

**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) 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 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**

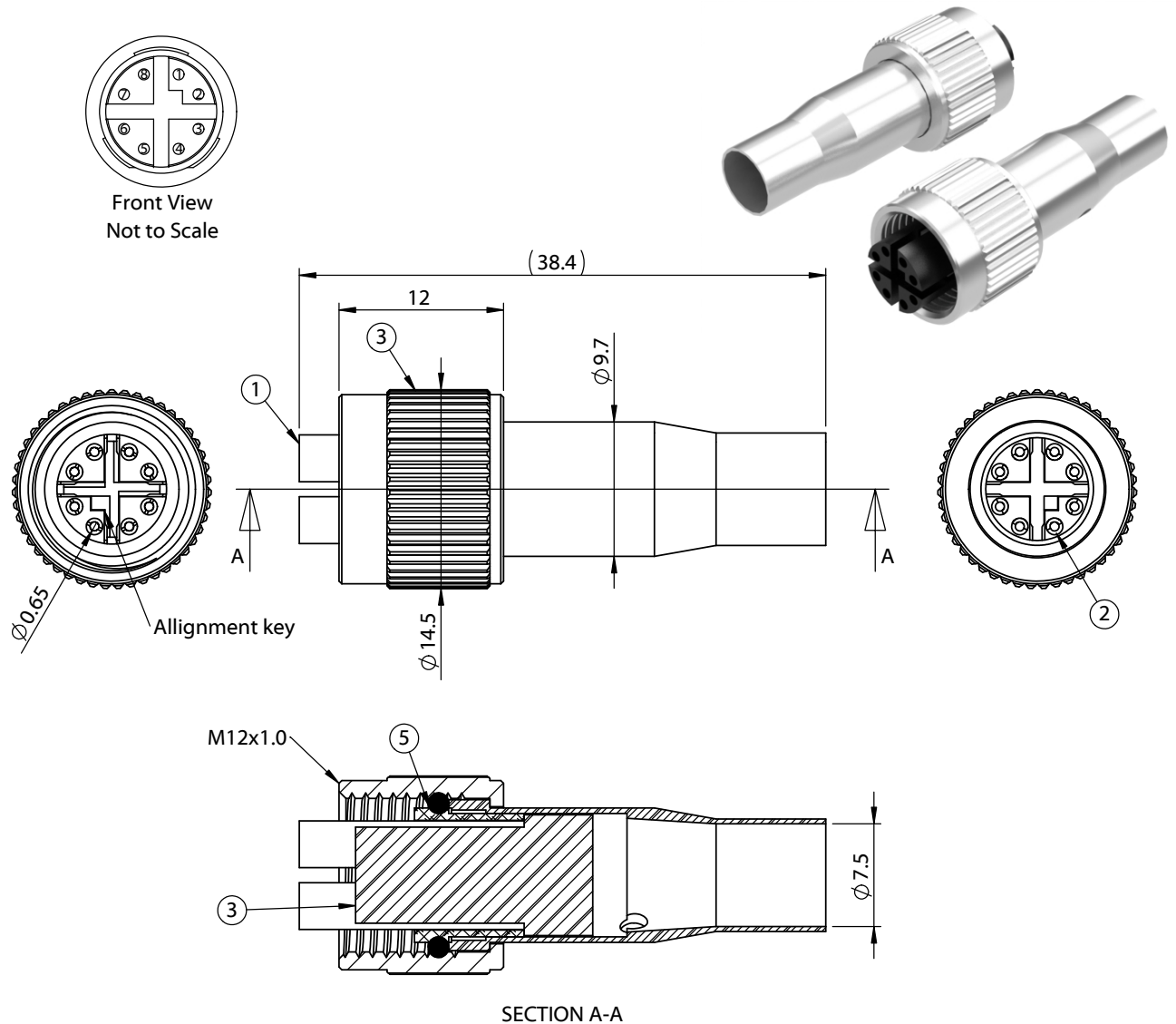
Salt spray test: 35 °C, relative humidity 90-95%, 5% NaCl mist for 48 hrs. Wash parts after test. Maintain mechanical requirements and a contact resistance of less than 10 mΩ.  
Waterproof: IP67

**Assembly Info**

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

**Transmission characteristics:**

CAT6a



Revision:	Date:	Description:	Prepared:	Notes:	<div style="text-align: center;"> <h1>TENSILITY</h1> <p>tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com</p> </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: $\pm$ 0.3 mm X.X: $\pm$ 0.1 mm X.XX: $\pm$ 0.05 mm	Description: Connector, 8 pin M12 X-code socket, L36.7 mm, gold plated, solder cup, molding style, IP67, shielded	Size: A	Part number: 54-00394
					Scale: 2:1	Sheet 1 of 1