INDUSTRIAL CONNECTOR

SIGNAL®

2025 Edition

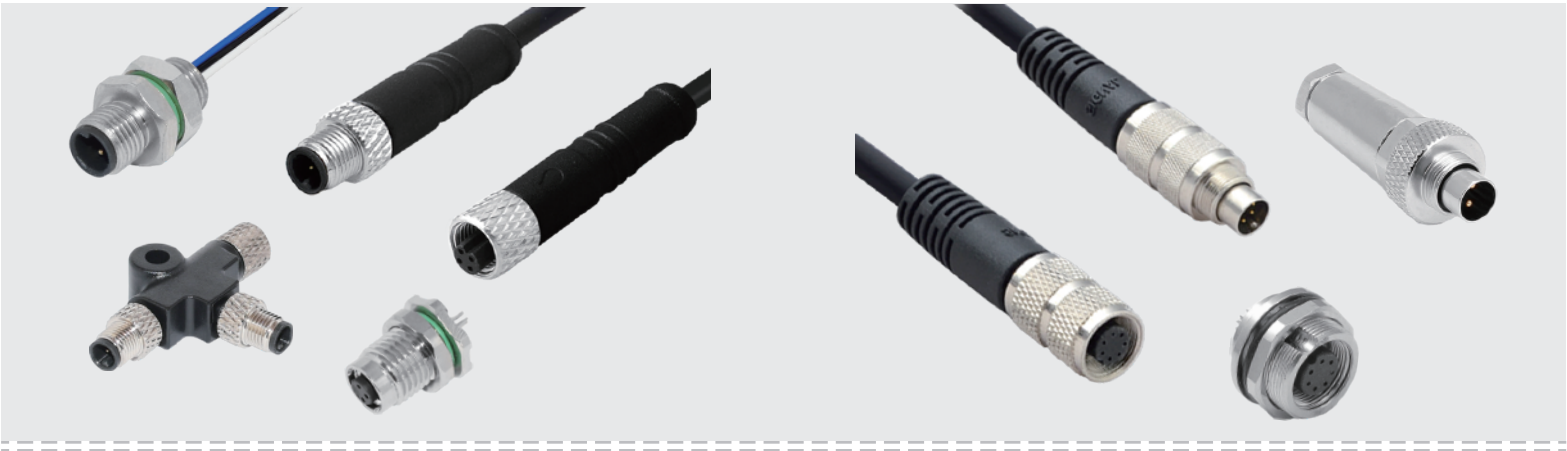Your Reliable Partner in Connectivity !

M5

M5 connectors are small and lightweight, and are widely used in drones, sensors, actuators and other equipment, especially in industrial automation, robotics and other occasions that require a high level of protection.

• IP67/IP68
• 1A rated current
• -25℃~+85℃
• 60V rated voltage

Coding

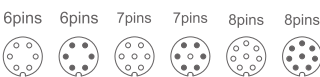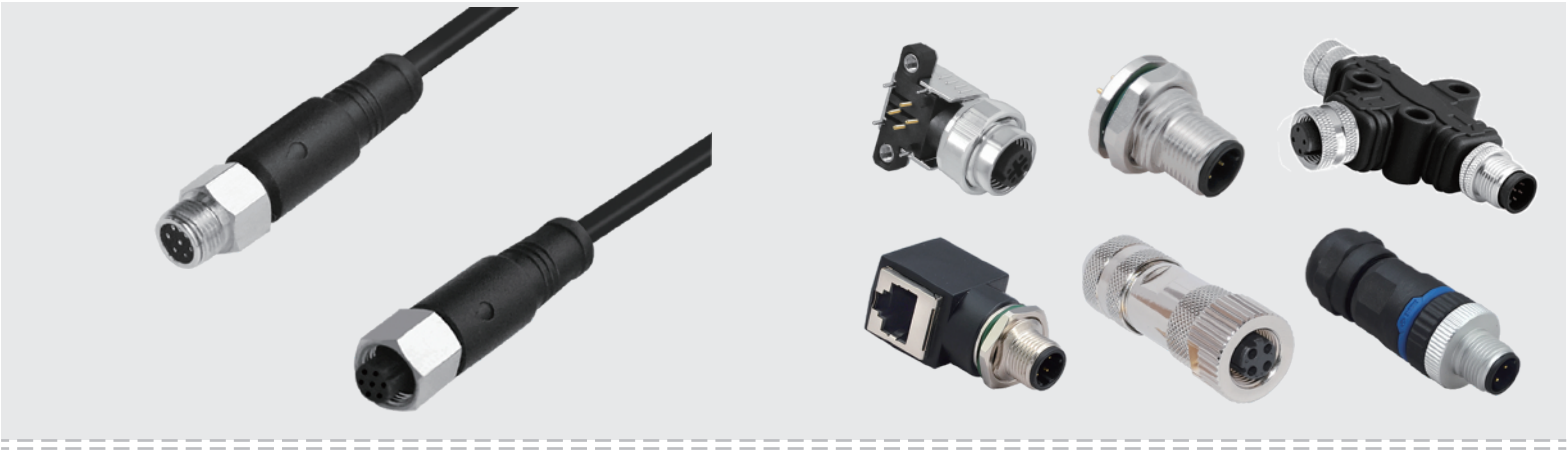| 3pins	3pins	4pins	4pins

