

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

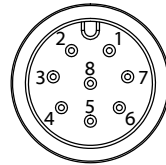
Dielectric strength: 1 min @ 500 Vac
Insulation resistance: 100 MΩ @ 500 Vdc
Contact resistance: 10 mΩ or less

Mechanical Requirements

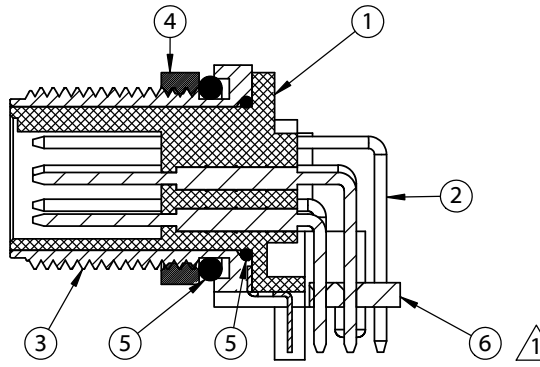
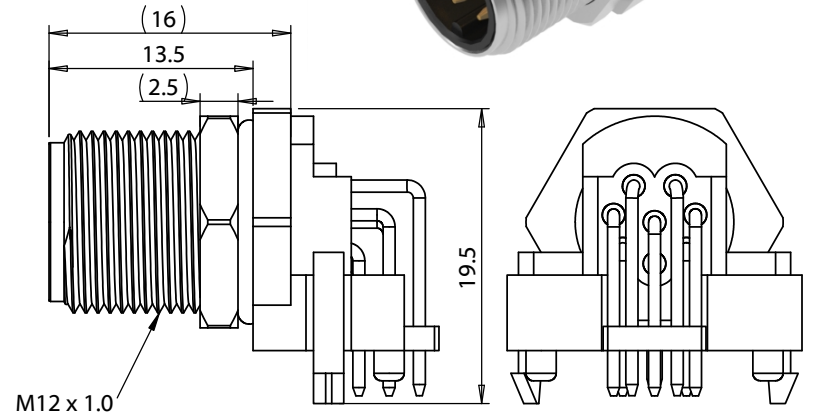
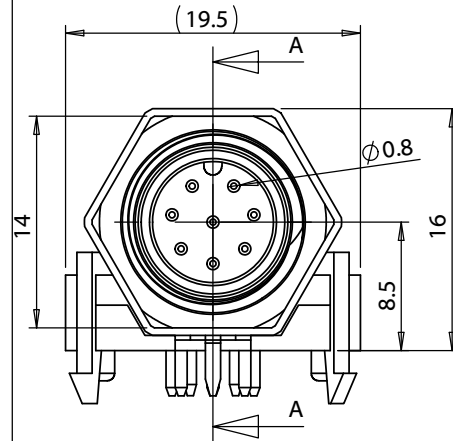
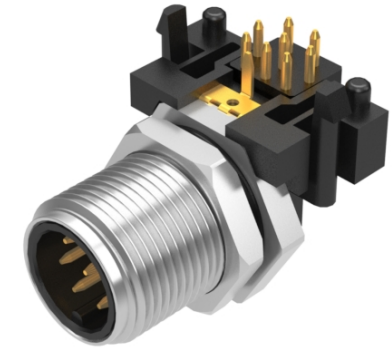
Life cycle: 500 mating cycles minimum

Environmental Requirements

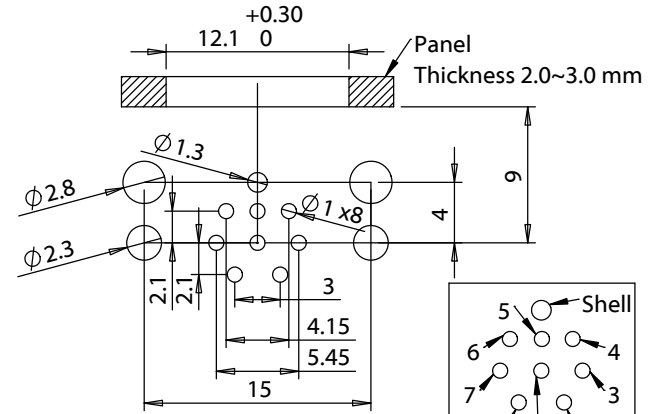
Salt spray test: 35 °C, relative humidity 90-95%, 5% NaCl mist for 48 hrs. Wash parts after test. Maintain mechanical requirements and a contact resistance of less than 10 mΩ. Waterproof: IP67 (in mated state). IP67 panel ingress requires sealing cap



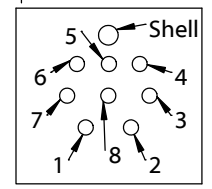
Front View
Not to Scale



SECTION A-A



PCB Layout



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

Prepared:
AG
Digitally signed by AG
Date: 2023.06.20
13:35:32 -07'00'

Verified:
PB
Digitally signed by PB
Date: 2023.06.20
16:44:20 -07'00'

Dimensions are in millimeters.
Tolerances:
X: ± 0.5 mm
X.X: ± 0.3 mm
X.XX: ± 0.1 mm

Notes:
RoHS compliant

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

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Size: A Part number: **54-00251**

Scale: 2:1 Sheet 1 of 1