

1. Insulator: PBT +15% GF, black
2. Center pin: C3604 brass, 2 μ m nickel plated
3. Shell: C3604 brass, 2 μ m nickel plated

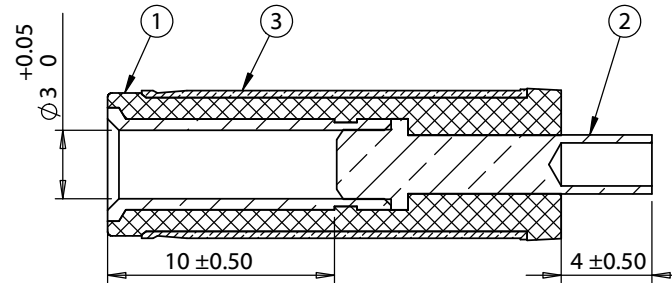
Dielectric strength: 1 min @ 500 Vac
Insulation resistance: 100 MΩ @ 500 Vdc
Contact resistance: 30 mΩ or less

Insertion force: 0.3-3 kgf
Withdrawal force: 0.3-3 kgf
Life cycle: 5000 mating cycles while maintaining 0.3-3 kgf min.
insertion force, 0.2 kgf min. withdrawal force and less than
100 mΩ contact resistance.

Heat test: 70 °C, relative humidity 70-85% for 96 hours while maintaining contact resistance: 100 mΩ or less, insulation resistance: 50 MΩ @ 500 Vdc, and without looseness or deformation

Humidity test: 40 °C, relative humidity 90-100% for 96 hours while maintaining dielectric strength: 1 min @ 500 Vac, insulation resistance: 50 MΩ @ 500 Vdc, and contact resistance: 100 mΩ 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.





Technical drawing of a shaft with a keyway, showing front, side, and end views with dimensions.

Front View (Left): Shows the shaft with a keyway. Dimensions include a total length of 24 ± 0.50 , a keyway width of 1.8 ± 0.20 , a keyway depth of 0.5 ± 0.10 , and a keyway height of 1.5 ± 0.10 . The shaft diameter is $\phi 6.3$.

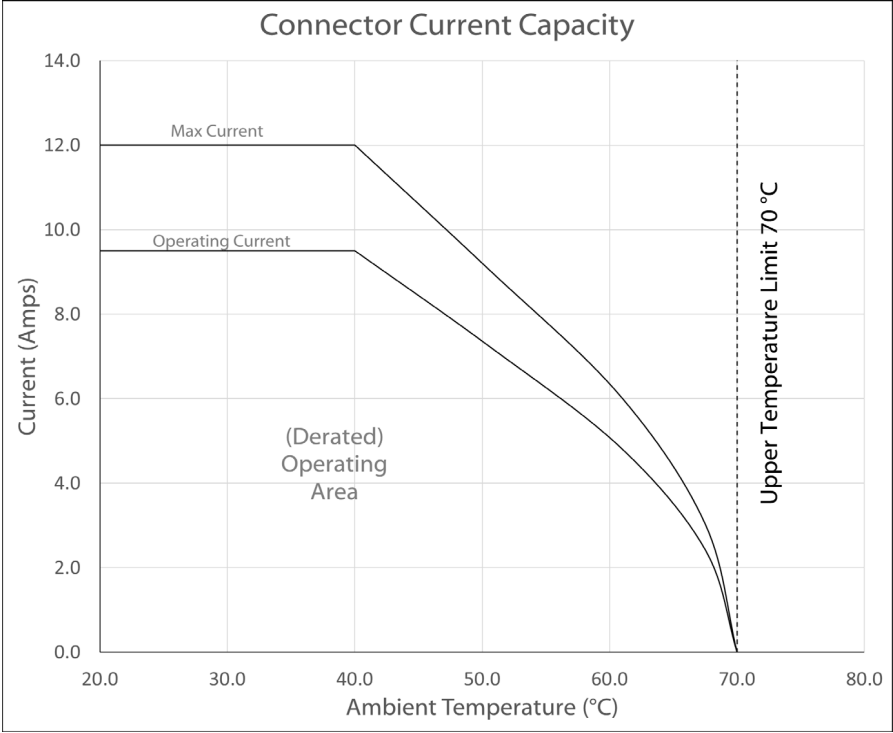
Side View (Right): Shows the shaft with a keyway. Dimensions include a total length of 24 ± 0.50 , a keyway width of 1.8 ± 0.20 , a keyway depth of 0.5 ± 0.10 , and a keyway height of 1.5 ± 0.10 . The shaft diameter is $\phi 6.3$.

End View (Bottom): Shows the shaft with a keyway. Dimensions include a total length of 24 ± 0.50 , a keyway width of 1.8 ± 0.20 , a keyway depth of 0.5 ± 0.10 , and a keyway height of 1.5 ± 0.10 . The shaft diameter is $\phi 6.3$.

Revision:	Date:	Description:	Prepared:	Notes:	<div>TENSILITY</div> <div>tel 1.541.323.3228 800 877.670.7118</div> <div>fax 1.541.323.4202 web tensility.com</div>		
A	02/24/2010	Initial release	Verified:	RoHS compliant			
A1	06/07/2013	Added mechanical & electrical details	Dimensions are in millimeters. Tolerances: X: ± 0.3 mm X.X: ± 0.1 mm X.XX: ± 0.05 mm	Function test: no open, no short circuit, no intermittent	Size: Part number: A 50-00090		
				Description: Connector, dc plug, 6.5x3.0x24 mm, molding style			
						Scale: 3:1	 
		5	4	3	2	1	

Ratings
Maximum Operating Voltage: 48 V
Maximum Operating Current: 9.5 A

Operating Temperature Range
-25~70 °C, relative humidity of 85% or less



Testing based on IEC 60512-5-2. Max current curve generated with isolated test article under controlled environmental conditions, and does not take into account external factors such as housings, mating cables, or other circuitry. Operating current curve (derated by 20% of maximum values) accounts for external factors, and manufacturing variation.

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