



詮欣股份有限公司  
CHANT SINCERE CO., LTD.

# M8/M12





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# 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.

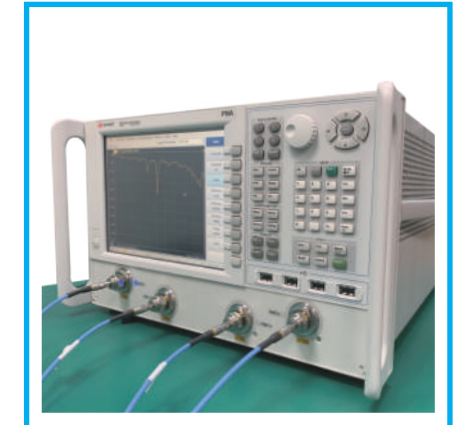
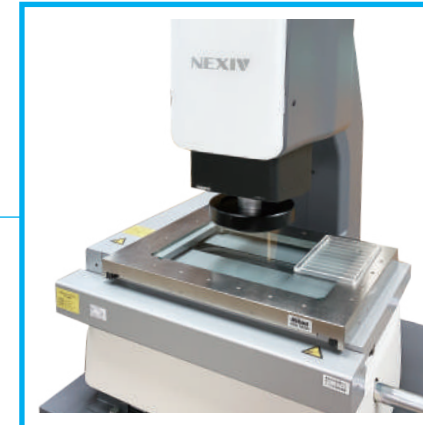
- **Chant Sincere** won the “National Bedrock Award” & “Small Giant Award” from Taiwan Connector maker competition and got many “Best Supplier Awards” from Global customers. We are focusing on improving our design and manufacture technology, and we have been applying for a lot of international patents 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 38 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 14064-1  
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

