

**Style**  
M12 Socket, shielded  
8 pin  
X-coding

**Ratings**  
Voltage: 48 V  
Current: 0.5 A

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

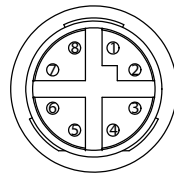
**Materials**  
① Insulator: Polyamide 66 (PA66), UL94 HB, black  
② Pin: phosphor copper, gold plated  
③ Inner shielding: Zinc aluminum alloy, nickel plated  
④ Shell: C3604 brass, nickel plated  
⑤ O-ring: Nitrile rubber, black & green  
⑥ Shield contact: C3604 brass, nickel plated

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

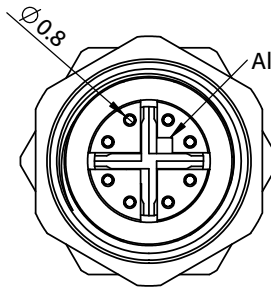
**Mechanical Requirements**  
Life cycle: 500 mating cycles minimum

**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.

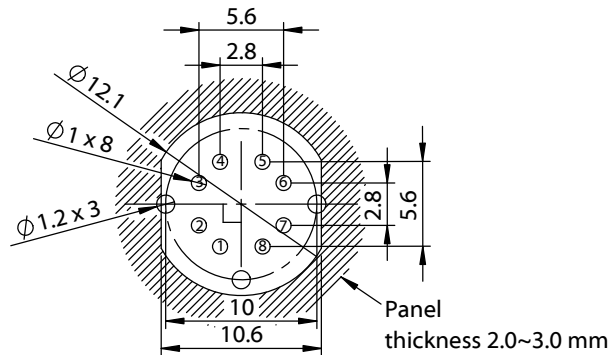
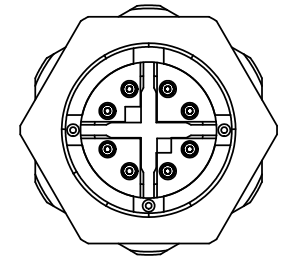
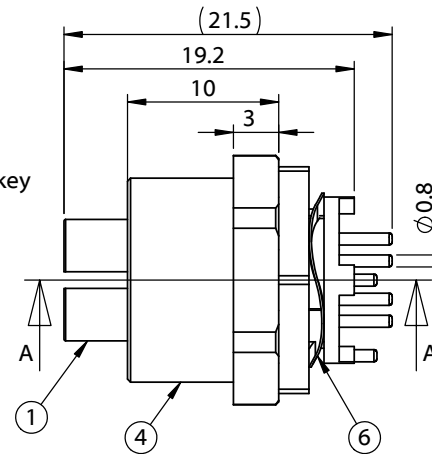
**Transmission Characteristics:**  
CAT6a



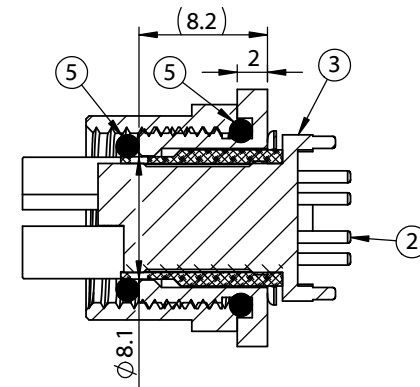
Front View  
Not to Scale



Alignment key



PCB and panel Layout



SECTION A-A

Revision:	Date:	Description:
A	5/9/2023	Initial release

Prepared:

Verified:

Dimensions are in millimeters.  
Tolerances:  
X: ± 0.3 mm  
X.X: ± 0.1 mm  
X.XX: ± 0.05 mm

Notes:

RoHS compliant

Function test: no open, no short circuit, no intermittent

Description:  
Connector, 8 pin M12 X-code socket, L21.5 mm, gold plated, thru hole PCB, panel mount, IP67, shielded

**TENSILITY**

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Size:	Part number:
A	54-00390
Scale: 2:1	Sheet 1 of 1