IndustrialNet™ M12 D-Code Category 5e Overmolded Cordsets

specifications

Industrial Ethernet cordsets shall be constructed of Category 5e, industrial grade, stranded, twisted pair cable for UTP and 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 5e M12 or RJ45 industrial plugs on each end which are wired according to the T568B and IEC 60603-7-41 standards.

technical information

Category 5e/Class D channel and component performance:	Exceeds channel and component requirements of ANSI/TIA-568.2-D Category 5e and ISO11801 Class D standards at swept frequencies of 1 to 100 MHz
FCC and ANSI compliance:	Meets ANSI/TIA-1096-A; contacts plated with 30 micro-inches of gold for superior performance
IEC compliance:	• ANSI/TIA 568.2-D: Category 5e • ISO 11801 Class D standards at swept frequencies up to 100 MHz • ANSI/TIA-1005-A: Telecommunications Infrastructure Standard for Industrial Premises • IEC 61076-2-101 Connectors for Electronic Equipment: Circular connectors – Detail specification for connectors with M 12 × 1 screw-locking, for data transmission frequencies up to 100 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 24 AWG UTP or 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
Robust 600V-rated construction	Allows for patch runs between automation devices in industrial environments; rated for 600 V panel or on-machine applications when the space is shared with high voltage power cables; plug contact plated with 30 micro-inches of gold
Ergonomic design	Offers ease of handling while installing and in close proximity to other connectors
100% Performance tested	Factory testing provides confidence that each patch cord delivers specified performance
TPU jacket	Protects 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 D-Code Category 5e 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 D-Code Category 5e Overmolded Cordsets

M12 male to male D-Code, straight connector, UTP, teal:	ICD11T2NTL*M
M12 male to male D-Code, straight connector, STP, teal:	ICD11T1NTL*M
M12 male D-Code, straight connector, angled connector, STP, teal:	ICD12T1NTL*M
M12 male D-Code, female D-Code, straight connectors, STP, teal:	ICD13T1NTL*M
M12 male D-Code, straight connector, RJ45 plug, STP, teal:	ICD14T1NTL%M
M12 male D-Code, straight connector, STP, teal:	ICD15T1NTL*M
M12 male to male D-Code, angled connector, STP, teal:	ICD22T1NTL*M
M12 male D-Code, angled connector, STP, teal:	ICD25T1NTL*M
M12 male D-Code, female D-Code, angled connectors, STP, teal:	ICD26T1NTL*M
M12 female D-Code, straight connector, STP, teal:	ICD35T1NTL*M
M12 bulkhead female D-Code, RJ45 plug, STP, teal:	ICD44T1NTL^M
M12 bulkhead female D-Code, STP, teal:	ICD45T1NTL0.5M

Accessories

IndustrialNet™ M12 D-Code female to RJ45 jack panel mount adapter:	ICAM12DRJS
IndustrialNet™ Category 5e M12 D-Code field terminable plug:	ISPS5E44MFA
IndustrialNet™ Category 6A/6/5e shielded RJ45 field terminable plug:	FPS6X88MTG

IndustrialNet™ Copper Cable

Category 5e, SF/UTP, 24/7 AWG stranded, CM 2-pair:	ISFCH5C02A**-XG

IndustrialNet™ 600V Copper Patch Cords

Category 5e, SF/UTP, 600V Patch Cords:	ISTPHCH*M**

* To specify length, change the * to a 0.5,1,2,3,5,10,15,20
% To specify length, change the % to a 1,2,3,4,5,10,15,20
^ To specify length, change ^ to a 1 or 2
** To designate color, add suffix TL (Teal), BL (Black)

IndustrialNet™ M12 D-Code Category 5e Overmolded Cordsets

Twist Tie

ICD45T1NTL*M

D-Code Female

Twist Tie

ICD44T1NTL*M

RJ45 — D-Code Female

Twist Tie

ICD15T1NTL*M

D-Code Male

Twist Tie

ICD35T1NTL*M

D-Code Female

Twist Tie

ICD25T1NTL*M

D-Code Male

Twist Tie

ICD11T2NTL*M

D-Code Male — D-Code Male

Twist Tie

ICD11T1NTL*M

D-Code Male — D-Code Male

Twist Tie

ICD22T1NTL*M

D-Code Male — D-Code Male

Twist Tie

ICD14T1NTL*M

RJ45 — D-Code Male

Twist Tie

ICD12T1NTL*M

D-Code Male — D-Code Male

Twist Tie

ICD13T1NTL*M

D-Code Male — D-Code Female

Twist Tie

ICD26T1NTL*M

D-Code Male — D-Code Female

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