

## Materials

Outer shell: C3604 brass, black chrome-plating  
Front nut: C3604 brass, black chrome-plating  
Insulator: PPS (Polyphenylene sulfide) UL94 V-0, beige  
Pin: C38500 brass, 0.2  $\mu$ m gold-plated, solder cup style  
Washer p/n 56-00006: cold rolled steel, nickel-plating  
Nut p/n 56-00007: C3604 brass, nickel-plating

## Electrical Requirements

Breakdown voltage: 0.85 kV rms (contact to contact), 0.70 kV rms (contact to shell)  
Dielectric strength: 1 min @ 500 Vac  
Insulation resistance: 10,000 M $\Omega$  @ 500 Vdc  
Contact resistance: 30 m $\Omega$  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

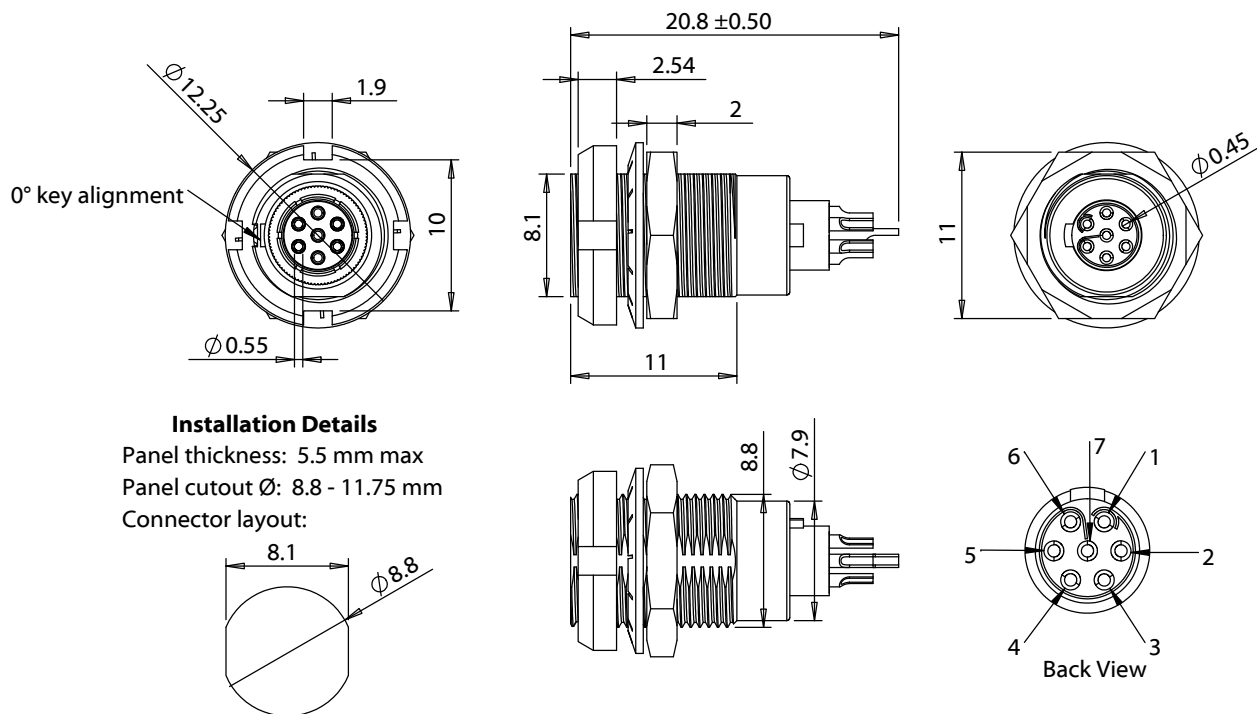
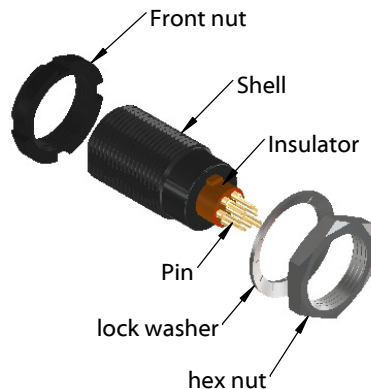
IP50 rating

## Assembly info

Wire gauge: 28 AWG max ( $\varnothing$ 0.35 mm)

## Mating info

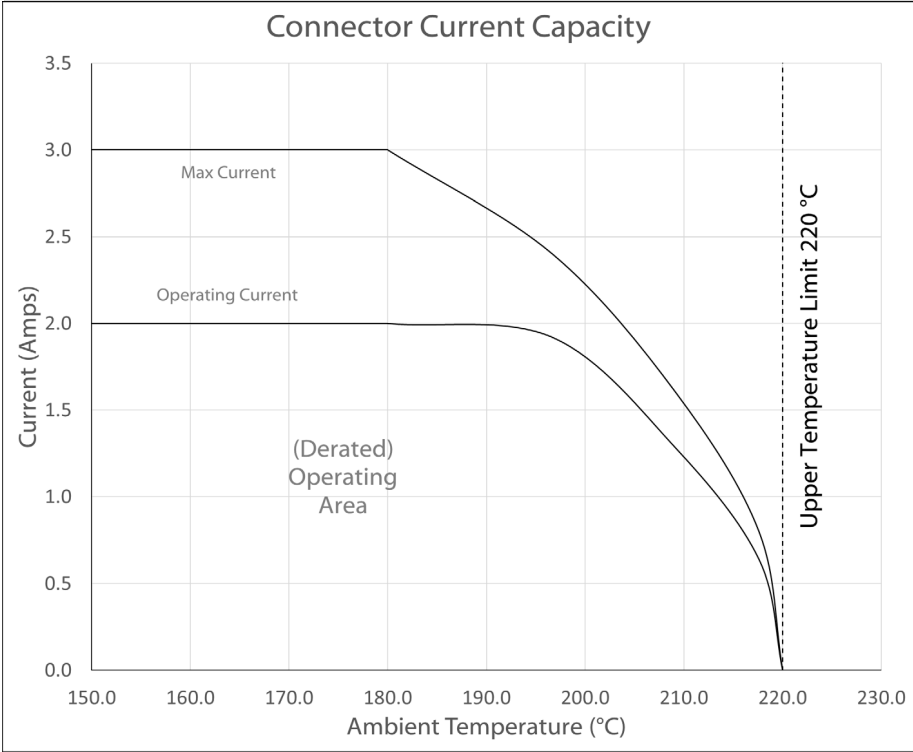
Mates with PPL7 series plug (7 pin, 0° key)



Revision:	Date:	Description:	Prepared:	Notes:	<h1>TENSILITY</h1> <p>tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com</p> <p>Size: Part number: A 51-00077</p> <p>Scale: 2:1</p> <p>Sheet 1 of 2</p>
A	05/20/2020	Initial Release	Verified:	RoHS compliant	
			Dimensions are in millimeters.	Function test: no open, no short circuit, no intermittent	
			Tolerances: X: $\pm$ 0.5 mm X.X: $\pm$ 0.3 mm X.XX: $\pm$ 0.05 mm	Description: Connector, PPL7, 7C, 0° panel socket, front-back mount, 7x21.7 mm, black chrome, solder	

**Ratings**  
Voltage: 300 V  
Current: 2.0 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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