

# IndustrialNet™ M12 X-Code Category 6A Overmolded Cordsets

## specifications

Industrial Ethernet cordsets shall be constructed of Category 6A, industrial grade, stranded, twisted pair cable for STP installations. Each cordset shall be 600V AWM rated for UL508A control cabinets, and on-machine use. The jacket shall be flame retardant (CMX/CM) for industrial Ethernet applications. Each cordset shall be pre-terminated and overmolded to include Category 6A, M12, or RJ45 industrial plugs on each end which are wired according to the T568B and IEC 60603-7-41 standards.



## technical information

**Category 6A/Class E<sub>A</sub> channel and component performance:** Exceeds channel and component requirements of ANSI/TIA-568.2-D Category 6A and ISO11801 Class E<sub>A</sub> standards at swept frequencies of 1 to 500 MHz

**FCC and ANSI compliance:** Meets ANSI/TIA-1096-A; contacts plated with 30 micro-inches of gold for superior performance

**IEC compliance:**

- Interface conforms to IEC-61076-2-101
- ANSI/TIA 568.2-D: Category 6A
- ISO 11801 Class E<sub>A</sub> standards at swept frequencies up to 500 MHz
- ANSI/TIA-1005-A: Telecommunications Infrastructure Standard for Industrial Premises
- IEC 61076-2-109 Connectors for Electronic Equipment: Circular connectors – Detail specification for connectors with M 12 x 1 screw-locking, for data transmission frequencies up to 500 MHz

**IP compliance:** Rated IP67 for dust protection and temporary liquid immersion 35 million plus flex cycles

**NEMA/UL compliance:** NEMA, 1, 3, 4, 6, 6P and IEC IP67, UL Type 12

**PoE compliance:** Meets IEEE 802.3af and IEEE 802.3at for PoE applications

**RoHS compliance:** Compliant

**Temperature rating:** -40° to +75°C (-40° to +167°F)

**Materials:** Constructed of 26 AWG STP stranded industrial grade TPU cable and IP67 overmolded connectors; Coupling nut: nickel plated over copper-zinc alloy; Contact pins: gold plated over copper-zinc alloy

## key features and benefits

**IP/NEMA/UL/CE rated** Withstands light wash down and temporary submerged conditions without loss of performance to ensure reliability in harsh factory environments

**TPU jackets** Protect cable against weld splatter, chemicals and abrasions; suitable for high-flex applications for increased reliability

**Factory terminated** Helps reduce termination errors in the field; assures reliability and saves time

**Extended temperature range** Provides durable connection in extreme conditions to increase system; reliability

**Robust construction** Rated to 35 million flex cycles, providing durability and reliability

**Optional RJ45 connector** Offers industry standard solution familiar to end users to speed deployment

## applications

IndustrialNet™ M12 X-Code Category 6A Overmolded Cordsets provide fast, reliable connections from machines and devices to switches and enclosures on the plant floor for Ethernet, PROFINET, Modbus and EtherCAT. The cordsets are rated to IP67, NEMA 1,3,4,6,6P, UL and M.I.C.E., ensuring high

performance and longevity under harsh environmental conditions. In mated conditions, these cordsets can withstand high temperature and high vibration commonly found in harsh industrial applications such as automotive, food and beverage, oil and gas, transportation and mining.

