

ix Industrial™ Magnetics Connector

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 on the factory floor. ix Mag Series connectors offer CAT6A performance for up to 10Gb/s Ethernet communication, support PoE++ up to 90W as defined by IEEE 802.3bt, and shield for excellent EMC immunity. These connectors are compatible with 100BaseT, 1000BaseT & 10GBaseT.

- ix Industrial™ solution with integrated magnetics
- High data rate performance for 10G Ethernet, with PoE++ capability as per IEEE 802.3bt
- External tabs option for EMI shielding
- Robust 2-point metal latches for secure mating
- Field terminable IDC plugs provide installation flexibility
- Fully mateable with ix Industrial™ plugs from other authorized vendors



TARGET MARKETS



FEATURES

- 10-position connector with CAT6A 10GBASE-T performance and PoE++ capability
- 360° shielding through mated pair
- 2-point metal latching
- 5000 mating cycles
- Field terminable IDC plugs with solder options
- Keyed Housings (Type-A, -B)
- Cable termination

BENEFITS

- Supports Ethernet/IP and common protocols including Profinet, DeviceNet, EtherCAT, Modbus, and others
- Provides excellent EMI immunity for use in electrically noisy environments with the option of external shield tabs
- Extremely robust mating to prevent accidental disconnection, and more durable than RJ45 latch
- High durability
- Ease of custom cabling or repair in the field with IDC contacts
- Solder version for high volume assembly
- Controlled mating for Ethernet, Signal/Bus, and other ports
- Field installable or factory certified cable assembly

TECHNICAL INFORMATION

MATERIAL

- Insulator – High-temperature thermoplastic, complies with UL 94V-0
- Contacts – Phosphor Bronze hard temper with Gold thickness options (0.20µm, 1.27µm) over 1.27µm min. Nickel on contact mating area & 2.54µm min. matte Tin plating on solder tails
- Shield Stainless Steel with Tin finish tails

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: 960mA @ 40°C
- Voltage Rating: 60VDC max.
- Initial Contact Resistance: 30mΩ max. (per IEC 60512-2-1, Test 2a)
- Insulation Resistance: 500MΩ min. @ 500VDC (per IEC 60512-3-1, Test 3a)
- Dielectric Withstanding Voltage:
 - Contact to Contact – 1000VDC, 60 Hz, 1 min.
 - Contact to Shield – 1500VAC, 60 Hz, 1 min.

PACKAGING

- Tray & Bulk pack (Plug Connectors)
- Carton (Cables)
- Tray (Receptacles)

SPECIFICATIONS

- IEC-61076-3-124
- Amphenol Specification: S6219C

ENVIRONMENTAL

- Operating Temperature Range: -40°C to +85°C
- Humidity: 10 cycles, 24hrs / cycle @ 93% humidity, low temperature +25°C, high temperature +65°C, cold sub-cycle -10°C, per IEC 60068-2-38, Test Z/AD

APPROVALS AND CERTIFICATIONS

- RoHS per EU Directive 2011/65/EU and Amendments

TARGET MARKETS/APPLICATIONS



Traffic Control Monitoring Systems



Mobile Communication Systems

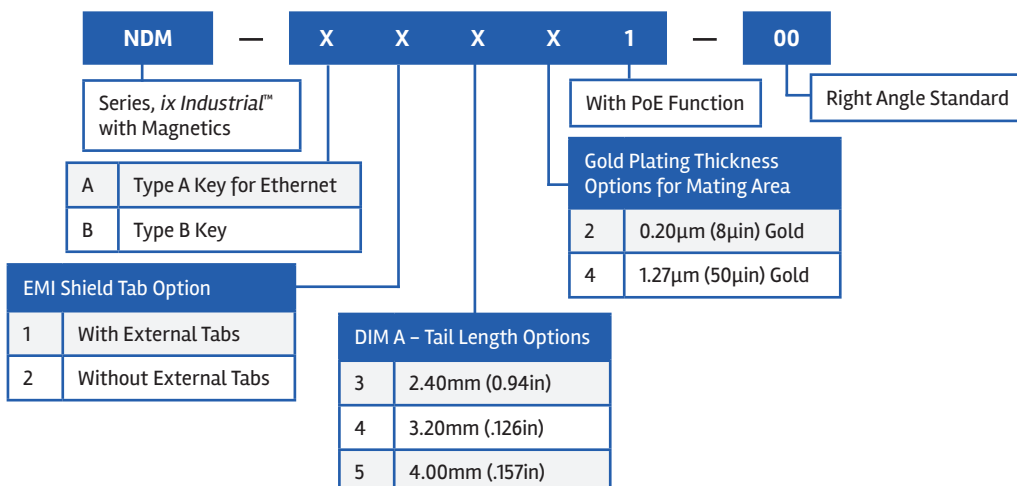


Internet of Things (IoT)
Machine to Machine (M2M)
Robotics
Transportation
Sensors, Actuators & Network Nodes
Test Equipment
Building Automation



Healthcare/Medical Equipment

PART NUMBER SELECTOR



CM10IXMAGC102EA