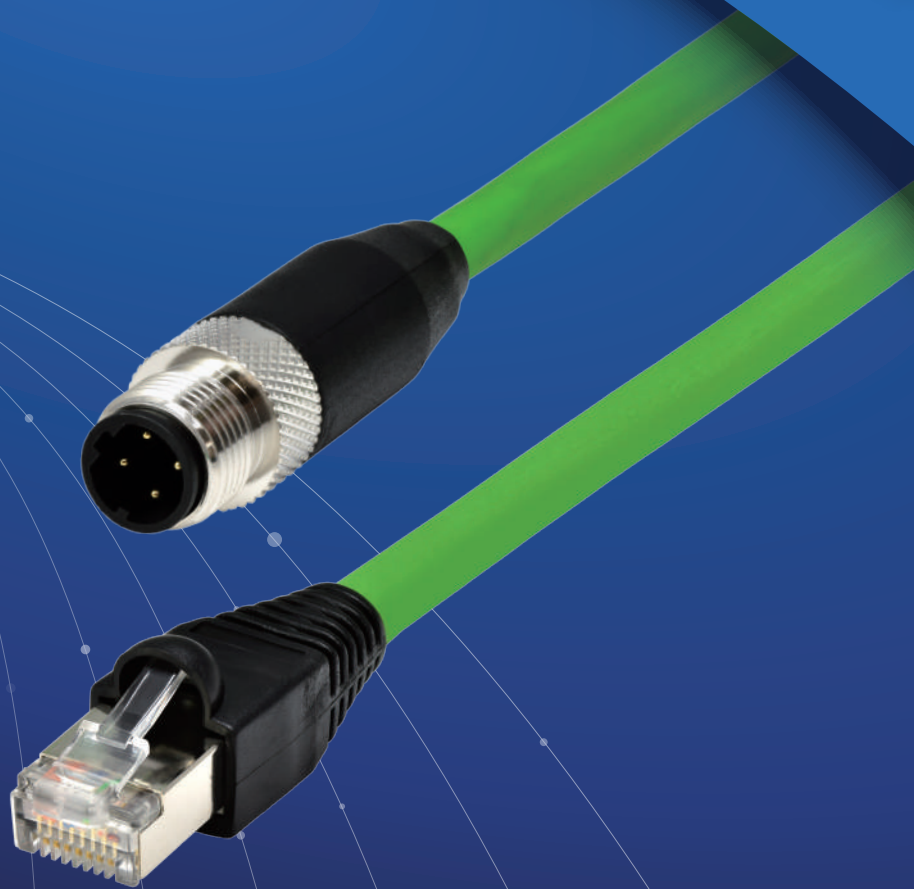




詮欣股份有限公司
CHANT SINCERE CO., LTD.

M8/M12





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Contents

| | |
|------------------------------------|------|
| ■ About Chant Sincere | P.1 |
| Quality System | P.3 |
| Competencies & Technology | P.5 |
| ■ M12 Series | P.7 |
| M12 X-Code Female Panel | |
| M12 X-Code to RJ45 Cable | |
| ■ M8 Series | P.21 |
| M8 A-Code 8Pin Male Cable Assembly | |



About Chant Sincere



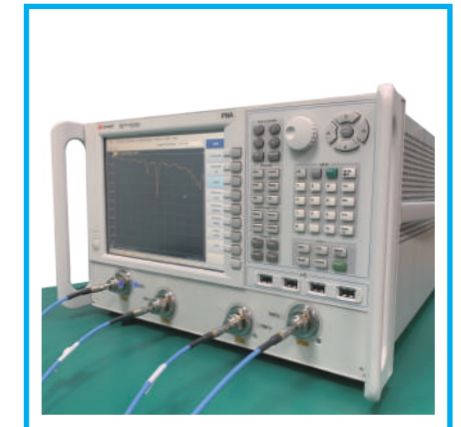
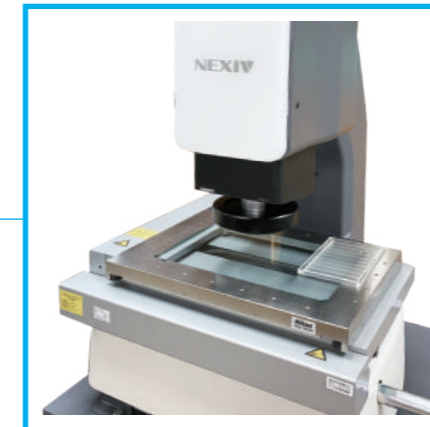
- **Chant Sincere Co., Ltd.** was set up in 1985., With the management concept of “Honest, Innovative, Quality, Longterm” to design and manufacture connector and cable. Keep developing new innovative products and integrating vertically from R&D, tooling, assembly and quality control to meet the demands (quality/cost/delivery) from customers. Chant Sincere Co., Ltd. Has been constructing various of product families to provide a total solution to customers.
The connector and cable products are widely used in many different application , such as Computing, Industrial & Automation, Telecommunication, Automotive, Waterproof, Consumer and Medical Industry.

