

**Style**

M12 Plug, 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 Inner shielding: Zinc aluminum alloy, nickel plated
- ④ Shell: C3604 brass, nickel plated
- ⑤ Threads: C3604 brass, nickel chrome

**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**

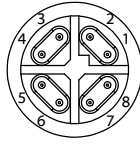
Salt spray test: 35 °C, relative humidity 90-95%, 5% NaCl mist for 48 hrs. Wash parts after test. Maintain mechanical requirements and a contact resistance of less than 10 mΩ.  
Waterproof: IP67

**Assembly Info**

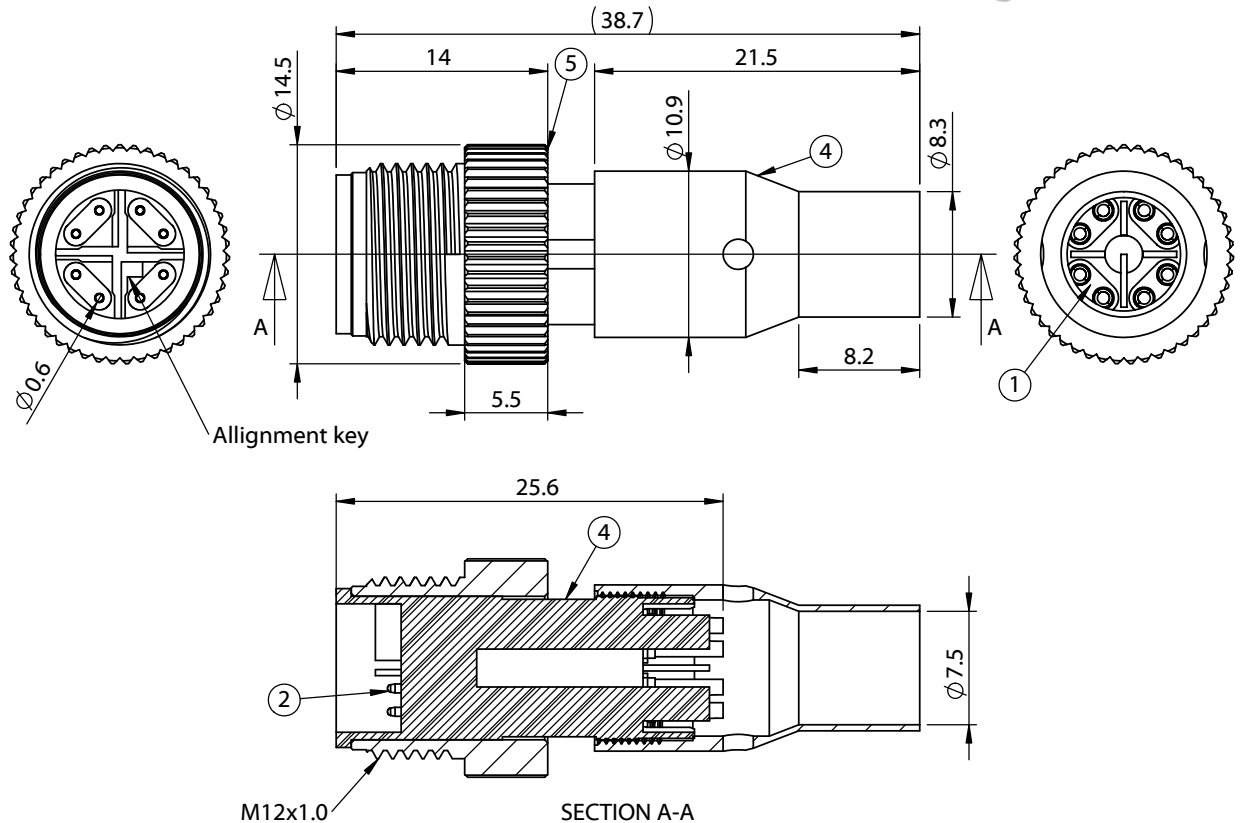
Wire gauge: 24 AWG max  
Wire size:  $\phi 7.5$  mm max

**Transmission characteristics:**

CAT6a



Front view  
Not to Scale



Revision:	Date:	Description:	Prepared:	Notes:	<div><b>TENSILITY</b></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			
			Dimensions are in millimeters.	Function test: no open, no short circuit, no intermittent	Size: Part number: A 54-00395		
			Tolerances: X: $\pm 0.3$ mm X.X: $\pm 0.1$ mm X.XX: $\pm 0.05$ mm	Description: Connector, M12 X-code plug, 8 pin, 8xL38.6 mm, molding style, solder cup, gold plated, IP67, shielded			
					Scale: 2:1		Sheet 1 of 1