

**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: C3604 brass, gold flashing  
③ M12 Shell: Zinc Alloy, nickel plated  
④ Outer Shell: Zinc Alloy, nickel plated  
⑤ Collet nut: Zinc Alloy, nickel plated  
⑥ Collet: Polyamide 66 (PA66), UL94 HB  
⑦ O-ring: Nitrile rubber, black & green

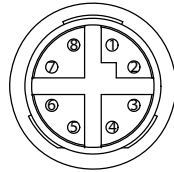
**Electrical Requirements**  
Dielectric strength: 1 min @ 500 Vac  
Insulation resistance: 100 MΩ @ 500 Vdc  
Contact resistance: 10 mΩ or less

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

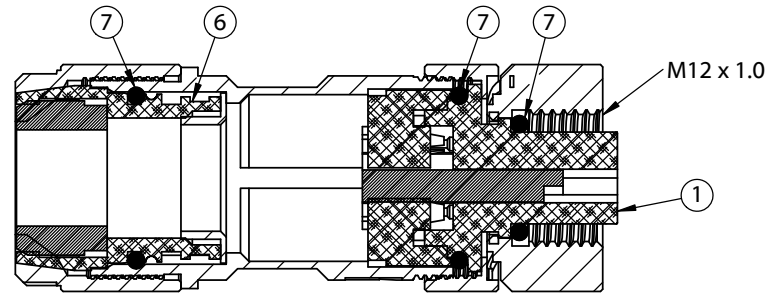
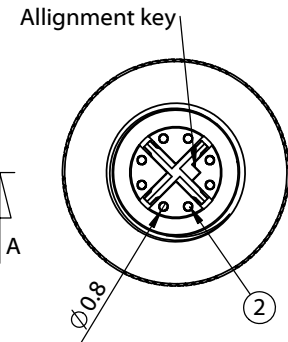
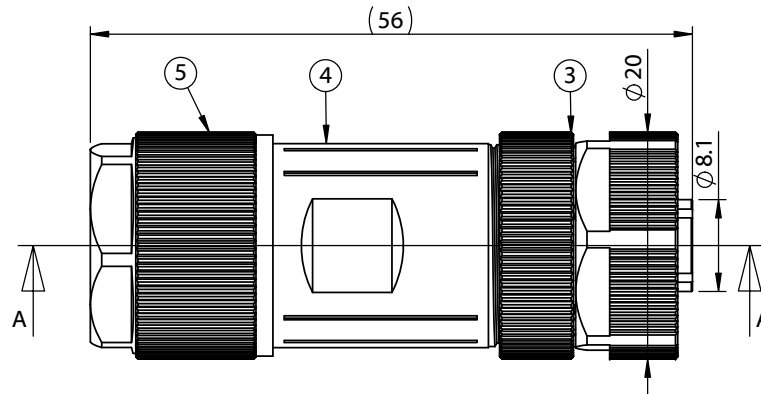
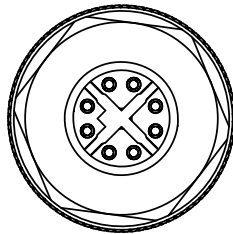
**Environmental Requirements**  
Salt spray test: 35 °C, relative humidity 90-95%, 5% NaCl mist for 48 hrs. Wash parts after test. Maintain mechanical requirements and a contact resistance of less than 10 mΩ.  
Waterproof: IP67

**Assembly Info**  
Wire gauge: 24 AWG max  
Wire size: Ø6~8 mm

**Transmission Characteristics:**  
CAT6a



Front View  
Not to Scale



SECTION A-A

Revision:	Date:	Description:	Prepared:	Notes:	<h1>TENSILITY</h1> <p>tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com</p>
A	5/9/2023	Initial release	Verified:	RoHS compliant	
			Dimensions are in millimeters. Tolerances: X: ± 0.3 mm X.X: ± 0.1 mm X.XX: ± 0.05 mm	Function test: no open, no short circuit, no intermittent	
				Description: Connector, 8 pin M12 X-code socket, L56 mm, gold plated, crimp, assembly style, IP67, shielded	
				Size: A	Part number: 55-00191
				Scale: 3:2	Sheet 1 of 1