### IndustrialNet™ M12 X-Code Category 6A Overmolded Cordsets

**M12 male to male X-Code, straight connector, STP, teal:** ICX11T1NTL\*M

**M12 male X-Code to RJ45, straight connectors, STP, teal:** ICX14T1NTL\*M

**M12 male X-Code, straight connector, STP, teal:** ICX15T1NTL\*M

**M12 bulkhead female X-Code, RJ45 plug, STP, teal:** ICX44T1NTL%M

**M12 bulkhead female X-Code, STP, teal:** ICX45T1NTL0.5M

### Accessories

**IndustrialNet™ Category 6A M12 X-Code field terminable plug:** ISPS6A88MFA

**IndustrialNet™ M12 X-Code female to 90° RJ45 jack panel mount adapter:** ICAM12X90DRJS

**IndustrialNet™ M12 X-Code female to RJ45 jack panel mount adapter:** ICAM12XRJS

**IndustrialNet™ Category 6A/6/5e shielded RJ45 field terminable plug:** FPS6X88MTG

### IndustrialNet™ Copper Cable

**Category 6A S/FTP, 24/7 AWG stranded, PUR 4-pair:** ISX6X04A\*\*-LED

**Category 6A SF/UTP, 24/7 AWG stranded, CM 4-pair:** ISFCH6X04A\*\*-UG

**Category 6A SF/UTP, 26/7 AWG stranded, CM 4-pair:** ISFCH6X04B\*\*-UG

**Category 6 U/UTP, 24/7 AWG stranded, CM 4-pair, black:** IUC6C04ABL-CEG

**Category 6 F/UTP, 26/7 AWG stranded, CM 4-pair, black:** IFC6C04BBL-CEG

**Category 6 S/FTP, 24/7 AWG stranded, PUR 4-pair:** ISX6004A\*\*-LED

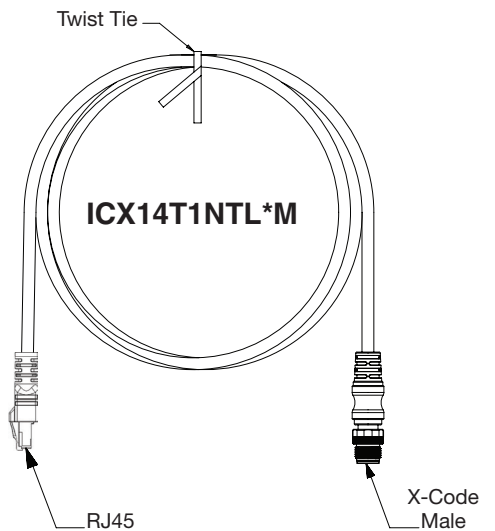
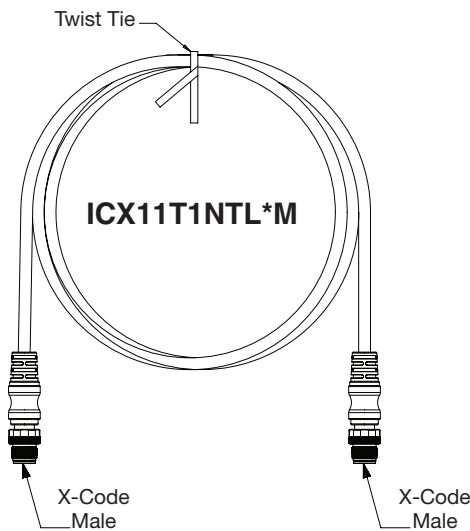
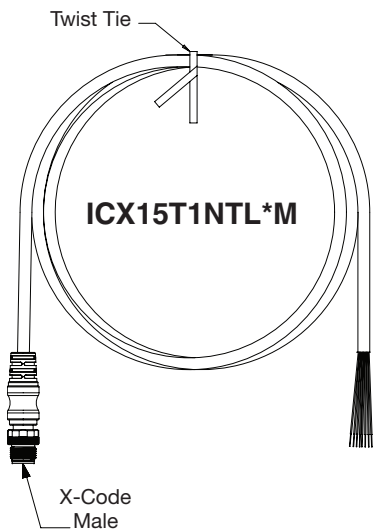
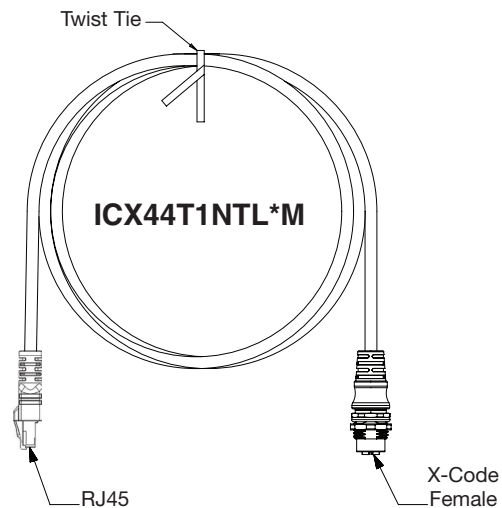
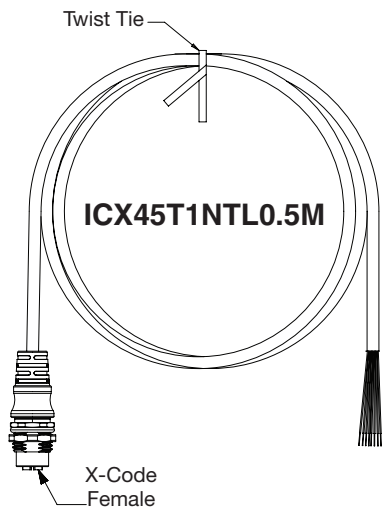
**Category 6A U/UTP, 23/1 AWG solid, CMR 4-pair:** IURH6X04\*\*-UG

### IndustrialNet™ 600V Copper Patch Cords

**Category 6A SF/UTP, 600V Patch Cords:** ISTEPH6XM\*\*

\* To specify length, change the \* to a 1,2,3,5,10,15.  
\*\*Designates color.  
Contact Customer Service for complete list of colors.  
% Lengths available are 1M or 2M.  
Replace % with 1 or 2 to indicate length.

# IndustrialNet™ M12 X-Code Category 6A Overmolded Cordsets



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