Ratings Voltage: 48 Vdc Current: 5 A **Operating Temperature Range** -25° to 70 °C, relative humidity of 85% or less Materials (1) Insulator: PBT+15% GF, black (2) Shell: C2700 brass, 2 µm nickel plated (3) Center contact: C2680 brass, 2 µm nickel plated Ø 2.5 ±0.05 1.5 ±0.1 2 **Electrical Requirements** Dielectric strength: 1 min @ 500 Vac Insulation resistance: 100 MΩ @ 500 Vdc (3) Contact resistance: 30 m Ω or less Mechanical Requirements Insertion force: 0.5-2.5 kgf Withdrawal force: 0.3-2 kgf Life cycle: 5000 mating cycles while maintaining 0.4 kgf min. insertion force, 0.2 kgf min. withdrawal force and less than 10 ±0.5 100 m Ω contact resistance. SECTION A-A **Environmental Requirements** Cold test: -25 \pm 3 °C for 48 hours without deformation Heat test: 70 °C, relative humidity 70-85% for 96 hours without deformation Humidity test: 40 °C, relative humidity 90-100% for 96 hours without deformation Salt spray test: 35 °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 m Ω . 0 Ø5.5-0.05 ±0.2 Ø5.3 : 15.8 ±0.30

Revision:	Date:	Description:	Prepared:	Notes:					
А	11/28/2011	Initial release		RoHS compliant			Ηſ	NSIL	ITY
A1	07/31/2012	Updated connector length	Verified:	Function test: no open, no short circuit, no intermittent		tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com			
A2	05/13/2019	Updated insulator material	Dimensions are in						
			— millimeters. Tolerances:	Description:	, 5.5x2.5xL18.5 mm, brass nickel		Size: Part number: A 50-00128		
			$X: \pm 0.3 \text{ mm}$						
			X.X: ± 0.1 mm X.XX: ± 0.05 mm	plated		Scale	: 3:1	$\bigcirc \bigcirc$	Sheet 1 of 1
5 4			4	3	2		1		1

Ø2.2±0.1

17.3 ±0.30 18.5 ±0.50 А

Ø 1.6 ±0.1