M6

M6 aviation plug is a connector widely used in harsh environments such as petroleum, chemical, steel, electricity, and automobile manufacturing.

• IP67/IP68
• 0.5A/1A rated current
• -25℃~+85℃
• 24V/60V/300V rated voltage

Coding

6pins	6pins	7pins	7pins	8pins	8pins

M8

The M8 connector has a diameter of about 8 mm and is widely used in household appliances, office equipment, communication equipment, automotive electronics and other fields.

• IP67/IP68
• 1.5A/3A/4A rated current
• -25℃~+85℃
• 30V/50V AC / 60V DC rated voltage
• Complies with IEC 61076-2-104 standard

Coding

3pins A	3pins A
4pins A	4pins A
4pins A	4pins A
5pins B	5pins B
6pins A	6pins A
8pins A	8pins A
4pins D	4pins D
4pins P	4pins P

M9

The M9 circular connector is a compact connector between M8 and M12, usually used for ROFIBUS/Industrial Ethernet bus system and industrial sensor network connection to achieve signal transmission and control.

• IP67/IP68
• 1A/3A/4A rated current
• -25℃~+85℃
• 125V rated voltage

Coding

2pins	3pins	4pins	5pins	7pins	8pins

M12

The M12 connector is a common circular connector, standard used in industrial automation, such as connections between sensors, actuators, controllers and other devices.
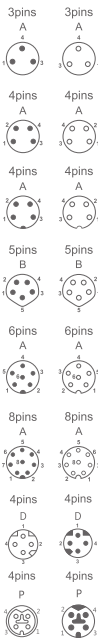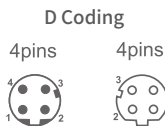
• IP67/68/69K
• 2~17 contacts
• Termination: PCB, Solder,screw, clamp crimping
• A/B/C/D/X/S/T/L/K/E/F/M/Y-Coding
• overmolding type, assembly type, panel type, adapter, etc.
• locking methods: Thread locking type, quick lock type, quick plug-in type, etc.
• PVC/PUR

Signal	4pins A	4pins A	5pins A	5pins A	8pins A	8pins A	12pins A	12pins A	17pins A	17pins A	5pins B	5pins B
Power	3pins C	3pins C	4pins C	4pins C	5pins C	5pins C	6pins C	6pins C	4pins F	4pins F	5+PE M	5+PE M
	4+FE E	4+FE E	4pins T	4pins T	3+PE S	3+PE S	4+FE L	4+FE L	4+PE K	4+PE K		
Data	4pins D	4pins D	8pins X	8pins X								
Mixed	8pins Y	8pins Y										

M12-D

The M12-D coded connector is a circular connector used in industrial fieldbus systems, supporting PROFIBUS, CANopen and other protocols. It has a 4-pin configuration and is suitable for stable signal and data communication of devices such as PLCs, industrial controllers and distributed I/0 modules.

