Ratings
Voltage: 48 V
Current: 14 A, (not mated under load)
Connector current ratings based on individual contact temperature rise (<30 °C)

Materials
(1) Insulator: PBT + 15% GF, UL94 V-0, black
(2) Shell: C3604 Brass, Nickel plated
(3) Pin: SK5 steel, Gold flashing

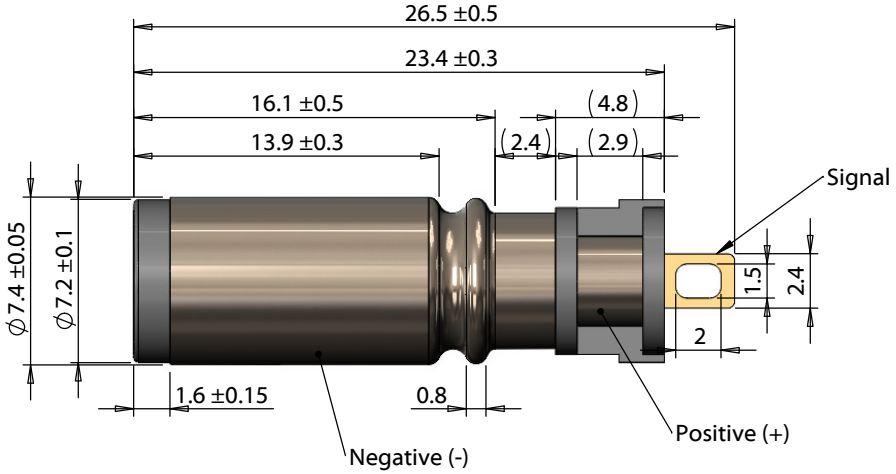
Electrical Requirements
Dielectric strength: 1 min @ 500 Vac
Insulation resistance: 100 MΩ @ 500 Vdc
Contact resistance: 30 mΩ or less

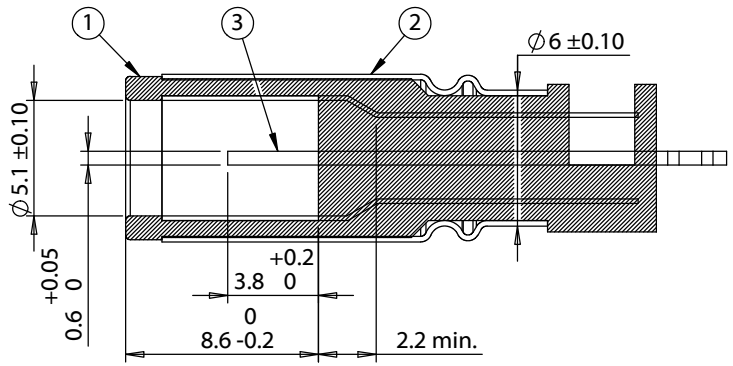
Mechanical Requirements
Insertion force: 0.3 ~ 3 kgf
Withdrawal force: 0.3 ~ 3 kgf
Life cycle: 5000 mating cycles

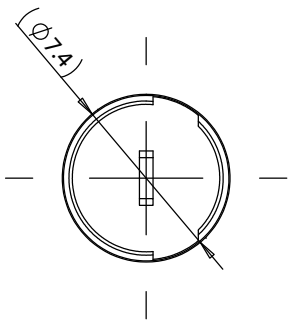
Environmental Requirements
Cold test: -25 ± 3 °C for 48 hours without deformation
Heat test: 70 °C, relative humidity 70 - 85% for 96 hours while maintaining contact resistance: 100 mΩ or less, insulation resistance: 50 MΩ @ 500 Vdc, without looseness or deformation
Humidity test: 30 °C, relative humidity 60% for 168 hours without deformation
Salt spray test: 35 °C, relative humidity 90 - 95%, 5% NaCl mist for 48 hrs. Wash parts after test. Maintain mechanical requirements and a contact resistance of less than 80 mΩ.

Operating Temperature Range
-40ºC ~ 150 ºC, relative humidity of 85% or less

Mates with connector
54-00429







Revision:	Date:	Description:
A	10/07/2025	Initial release

Prepared: KM Digitally signed by KM Date: 2025.10.07 09:04:40 -07'00'

Verified: CR Digitally signed by CR Date: 2025.10.07 11:28:07 -07'00'

Dimensions are in millimeters.
Tolerances:
X: ± 0.50 mm
X.X: ± 0.30 mm
X.XX: ± 0.20 mm

Notes:
RoHS compliant
Halogen free

Description:
Connector, dc plug, 7.4x5.1xL26.5 mm, brass nickel plated, black, molding style

TENSILITY
tel 1.541.323.3228 800 877.670.7118
fax 1.541.323.4202 web tensility.com

Size: A
Part number: 50-01040
Scale: 3:1
Sheet 1 of 1

To see a custom version of this cable assembly, call Tensility at 541-323-3228 or email engineering@tensility.com

5 4 3 2 1