- **Chant Sincere** won the “National Bedrock Award” & “Small Giant Award” from Taiwan Connector maker competition and got many “Best Supplier awards” from Global customers. We are focusing on improving our design and manufacture technology, and we have been applying for a lot of international patents for our products including I/O connector, Board to Board connector, Waterproof connector, Industrial Connector, Automotive connector, Memory Card connector and adaptor, High Speed connector/cable (USB3.1), Audio & Vidio connector and cable (HDMI,Display Port)...etc.
Chant Sincere Co., Ltd. Has been growing up as a global professional manufacturer for connector and cable.

The Core Competence of Chant Sincere Co.,Ltd. including.

- Over 36 Years Manufacture Experience
- ODM/OEM Capability
- Vertical Integration (Design, Tooling, Manufacturing, Test)
- Automation Capability
- Precise Tooling Center
- Wide Range of Product Line
- Systematic Testing Process
- Customized Capability
- Quality System (ISO,IATF)
- National Awards Rising Sun Awards/Best Supplier Awards

ISO 13485
IATF 16949
ISO 14001
ISO 9001



Quality systems

COXOC Quality Assurance department meets our customers' quality requirements by practicing continual improvement in our quality assurance processes and increasing customers' satisfaction in the quality of our products.

The effectiveness of COXOC QA operation is certified by well-known organizations such as ISO9001 Quality Assurance Management System, ISO 14001 Environmental Management System, ISO/IATF 16949 for Automobile Industry Quality Management System, and ISO13485 Medical Devices Quality Management System, COXOC integrated supply chain and devoted staff has enabled us to build a solid foundation and core capability to better serve our customers. It is COXOC principal to always meet and exceed customer expectation by providing superior products and services. COXOC ultimate goal is to create value for our customers by building collaborative and mutually beneficial relationships.

Competencies & Technology

The R&D Center at Chant Sincere leads the industry in research, design, and manufacturing of numerous key parts. This center has successfully developed for both wired and wireless solutions for computer peripherals, communication systems, and automobiles/industrial/medical equipment. Our solid R&D team formed a strong foundation in advance manufacturing technology and superior quality control that also enabled high value adding service for customers.

USB type C connectors is an example of the fruits of our research. This miniature and unidirectional interface provides many useful functions such as lighting data transfer rate up to 10 Gbits/s, DP ALT Mode high-definition video signal support, and brilliant 100W charging capability. Chant Sincere advanced the research further into higher specs such as USB 3.2 and USB 4.0 and offers customized solution for various of industrial applications. We delivered comprehensive solutions in bridging the diverse need for new interface and solve on-going product design issues for customers.

QSFP-DD is an ultra-fast interface that transmit data at 400Gbps speed. At this speed, stringent requirement for signal integrity and operating temperature is inviable which imposed huge challenges for the industry. At Chant Sincere, we implemented comprehensive computational software, state of art measuring equipment and eminent R&D capability to aid the solution delivering process. The analysis process includes simulation under CST MSW (Time Domain Simulation), ANSYS HFSS (Frequency Domain Simulation) for signal integrity as well as real-time measurement using test boards and PNA (up to 43.5GHz) to deliver quality reports for signal integrity (S-parameter, Gain compression, conversion gain/loss, noise level). We further performed simulation of its operating temperature using Icepak (Heat transfer and fluid flow simulator). This enabled the performance optimization for heat dissipation solution. With the above R&D skills we successfully delivered the desired professional service within the shortest time frame for our customers.



