

**Style**  
M12 Plug, shielded  
8 pin  
A-coding

**Ratings**  
Voltage: 30 V  
Current: 2 A

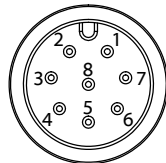
**Operating Temperature Range**  
-40 ~ 105 °C

**Materials**  
① Insulator: Polyamide 66 (PA66), UL94 HB, black  
② Pin: C3604 brass, gold plated  
③ Shell: C3604 brass, nickel plated  
④ Nut: C3604 brass, nickel plated  
⑤ O-ring: Nitrile rubber, black & green  
⑥ Pin alignment guide: Polyamide 66 (PA66), UL94 HB, black

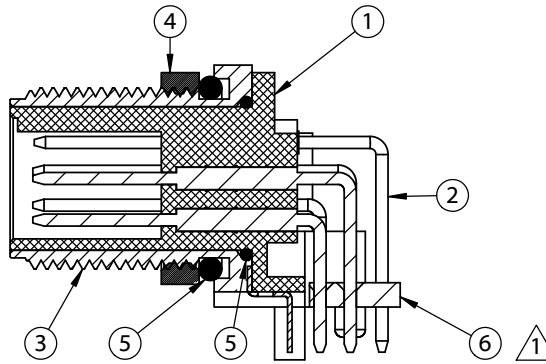
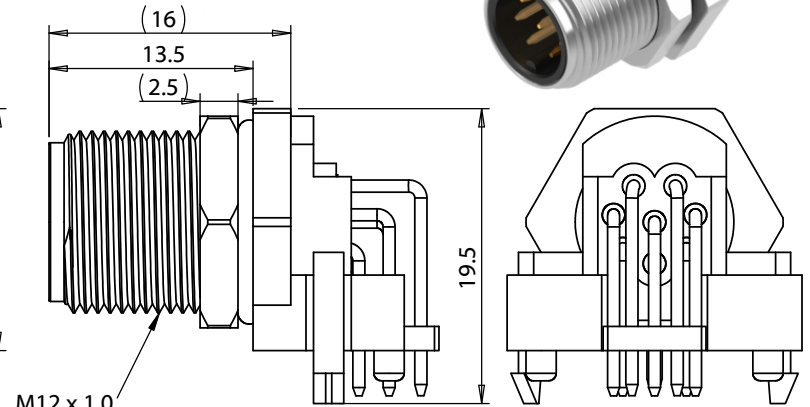
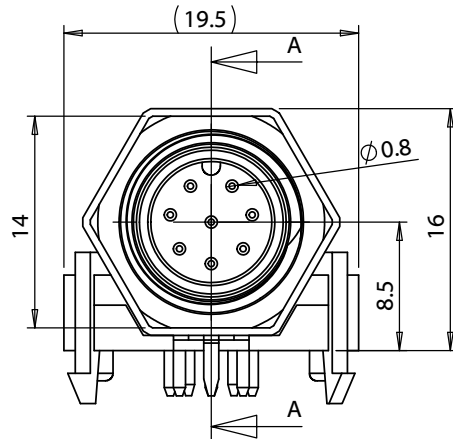
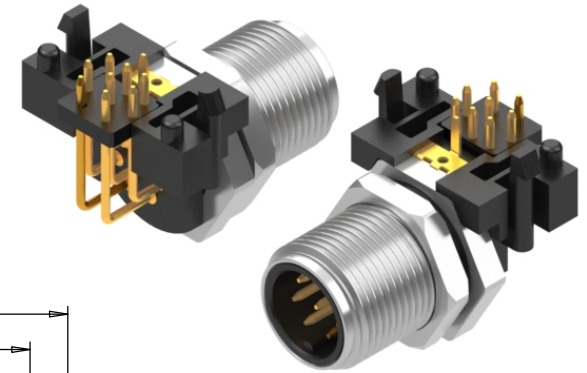
**Electrical Requirements**  
Dielectric strength: 1 min @ 500 Vac  
Insulation resistance: 100 MΩ @ 500 Vdc  
Contact resistance: 10 mΩ or less

**Mechanical Requirements**  
Life cycle: 500 mating cycles minimum

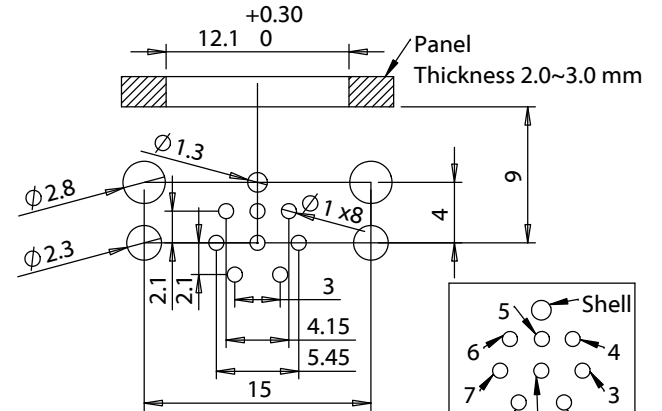
**Environmental Requirements**  
Salt spray test: 35 °C, relative humidity 90-95%, 5% NaCl mist for 48 hrs. Wash parts after test. Maintain mechanical requirements and a contact resistance of less than 10 mΩ.  
Waterproof: IP67 (in mated state). IP67 panel ingress requires sealing cap



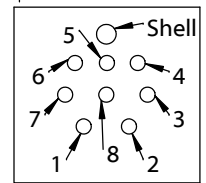
Front View  
Not to Scale



SECTION A-A



PCB Layout



Revision:	Date:	Description:
A	9/30/2020	Initial release
A1	10/13/2021	Added pin alignment guide

Prepared:	Notes:
Verified:	RoHS compliant
Dimensions are in millimeters. Tolerances: X: ± 0.5 mm X.X: ± 0.3 mm X.XX: ± 0.1 mm	Function test: no open, no short circuit, no intermittent
	Description: Connector, 8 pin M12 A-code plug, 12xL25mm, gold plated, PCB mount, 90°, PCB, IP67

**TENSILITY**

tel 1.541.323.3228 800 877.670.7118  
fax 1.541.323.4202 web tensility.com

Size:	Part number:
A	54-00251
Scale: 2:1	Sheet 1 of 1