

**Style**

M12 Socket, shielded  
4 pin  
A-coding

**Ratings**

Voltage: 250 V  
Current: 4 A

**Operating Temperature Range**

-40~105 °C

**Materials**

- ① Insulator: Polyamide 66 (PA66), UL94 HB, black
- ② Pin: C5191 phosphor bronze, gold plated
- ③ Shell: C3604 brass, nickel plated
- ④ Nut: C3604 brass, nickel plated
- ⑤ O-ring: Silicone rubber
- ⑥ Epoxy: Epoxy resin

**Electrical Requirements**

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

**Mechanical Requirements**

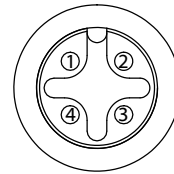
Life cycle: 500 mating cycles minimum

**Environmental Requirements**

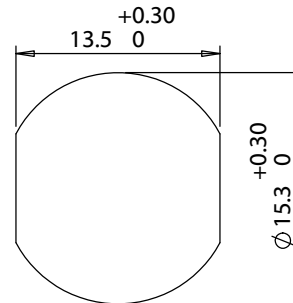
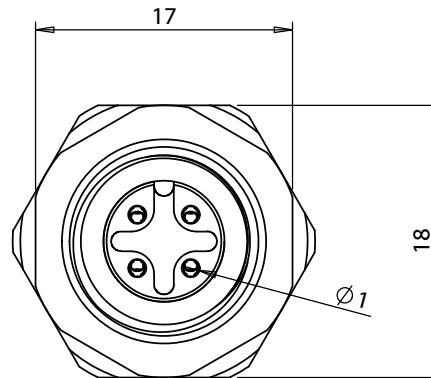
Salt spray test: 35 °C, relative humidity 90-95%, 5% NaCl mist for 48 hrs. Wash parts after test. Maintain mechanical requirements and a contact resistance of less than 10 mΩ.  
Waterproof: IP67

**Assembly Info**

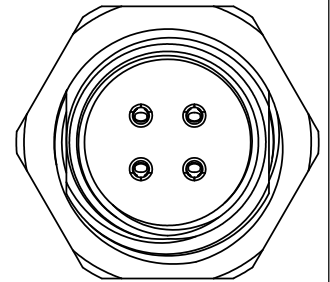
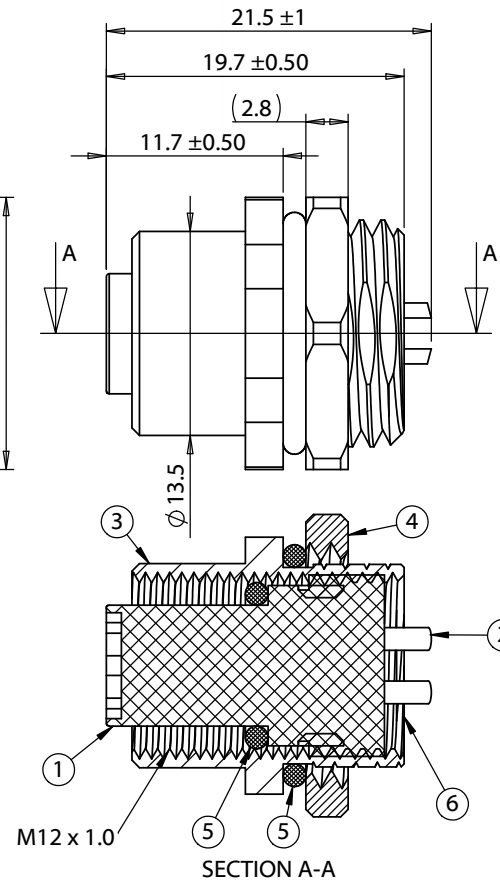
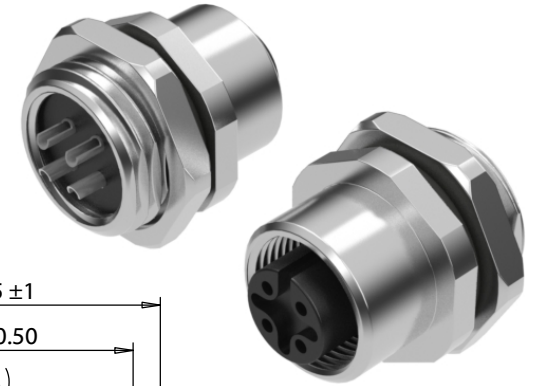
Wire gauge: 22 AWG max



Front View  
Not to Scale



Panel cutout (PG9)  
Panel thickness (3.5mm max.)



|           |           |                 |                                                                                                  |                                                                                              |                                                                                                                     |              |              |
|-----------|-----------|-----------------|--------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|--------------|--------------|
| Revision: | Date:     | Description:    | Prepared:                                                                                        | Notes:                                                                                       | <div>TENSILITY</div> <div>tel 1.541.323.3228 800 877.670.7118</div> <div>fax 1.541.323.4202 web tensility.com</div> |              |              |
| A         | 10/1/2020 | Initial release | Verified:                                                                                        | RoHS compliant<br>Function test: no open, no short circuit, no intermittent                  |                                                                                                                     |              |              |
|           |           |                 | Dimensions are in millimeters.<br>Tolerances:<br>X: ± 0.3 mm<br>X.X: ± 0.1 mm<br>X.XX: ± 0.05 mm | Description:                                                                                 | Size:                                                                                                               | Part number: |              |
|           |           |                 |                                                                                                  | Connector, M12 A-code socket, 4 pin, 12xL21.5 mm, panel mount, solder cup, gold plated, IP67 | A                                                                                                                   | 54-00181     |              |
|           |           |                 |                                                                                                  |                                                                                              | Scale: 2:1                                                                                                          |              | Sheet 1 of 1 |