• IP67
• 4 contacts
• Max 20AWG/0.75mm² wire gauge
• Data transmission up to 100MHz
• 4A rated current
• 250V rated voltage
• Cable assembly/Panel mount type/Field attachable type/Crimp type are available
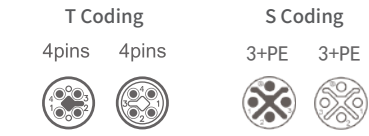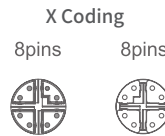• In accordance with DIN IEC 61076-2-101

M12-L/K

The M12-L coding connector is designed for high-current DC power supply (such as 16A/63V), which is commonly used in servo drives, motors and high-power sensors; the M12-K coding is for AC power supply (such as 250V AC), which is suitable for industrial lighting, AC power supply equipment and other scenarios. Both emphasize high load capacity and electrical safety.

• IP67
• 5 contacts
• Max 16AWG/1.5mm² wire gauge
• -25℃-85℃
• M12-L: 16A/63V
• M12-K: 12A/630V
• Cable assembly/Panel mount type/ Field attachable type are available
• In accordance with DIN IEC 61076-2-111

D Coding		L Coding		K Coding	
4pins	4pins	4+FE	4+FE	4+PE	4+PE

M12-X

The M12-X coded connector is a circular connector designed for high-speed data transmission. It is typically used in industrial Ethernet (such as PROFINET, Ether- or high-frequency signal transmission scenarios, supporting Net/IP) with a communication rate of more than 10 Gbps. It is suitable for high-bandwidth connection requirements of equipment such as industrial robots, vision systems and high-precision sensors.

• 8 contacts
• Ethernet,Profinet application
• With Cat5/Cat5e/Cat6A/Cat7 cables
• 4 twin data transmission up to 10 Gbit/s
• 0.5A rated current
• 60V rated voltage
• Cable assembly/Panel mount type/Field attachable type/Crimp type are available
• In accordance with DIN IEC 61076-2-109

M12-S/T

The M12-S coding connector is mainly used in low-current sensor signal transmission (such as 12A/630V), which is commonly found in photoelectric sensors, proximity switches and other equipment; the M12-T coding is specially designed for two-wire DC sensors (such as 12A/63V), which is suitable for the integration of simple signal connection and power supply in industrial automation.

• IP67
• 3/4 contacts
• Max 16AWG/1.5mm² wire gauge
• -25℃-85℃
• 12A rated current
• M12-S: 12A/630V
• M12-T: 12A/63V
• Cable assembly/Panel mount type/ Field attachable type are available
• In accordance with DIN IEC 61076-2-111

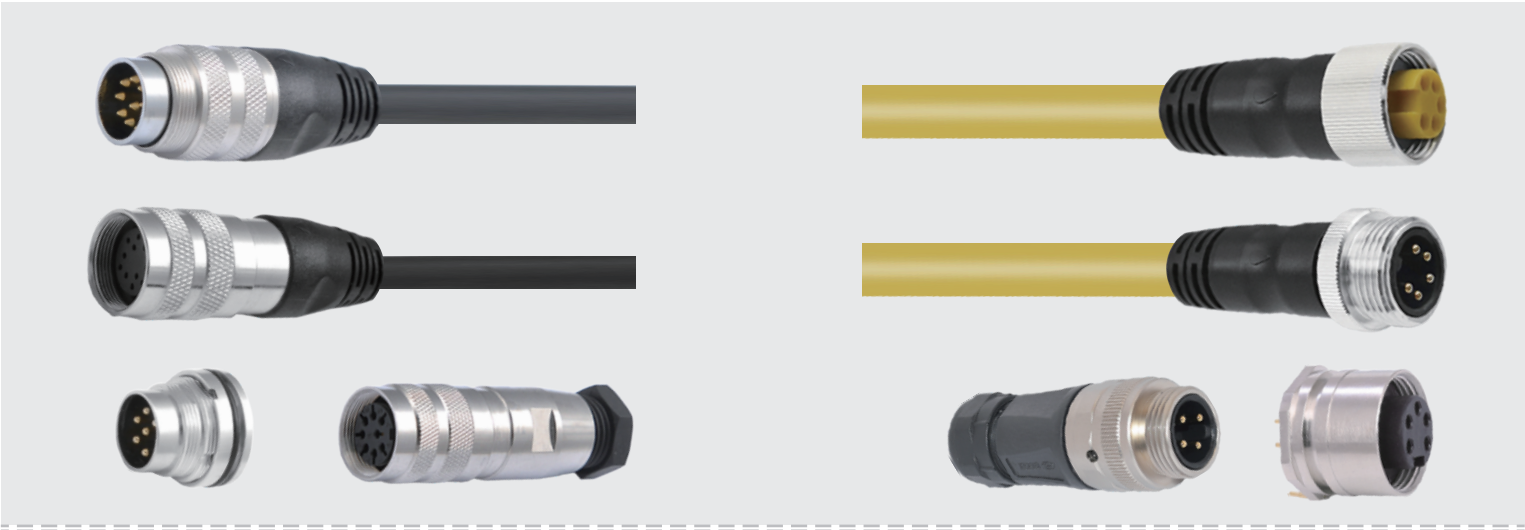| X Coding		T Coding		S Coding	
8pins	8pins	4pins	4pins	3+PE	3+PE