M12



M12 Application

- M8/M12 Connector System fills the needs for sensor connection in industrial machinery and factory automation. The M8/M12 standard is also ideal for applications environmental protection is required. The M8/M12 connector system provides a future-proof interface that supports higher-bandwidth needs, meeting the requirements of up to 10GB/s.

Application

- Industrial machinery
- Factory automation
- I/O boxes
- Sensors
- Switches

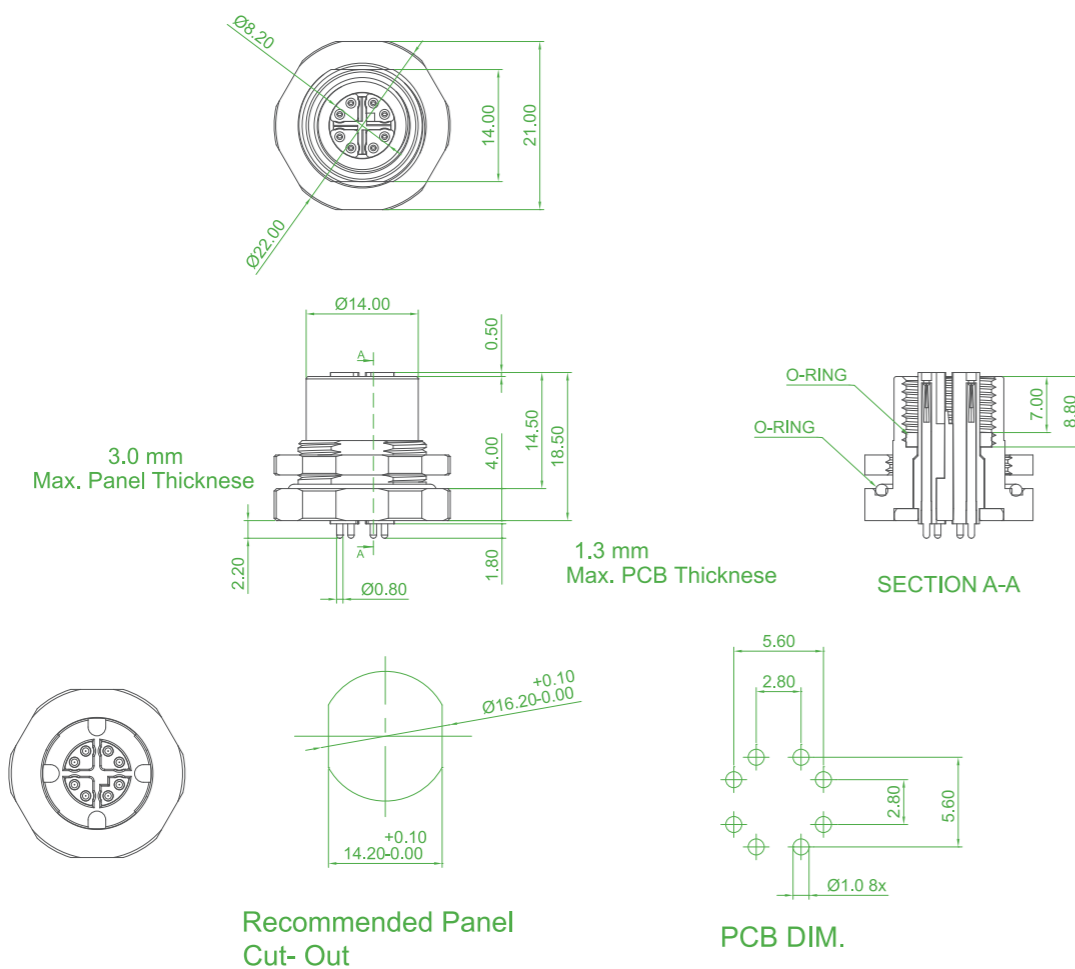
Product Characteristics

- Compact and reliable environmentally protected connection
- Signal and terminated cable assemblies of over-molded construction
- Supports higher-bandwidth needs up to 10GB/s

