

Materials

Outer shell: C3604 brass, black chrome-plating  
Latch sleeve: C3604 brass, black chrome-plating  
Split insert carrier 1: C3604 brass, nickel-plating  
Split insert carrier 2: C3604 brass, nickel-plating  
Insulator: PPS (Polyphenylene sulfide) UL94 V-0, beige  
Pin: C38500 brass, 0.2 µm gold-plating, solder cup style  
Collet: C3604 brass, nickel-plating  
Collet nut: C3604 brass, black chrome-plating

Electrical Requirements

Breakdown voltage: 0.85 kV rms (contact to contact), 0.65 kV rms (contact to shell)  
Dielectric strength: 1 min @ 500 Vac  
Insulation resistance: 10000 MΩ @ 500 Vdc  
Contact resistance: 30 mΩ or less, 5000 cycles

Mechanical Requirements

Insertion force: 1.02 kgf average  
Withdrawal force: 0.82 kgf average  
Latch force: 18.4 kgf average  
Life cycle: 5000 minimum mating cycles at 300 cycles per hour  
Shock resistance: 100g, 6 ms  
Resistance to vibration: 10-2000 Hz, 15g

Environmental Requirements

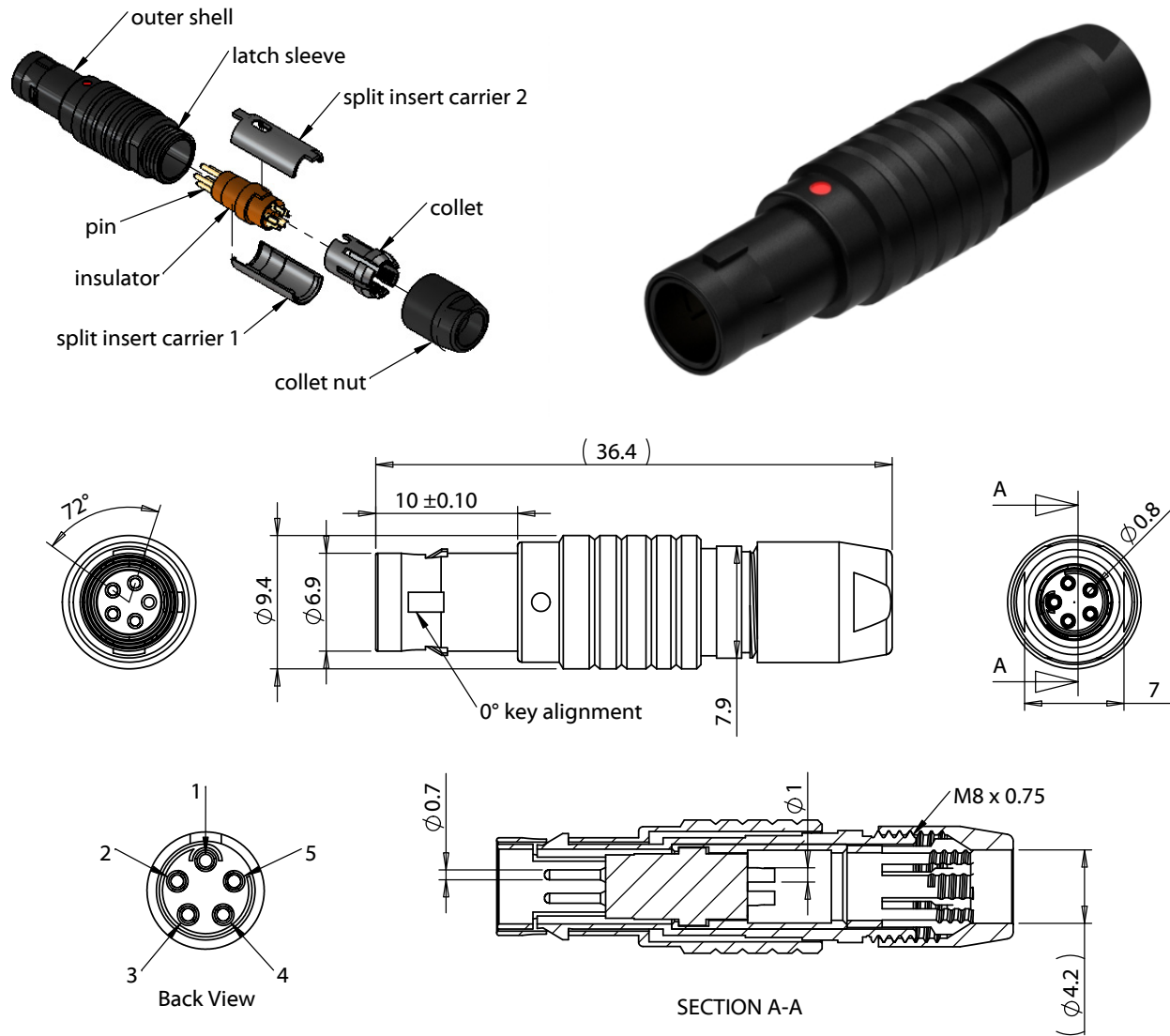
IP50 rating

Assembly info

Wire gauge: 24 AWG max (Ø0.60)  
Cable jacket Ø: 3.2 - 4.2 mm  
Maximum collet nut tightening torque: 0.5 Nm

Mating info

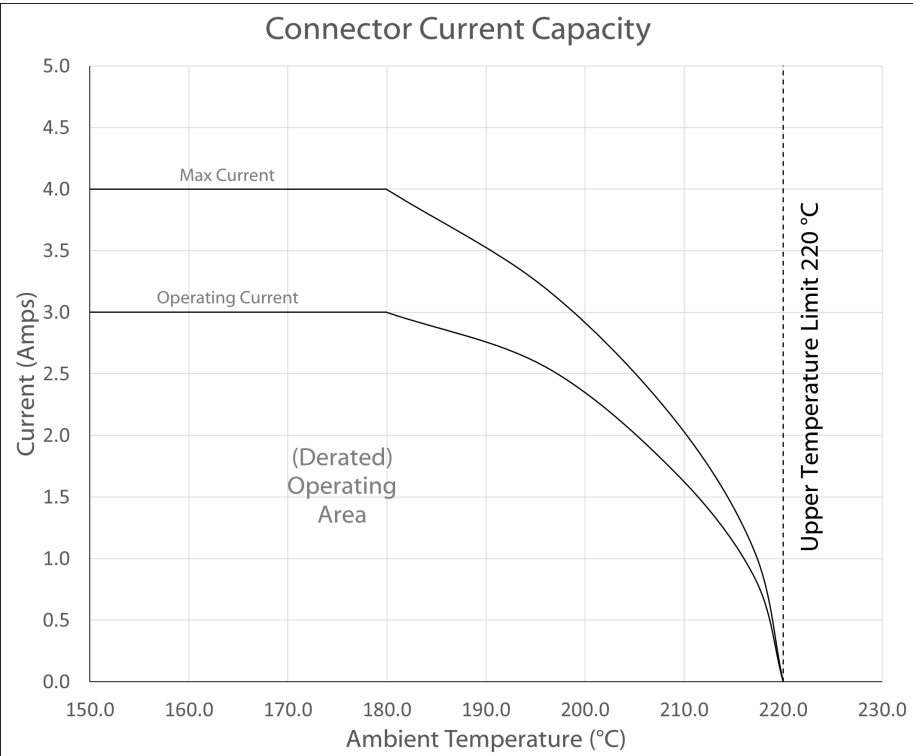
Mates with PPL7 series jacks (5 pin, 0° key)



Revision:	Date:	Description:	Prepared:	Notes:	<b>TENSILITY</b> tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com	
A	05/19/2020	Initial Release	Verified:	RoHS compliant Function test: no open, no short circuit, no intermittent		
			Dimensions are in millimeters. Tolerances: X: ± 0.5 mm X.X: ± 0.3 mm X.XX: ± 0.05 mm	Description: Connector, PPL7, 5C, 0° plug, 7x38 mm, black chrome, solder, Ø3.2-4.2 mm wire	Size: A	Part number: 51-00069.42
					Scale: 2:1	Sheet 1 of 2

**Ratings**  
Voltage: 300 V  
Current: 3.0 A

**Operating Temperature Range**  
-55 to 220 °C



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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