M16

M16 series circular connectors are specially developed for customers' special application areas. This series is divided into injection molding, assembly and panel types.

• IP67/IP68
• 1A/5A rated current
• -25℃~+85℃
• 32V/63V/100V rated voltage
• Complies with IEC 61076-2-106 standard

Coding

2pins	3pins	4pins
5pins	5p(DIN)	6pins
6p(DIN)	7pins	7p(DIN)
8pins	8p(DIN)	12pins
14p(DIN)	16pins	19pins
24pins		

7/8"

7/8" connectors are suitable for European and North American markets and are suitable for signal and power transmission. The series includes molded, assembled, panel and splitter.

• IP67/IP68
• 9A/12A rated current
• -25℃~+85℃
• 300V rated voltage

Coding

3pins	3pins
4pins	4pins
5pins	5pins

M23

The M23 series waterproof connectors are waterproof, moisture-resistant, Anti-Vibration. They are widely used in industrial automation machinery, rail transit equipment and medical equipment. The series is divided into injection molding, assembly and panel types.

• IP67/IP68
• 1A/2A/3A/3.6A/5A/8A/10A/20A/28A rated current
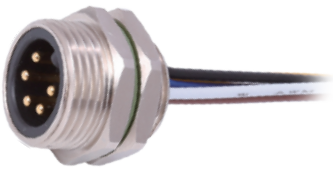• -25℃~+85℃
• 60V/150V/250V/300V/600V rated voltage

Coding

6pins	7pins
8+1	6+3
12pins	16pins
17pins	16+3
5+PE	4+3+PE
(5+3+PE)-A	(5+3+PE)-B
4+4+3+PE	4+4+4+PE

RF

RF connectors are used for the transmission of radio frequency signals. They have the characteristics of low loss and high standing wave ratio and are widely used in wireless communication, radar and other fields.

• IP67/IP68
• -55℃~+125℃
• 150V rated voltage

SMT/THR/THT

SMT connectors are small in size and suitable for consumer electronics; THT connectors have high mechanical strength and are used in industrial scenarios; THR connectors combine the advantages of both and are suitable for areas with high reliability requirements such as automobiles.
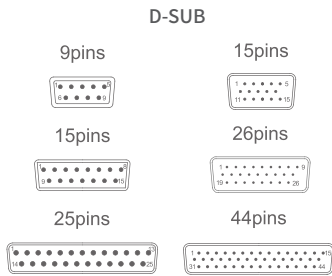
• IP67/IP68
• 0.5A/1.5A/2A/4A/12A/16A rated current
• -40℃~+105℃
• 30V/60V/250V rated voltage
• Plug-in wiring method
• ≤10mΩ contact resistance
• >100MΩ insulation resistance

USB/D-SUB

USB connectors are suitable for various low-voltage connection needs, while D-Sub connectors are named after their shape and are commonly used in VGA, parallel ports, etc.
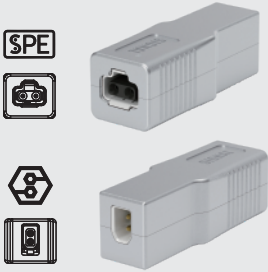
• IP67/IP68
• USB: 1.5A rated current
  D-SUB: 5A rated current
• -25℃~+80℃
• USB: 30V rated voltage
  D-SUB: 300V rated voltage