M12 X-Code Female Panel



Drawing



Specification

| Description | | M12 X-Code Panel Female Connector |
|-----------------|---------------------------------|-----------------------------------|
| Part no. | | 649EE08FDDDD2NEA3 |
| Material | Insulator | Thermosetting polymer |
| | Contact | Copper Alloy |
| | Metal Part | Copper Alloy |
| Contact Plating | Underplate | 50u"~200u" Nickel |
| | Contact Area | 30u" Selective Gold |
| Electrical | Operation Voltage | 48V AC(RMS) |
| | Current Rating | 0.5 Amps max. |
| | Contact Resistance | 5m Ohms max. |
| | Insulation Resistance | 100M Ohm min @ 500 VDC |
| | Dielectric Withstanding Voltage | 500 VAC/ minutes |
| | Temperature Range | -40°C TO +70°C |

M12 Connector

| Application type | Contact type | Gender | Pin count | A-code | D-code | Part no. |
|--|--------------|--------|-----------|--------|--------|------------------|
| Cable end  | Solder | Male | 4 | V | V | 649AFXXMSTD1NXA3 |
| | | | 5 | V | V | |
| | | Female | 4 | V | V | 649AFXXFSTD1NXA3 |
| | | | 5 | V | V | |
| | | | 8 | V | | 649AE08FSSD1NAA3 |
| | | | | | | |
| Cable end  | IDC | Male | 4 | V | V | 649IEXXMSND1NXA3 |
| | | | 5 | V | V | |
| | | Female | 4 | V | V | 649IEXXFSD1NXA3 |
| | | | 5 | V | V | |
| Through Panel  | Solder | Male | 4 | V | V | 649AEXXMSSD2NXA3 |
| | | | 5 | V | V | |
| | | | 8 | V | | 649AE08MSSD2NAA3 |
| Front Mount / Through Panel  | Dip | Male | 4 | V | | 649EEXXMSSD2NAA3 |
| | | | 5 | V | | |
| | | Female | 4 | V | | 649EEXXFSSD2NAA3 |
| | | | 5 | V | | |
| Panel Mount Female  | Solder | Female | 2 | V | | 649AE02FSSD2NAA3 |
| | | | 3 | V | | 649AE03FSSD2NAA3 |
| | | | 4 | V | V | 649AE04FSSD2NXA3 |
| | | | 5 | V | | 649AE05FSSD2NAA3 |
| | | | 6 | V | | 649AE06FSSD2NAA3 |
| | | | 7 | V | | 649AE07FSSD2NAA3 |
| | | | 8 | V | | 649AE08FSSD2NAA3 |
| | | | 9 | V | | 649AE09FSSD2NAA3 |
| | | | 10 | V | | 649AE10FSSD2NAA3 |
| | | | 11 | V | | 649AE11FSSD2NAA3 |
| | | | 12 | V | | 649AE12FSSD2NAA3 |

| Application type | Contact type | Gender | Pin count | X-code | Part no. |
|--|----------------|--------|-----------|--------|------------------|
| Panel Mount (PG9)  | Solder | Female | 2 | V | 649AE02FBBD4NEA3 |
| | | | 3 | V | 649AE03FBBD4NEA3 |
| | | | 4 | V | 649AE04FBBD4NEA3 |
| | | | 5 | V | 649AE05FBBD4NEA3 |
| | | | 8 | V | 649AE08FBBD4NAA3 |
| Through Panel (PG9)  | Dip | Female | 8 | V | 649EE08FSSD4NAA3 |
| Cable End  | Solder | Male | 8 | V | 649AE08MDDD1NED3 |
| Cable End  | Crimp | Female | 8 | V | 649KE08FBBD1NFD3 |
| Cable End / Cable End(Molded)  | Crimp | Male | 8 | V | 649KE08MDDD1NFA3 |
| | | | | | 649ME08MDDD1NED3 |
| Cable End  | IDC | Male | 8 | V | 649IE08MBTD1NXD3 |
| | IDC (no cover) | | | | |
| Through Panel  | Dip | Female | 8 | V | 649EE08FDDD2NEA3 |

