

**Style**

M12 Plug, shielded  
5 pin  
A-coding

**Ratings**

Voltage: 60 V  
Current: 4 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: Silicone rubber
- ⑥ Epoxy: Epoxy resin

**Electrical Requirements**

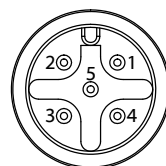
Dielectric strength: 1 min @ 500 Vac  
Insulation resistance: 100 MΩ @ 500 Vdc  
Contact resistance: 10 mΩ or less

**Mechanical Requirements**

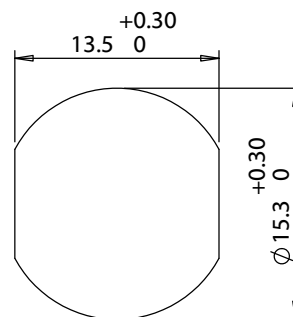
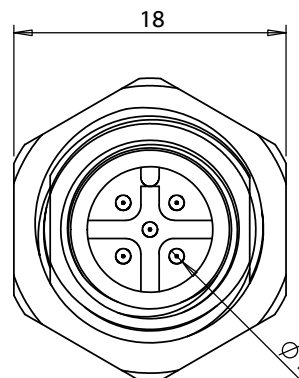
Life cycle: 500 mating cycles minimum

**Environmental Requirements**

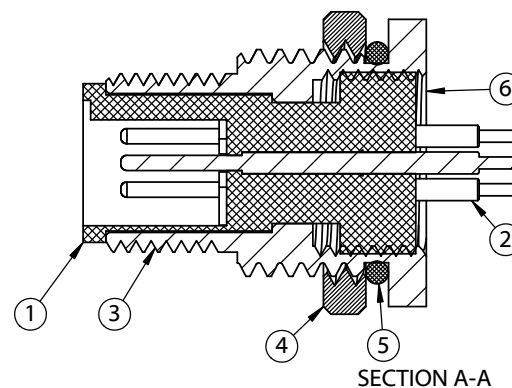
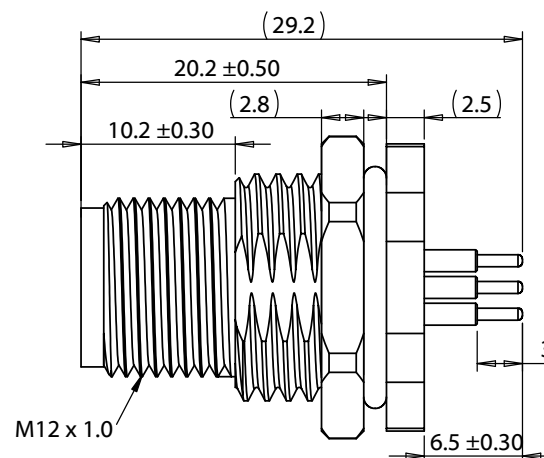
Salt spray test: 35 °C, relative humidity 90-95%, 5% NaCl mist for 48 hrs. Wash parts after test. Maintain mechanical requirements and a contact resistance of less than 10 mΩ.  
Waterproof: IP67



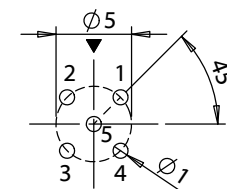
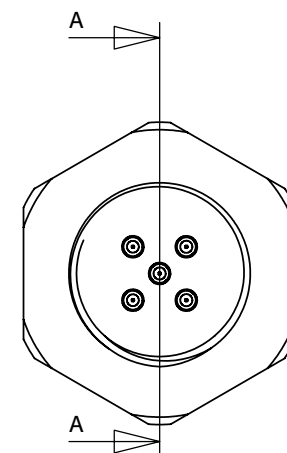
Front View  
Not to Scale



Panel cutout (PG9)  
Panel thickness (5.0mm max.)



SECTION A-A



PCB Layout

|           |           |                 |                                |   |  |              |              |
|-----------|-----------|-----------------|--------------------------------|---|--|--------------|--------------|
| Revision: | Date:     | Description:    | Prepared:                      | Notes:  | <div style="text-align: center;"> <h1>TENSILITY</h1> <p>tel 1.541.323.3228 800 877.670.7118</p> <p>fax 1.541.323.4202 web tensility.com</p> </div> |              |              |
| A         | 10/6/2020 | Initial release | Verified:                      | RoHS compliant  |  |              |              |
|           |           |                 |                                | Function test: no open, no short circuit, no intermittent                                 | Size:  | Part number: |              |
|           |           |                 | Dimensions are in millimeters. | Description:  | A  | 54-00217     |              |
|           |           |                 | Tolerances:                    | Connector, M12 A-code plug, 5 pin, 12xL29.2 mm, panel mount, thru hole, gold plated, IP67 | Scale:   | 2:1          | Sheet 1 of 1 |
|           |           |                 | X: ± 0.3 mm                    |   |  |              |              |
|           |           |                 | X.X: ± 0.1 mm                  |   |  |              |              |
|           |           |                 | X.XX: ± 0.05 mm                |   |  |              |              |