USB

4pins A	4pins B
4pins A	4pins B
4pins A	4pins B
4pins A	4pins C

D-SUB

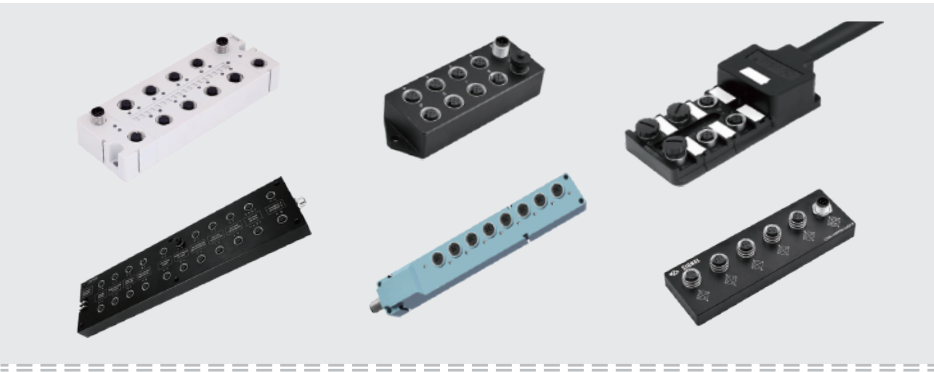|	
9pins	15pins
15pins	26pins
25pins	44pins

USB-A USB-B USB-C

D-SUB

Push-Pull

With push-pull locking mechanism, it is easy to install and remove, suitable for occasions that require frequent connection and disconnection.

• IP66/IP68
• 1.5A rated current
• -55℃~+200℃

DISTRIBUTION BOX

The junction box can systematically connect sensors and actuators for field control, facilitate one-to-many port data signal transmission, save costs and simplify installation.

SPE/M12 Type C

SPE Adapter

The IEC 63171-2 and IEC 63171-6 interface SPE adapters support PoDL and 600MHz transmission, are IP-rated for protection, and solve compatibility issues between different standard interfaces in industrial environments, enabling seamless device interconnection.

SPE

INDUSTRIAL PARTNER NETWORK®

SPE (Single Pair Ethernet) connector is an Ethernet connection solution designed for single-pair cables. It supports high-speed data transmission and has the advantages of saving space, cost and low power consumption. It is widely used in industrial automation, automotive electronics,Internet of Things(IoT) and other fields.

• IP20/IP67
• 2A/4A/8A rated current
• -25℃~+80℃
• 60V rated voltage

SPE

www.signal-connector.com
www.signal-connector.com
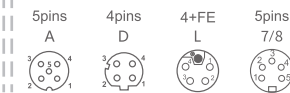www.signal-connector.com
www.signal-connector.com

IO-link

IO-Link connector is a communication interface designed for industrial automation. It realizes efficient and intelligent connection between sensors, actuators and other devices and control systems.

• High flexibility, compatible with a variety of devices
• Efficient transmission, full word lossless
• Plug and play, simplified installation and configuration
• Remote monitoring, improved maintenance efficiency

PROFINET®

EtherCAT.

IO-Link

Coding

5pins A	4pins D	4+FE L	5pins 7/8

Machine Vision

Machine vision connectors are electrical interface components designed specifically for machine vision systems. They are used to connect cameras, image processors and other devices to achieve stable transmission of image data.

• SHR power connector
• USB 3.0
• Camera Link
• CoaXPress
• Ethernet
• Series circular connector

Marine

Marine connectors are electrical connection components designed for marine environments, used for signal and power transmission inside ships and between ships and other equipment.

• IP67/IP68
• 4A rated current
• -25℃~+85℃
• 60V rated voltage

Automotive

Mobile Machinery

Medical

Robotics

Customized cables

Customized wiring harnesses are wire and cable assemblies designed and manufactured according to specific equipment or system requirements, used to achieve the transmission and control of electrical signals and power.

• Personalized design: Accurately match requirements and improve system performance
• High-quality materials: Select high-quality cables to ensure stable and reliable transmission
• Compact layout: Optimize space utilization and reduce interference and failure risks
• Flexible customization: Length, color, and connectors can be customized as needed
• Efficient production: Quick response and shortened delivery cycle

![SIGNAL®]

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