5/16-32			
					Scale: 2:1		Sheet 1 of 1