

Style

M12 Socket, shielded
8 pin
X-coding

Ratings

Voltage: 50 Vac / 60 Vdc
Current: 0.5 A (all contacts)
1 A (single contact)

Operating Temperature Range

-40~105°C

Materials

- ① Insulator: Polyamide 66 (PA66) glass fiber, UL94 HB, black
- ② Pin: phosphor copper, gold plated
- ③ Cross shield: Zinc aluminum alloy, nickel plated
- ④ Shell: C3604 brass, nickel plated
- ⑤ Nut: C3604 brass, nickel plated
- ⑥ O-ring: Silicone rubber

Electrical Requirements

Dielectric strength: 1 min @ 500 Vac
Insulation resistance: 100 MΩ @ 500 Vdc
Contact resistance: 5 mΩ or less

Mechanical Requirements

Life cycle: 500 mating cycles minimum

Environmental Requirements

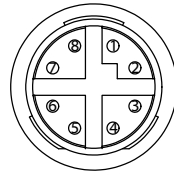
Salt spray test: 35 °C, relative humidity 90-95%, 5% NaCl mist for 48 hrs. Wash parts after test. Maintain mechanical requirements and a contact resistance of less than 10 mΩ.
Waterproof: IP67 (in mated state). IP67 panel ingress requires sealing cap.

Assembly Info

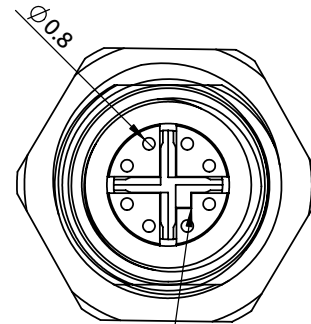
Wire gauge: 24 AWG max
Wire size: $\varnothing 7.5$ mm max

Transmission characteristics:

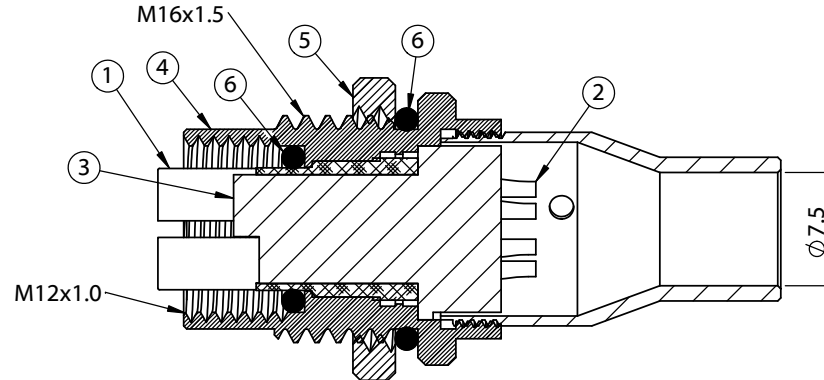
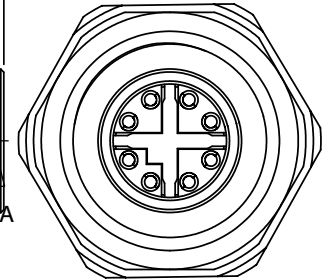
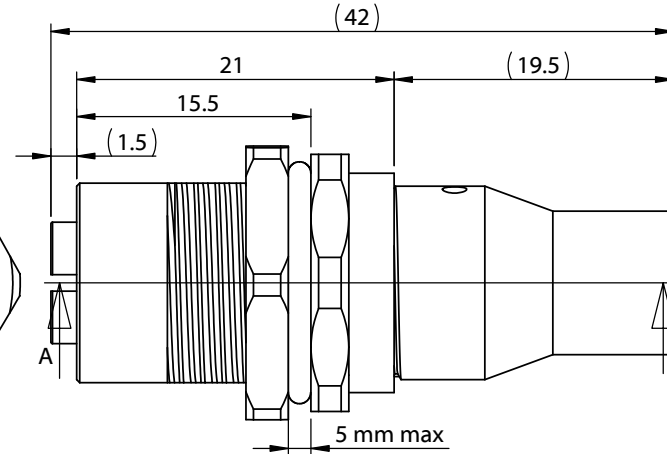
CAT6a



Front View
Not to Scale



Alignment key



SECTION A-A

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	5/16/2023	Initial release	Verified:	RoHS compliant Function test: no open, no short circuit, no intermittent			
			Dimensions are in millimeters. Tolerances: X: ± 0.3 mm X.X: ± 0.1 mm X.XX: ± 0.05 mm	Description:	Size:	Part number:	
				Connector, M12 X-code socket, 8 pin, 12xL40.5 mm, panel mount, solder cup, gold plated, IP67	A	54-00398	
					Scale: 2:1		Sheet 1 of 1