■ M12 Connector

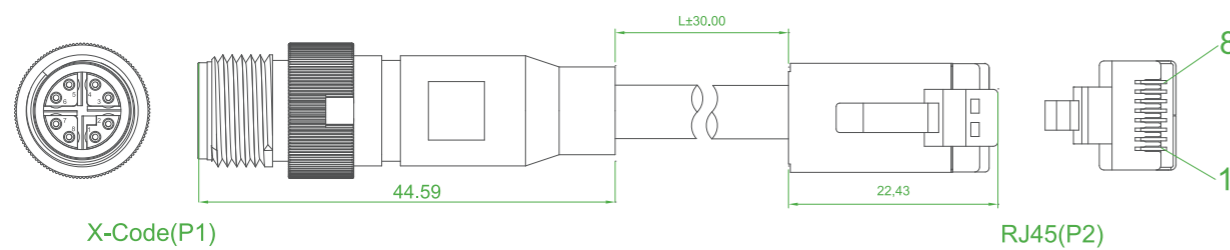
| Application type | Contact type | Gender | Pin count | A-code | D-code | Part no. |
|--|--------------|--------|-----------|--------|--------|------------------|
| Panel Mount (PG9)  | Solder | Male | 4 | V | V | 649AEXXMSSD4NXA3 |
| | | | 5 | V | V | |
| | | | 8 | V | | 649AE08MSSD4NAA3 |
| Panel Mount (M16)  | Solder | Male | 4 | V | V | 649AEXXMSSD3NXA3 |
| | | | 5 | V | V | |
| | | | 8 | V | | 649AE08MSSD3NAA3 |
| Cable End  | Solder | Male | 4 | V | V | 649AEXXMSSD5NXA3 |
| | | | 5 | V | | |
| | | | 8 | V | | |
| | | Female | 4 | V | V | 649AEXXFSSD5NXA3 |
| | | | 5 | V | | |
| | | | 8 | V | | |



M12 X-Code to RJ45 Cable



Drawing



WIRING DIAGRAM

| X-Code(P1) | RJ45(P2) |
|------------|----------------|
| PAIR 1 — 1 | 1 WHITE/ORANGE |
| PAIR 2 — 2 | 2 ORANGE |
| PAIR 3 — 3 | 3 WHITE/GREEN |
| PAIR 4 — 4 | 6 GREEN |
| PAIR 5 — 5 | 7 WHITE/BROWN |
| PAIR 6 — 6 | 8 BROWN |
| PAIR 7 — 7 | 5 WHITE/BLUE |
| PAIR 8 — 8 | 4 BLUE |
| SHELL — | SHELL |

Specification

| Description | | M12 X-Code to RJ45 Cable |
|------------------|-----------------------|---|
| Part no. | | CW0608EADB01EXMX |
| Part Description | Connector | M12 X-Code Male Connector Contact Gold Plate 30u" over 50~220u" Nickel |
| | | RJ45 Cat 6A Male Connector Contact Gold Plate 50u" |
| | Cable | 10G Cat 6A 26 AWG 4 Pairs |
| | Shielded | FTP Aluminium/ Polyester 4 Pairs |
| Electrical | Jacket | Material PVC |
| | Rated Current | 0.5 Amps |
| | Rated Voltage | 50 V AC |
| | Insulation Resistance | > 100MΩ |
| | Degree of Protection | IP67 |
| | Operation temp. | -25°C TO +85°C |

M12 Cable

| Application type | Description | Part no. |
|--|--|------------------|
| Free End  | Female, 4 \ 5 \ 8Pin, A \ D-Code, 90° | CW01AXXAXA01E1M0 |
| Free End  | Female, 4 \ 5 \ 8Pin, A \ D-Code, 180° | CW02AXXAXA01E1M0 |
| Cable Open End  | Female, 4 \ 8Pin, A \ D-Code, 180° | CW02AXXAXB02E1M0 |
| Rear Mount Free End  | Female, 4 \ 5Pin, A-Code | CW02AXAAAB0XE1M0 |
| Free End  | Male, 4 \ 5Pin, A \ D-Code, 90° | CW03AXXAAA01E1M0 |

| Application type | Description | Part no. |
|--|--|------------------|
| Free End  | Male, 4 \ 5 \ 8Pin, A \ D-Code, 180° | CW04AXXAXX0XE1M0 |
| Front / Rear Mount Free End  | Male, 4 \ 5Pin, A-Code | CW04AXAAAB0XE1M0 |
|  | Male, 4Pin, A-Code to A-Code, 180° | CW0504AAXB03E1M0 |
|  | Male, 4Pin, D-Code to D-Code, 180° | CW0504DAXB03E1M0 |
|  | Male, 5 \ 8Pin, A-Code to A-Code, 180° | CW050XAAXB0XE1M0 |

