

## INTRODUCING

# M12 X-CODE CORDSETS AND M12 X-CODE TO RJ45 CORDSETS

- Unit remains protected & fully operational in most industrial applications
- Secured signal connections and data transmission

X-code connection technology is experiencing a significant increase in interest as more companies look for higher network speeds and more reliable, high-quality data transmissions. The 8-pin M12 X-code design is the most recent evolution in the Industrial environment which can handle 10 Gbit/s Ethernet transmission speeds. Category 6A (Cat6A) cables usually consist of standardized twisted pair cables for Ethernet and other network layers. These can handle data rates up to 10 Gbit/s. In order to withstand these high speeds and data output, Cat6A cables have significant shielding and cable twist requirements.

The M12 X-code connector is specially developed for these requirements, whereby the channel pairs are separated and the degree of shielding in the connector itself has been increased. The new M12 X-coded cordsets, which are UL certified and have an IP67 rating for dust-tight and waterproof applications ensure efficient, high-quality and reliable connectivity and high integrity signal transmission.

### FEATURES

- Enclosure rating of IP67
- 360 degrees shielding
- PUR cables suitable for drag chain application (up to 3 million cycles)
- TPE cables suitable for drag chain (up to 1 million cycles) and torsion applications (up to 3 million cycles)

### BENEFITS

- Ensure the application of cable assembly in flexible installation environment
- Ensure the application of cable assembly in Torsion application environment
- 360 degrees shielding

### APPLICATIONS

- Vision systems and cameras
- Industrial communications
- Industrial machinery
- Robotics

### ELECTRICAL

- Rated voltage: 30V
- Rated current: 0.5A
- Initial value contact resistance: 15mΩ Max.
- Rated impulse voltage: 0.5kV

### MATERIALS

- Nylon for HSG
- TPU for TPE/PUR cable overmolding
- PVC for PVC cable overmolding
- Zinc alloy for metal nuts and shielded shell, Nickel plated for metal nut, Tin plated for shielded shell



### MECHANICAL

- Durability: 100 cycles
- Degree of protection:
  - IP67 for M12 X-code (mated)
  - IP20 for RJ45 side
- Mating and un-mating force:
  - Insertion: 30N max.
  - Withdraw: 30N max.
- Sinusoidal vibration per IEC60512, test 6d

### SPECIFICATIONS

- IEC 61076-2-109 for M12 X-code
- IEC 60603-7 for RJ45

### STANDARDS

- UL1863
- UL444 for PVC/TPE cable
- UL758 for PUR cable

### LEARN MORE

- [M12 X-Code cordsets Product Page](#)
- [M12 X-Code cordsets Product Flyer](#)
- [M12 X-Code cordsets Parts List](#)
- [M12 X-Code cordsets Virtual Sample Kit](#)