ix Industrial™ IP20 Connectors

ix Industrial™: Next Generation Industrial IoT Connectivity

ix Industrial™ connectors enable IoT connectivity for Ethernet and other Industrial protocols through all levels of an operation from the Enterprise/Cloud to the sensors/actuators at the factory floor. These 10mm pitch connectors featuring 2–point metal latches are just 25% of the size of an RJ45 connector, and as such allow much greater port density and mating security. They are PoE capable, provide data performance to Cat6A level (10GBASE–T), and feature 360° shielding through the mated pair for superior EMI protection.

- Increased port density compared to RJ45
- High data rate performance for 10G Ethernet, with PoE capability
- Excellent EMI protection for noisy environments
- Robust 2 point metal latches for secure mating
- Fully intermateable with ix Industrial™ products from other authorized vendors

TARGET MARKETS

FEATURES	BENEFITS
• Complies with IEC61076–3–124	• Fully qualified second source intermateable with other vendors' products
• 75% smaller than RJ45	• 10mm connector pitch provides greater port density
• 10 position connector with Cat6A 10GBASE–T performance and PoE capability	• Supports Ethernet/IP and common protocols including Profinet, DeviceNet, EtherCAT, Modbus and others
• 360° shielding through mated pair	• Provides excellent EMI immunity for use in electrically noisy environments
• 2–point metal latching	• Extremely robust mating to prevent accidental disconnection, and more durable than RJ45 latch
• Heavy duty shield solder hold–down tabs on PCB mount receptacles	• Provides secure connection to the PCB protecting SMT joint integrity under mechanical stresses
• 5000 mating cycles	• High durability
• Field terminable IDC plugs with solder options	• Ease of custom cabling or repair in the field with IDC contacts • Solder version for high volume assembly
• Keyed Housings (Type–A, –B, –C)	• Controlled mating for Ethernet, Signal/Bus, other ports

TECHNICAL INFORMATION

MATERIAL

▪ External Shields: Stainless steel, nickel plated (plugs) or tin plated (receptacles)

▪ Insulators: Thermoplastic, UL94V–0

▪ Contacts: Copper alloy plated with gold over nickel (mating area)

MECHANICAL PERFORMANCE

▪ Insertion/Withdrawal Force: 25N (5.6 lbs–force) max. (IEC 60512–13–2, Test 13b)

▪ Pull–Out Force: 80N (18 lbs–force) min. (IEC 60512–15–6, Test 15f)

▪ Mechanical Shock: 300m/s2, half–sine pulses, 11ms (IEC 60512–6–3, Test 6c)

▪ Vibration, Sinusoidal: 10Hz – 500Hz, 0.35mm, 50m/s2 (IEC 60512–6–4, Test 6d)

▪ Durability: 5000 mating cycles (IEC 60512–9–1, Test 9a)

ELECTRICAL PERFORMANCE

▪ Current Rating: 1.5A @ 40°C (per IEC 60512–5–2, Test 5b)

▪ Voltage Rating: 50V AC max., 60V DC max.

▪ Initial Contact Resistance: 30mΩ max. (per IEC 60512–2–1, Test 2a)

▪ Shielding Resistance: 100mΩ max. (per IEC 60512–2–1, Test 2a)

▪ Insulation Resistance: 500MΩ min. @ 500V DC (per IEC 60512–3–1, Test 3a)

▪ Dielectric Withstanding Voltage: 500V DC (per IEC 60512–4–1, Test 4a, Method A)

PACKAGING

▪ Tray (Plug Connectors)

▪ Carton (Cables)

▪ Tape & Reel (SMT Receptacles)

SPECIFICATION

▪ IEC–61076–3–124

▪ Amphenol Specification: S6168C

ENVIRONMENTAL

▪ Thermal Shock: 10 cycles between –55°C and +85°C (IEC 60512–11–4, test 11d)

▪ Humidity: Low temperature +25°C, high temperature +65°C, cold sub–cycle –10°C, 93% humidity (IEC 60068–2–38, Text Z/AD)

▪ Operating Temperature Range: –55°C to +85°C

APPROVALS AND CERTIFICATIONS

▪ RoHS

▪ UL E64911 Vol. 1

TARGET MARKETS/APPLICATIONS

Switches
Traffic Control
Monitoring systems

Industrial Internet of Things (IIoT)
Factory/Process Automation –
Machine to Machine, Sensors,
Actuators, Nodes
Robotics
Building Automation
Test Equipment

Healthcare
Medical Equipment

PART NUMBERS

Description	Part Numbers
Receptacle, Type–X, Plating Y, Right Angle Flag, SMT	ND9–XS1Y–00
Receptacle, Type–X, Plating Y, Right Angle Horizontal, SMT	ND9–XS3Y–00
Receptacle, Type–X, Plating Y, Vertical SMT	ND9–XS2Y–00
Plug, Type–X, Plating Y, IDC Termination, 24–26AWG	ND9–XP6Y–00
Plug, Type–X, Plating Y, IDC Termination, 28AWG	ND9–XP7Y–00
Plug, Type–X, Plating Y, Solder Pad	ND9–XP5Y–00

X = Key (A, B or C)
Y = Contact Plating: 1=Gold Flash; 2=8µ" Gold; 3=30µ" Gold; 4=50µ" Gold; 7=30µ" PdNi+Gold Flash

Disclaimer
Please note that the above information is subject to change without notice.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Crimpers / Crimping Tools *category:*

Click to view products by Amphenol *manufacturer:*

Other Similar products are found below :

010-0096 CT150-2-D02 CT150-6-RH07 622-6441LF 63484-3701 63800-8355 63819-1875 63819-2875 63819-4475 63827-5375 64005-0175 662903-2 690602-6 7-23471-1 734611-1 762637-1 811242-5 91362-1 1-21002-3 1-21002-7 12118040 12085270 12387119-6 1-22548-4 125442-1 DCE.91.073.BVC DCE.91.090.3MVM DCE.91.162.BVCM DCE.91.202.BVCM 1310G2 1333249-1 1-354003-0 1338301-1 DF62/RE-MD 142321 AP105-DF11-2428S(64) 1456088-1 1-45804-6 15397700 AX100749 1-59619-7 1596970-1 1-59619-8 1901238-2 2119581-1 K761 KTH-1079 KTH-2022 KTH-2260 904139-1