■ M12 Cable

| Application type | Description | Part no. |
|---|--------------------------------------|------------------|
|  | Male, 8Pin, X-Code to X-Code, 180° | CW0508EADB0XE1M0 |
|  | Male, 8Pin to RJ45, X-Code, 180° | CW0608EADB0XE1M0 |
|  | Male, 4 \ 8Pin to RJ45, A-Code, 180° | CW06X8AADB03E1M0 |
|  | Male, 4Pin to RJ45, D-Code, 180° | CW0648DADB03E1M0 |
|  | Female, 12Pin to USB3.0 AM, A-Code | CW089CAACA02E1M0 |

| Application type | Description | Part no. |
|--|----------------------------------|------------------|
|  | Female, 8Pin to RJ45, X-Code | CW0908EADAX1E1M0 |
|  | Female, 4 \ 8Pin to RJ45, A-Code | CW09X8AADB03E1M0 |
|  | Female, 4Pin to RJ45, D-Code | CW0948DADB03E1M0 |

M8



M8 Application

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- Sensors
- Switches

Product Characteristics

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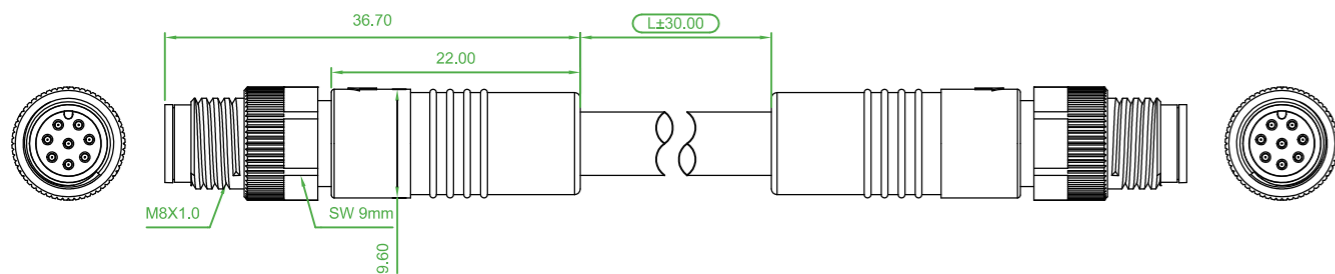
M8 A-Code 8Pin Male Cable Assembly



Specification

| Description | | M8 A-Code 8Pin Male Cable Assembly |
|-----------------|-------------------|------------------------------------|
| Part no. | | CW1508AABB01E1M0 |
| Material | Insulator | PA66 (6410G5) UL94V-0 |
| | Contact | Brass |
| | Shell | Brass |
| Contact Plating | Underplate | 50u" min Nickel |
| | Contact Area | 1u" Gold |
| Electrical | Operation Voltage | 30V AC/DC |
| | Current Rating | 1.5A |
| | Temperature Range | -20°C TO +80°C |
| | Operating Degree | IP67 |

Drawing



WIRING DIAGRAM

| A-Code(P1) | A-Code(P2) |
|------------|------------|
| 1 | 1 WHITE |
| 2 | 2 BLUE |
| 3 | 3 BROWN |
| 4 | 4 ORANGE |
| 5 | 5 BLACK |
| 6 | 6 RED |
| 7 | 7 YELLOW |
| 8 | 8 GREEN |
| SHELL | SHELL |

M8 Cable

| Application type | Description | Part no. |
|---|--------------------------------|------------------|
|  | Male, 8Pin, A-Code to A-Code | CW1508AABB01E1M0 |
|  | Female, 8Pin, A-Code to A-Code | CW1608AABB01E1M0 |

2020 09 rev 1



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