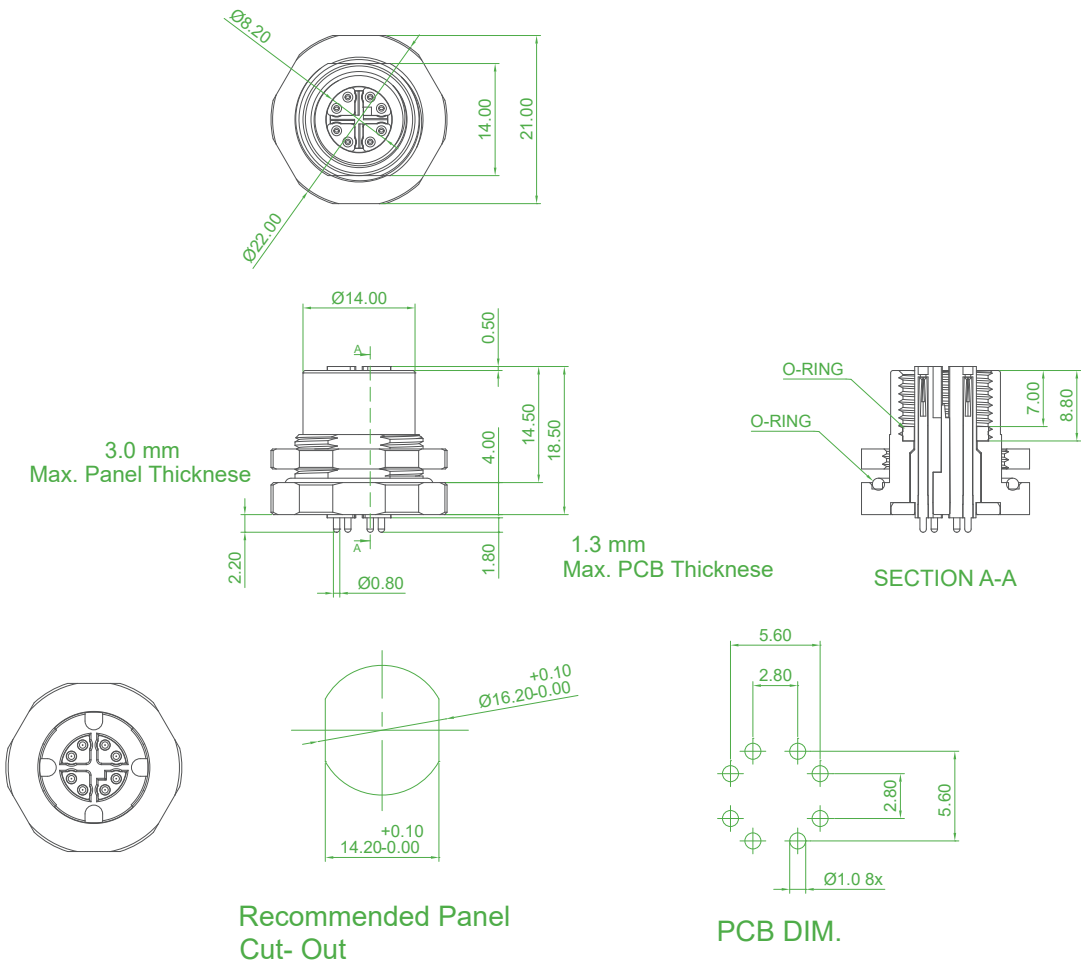
M12 X-Code Female Panel



Specification

Description		M12 X-Code Panel Female Connector
Part no.		649EE08FDDD2NEA3
Material	Insulator	Thermosetting Polymer
	Contact	Copper Alloy
	Metal Part	Copper Alloy
Contact Plating	Under Plate	50u" ~ 200u" Nickel
	Contact Area	30u" Selective Gold
Electrical	Operation Voltage	48 VAC(RMS)
	Current Rating	0.5 Amps Max.
	Contact Resistance	5 M Ohms Max.
	Insulation Resistance	100 M Ohm Min @500 VDC
	Dielectric Withstanding Voltage	500 VAC/ Minutes
	Temperature Range	-40°C to +70°C

Drawing





M12 Connector

Application Type	Contact Type	Gender	Pin Count	A-Code	D-Code	Part no.
<div>Cable End</div> 	Solder	Male	4	V	V	649AFXXMSTD1NXA3
			5	V	V	
		Female	4	V	V	649AFXXFSTD1NXA3
			5	V	V	
			8	V		649AE08FSSD1NAA3
<div>Cable End</div> 	IDC	Male	4	V	V	649IEXXMSND1NXA3
			5	V	V	
		Female	4	V	V	649IEXXFSND1NXA3
			5	V	V	
<div>Through Panel</div> 	Solder	Male	4	V	V	649AEXXMSSD2NXA3
			5	V	V	
			8	V		649AE08MSSD2NAA3
<div>Front Mount / Through Panel</div> 	Dip	Male	4	V		649EEXXMSSD2NAA3
			5	V		
		Female	4	V		649EEXXFSSD2NAA3
			5	V		
<div>Panel Mount Female</div> 	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.
<div>Panel Mount (PG9)</div> 	Solder	Female	2	V	649AE02FBBD4NEA3
			3	V	649AE03FBBD4NEA3
			4	V	649AE04FBBD4NEA3
			5	V	649AE05FBBD4NEA3
			8	V	649AE08FBBD4NAA3
<div>Through Panel (PG9)</div> 	Dip	Female	8	V	649EE08FSSD4NAA3
<div>Cable End</div> 	Solder	Male	8	V	649AE08MDDD1NED3
<div>Cable End</div> 	Crimp	Female	8	V	649KE08FBBD1NFD3
<div>Cable End / Cable End(Molded)</div> 	Crimp	Male	8	V	649KE08MDDD1NFA3
					649ME08MDDD1NED3
<div>Cable End</div> 	IDC	Male	8	V	649IE08MBTD1NXD3
	IDC (no cover)				
<div>Through Panel</div> 	Dip	Female	8	V	649EE08FDDD2NEA3

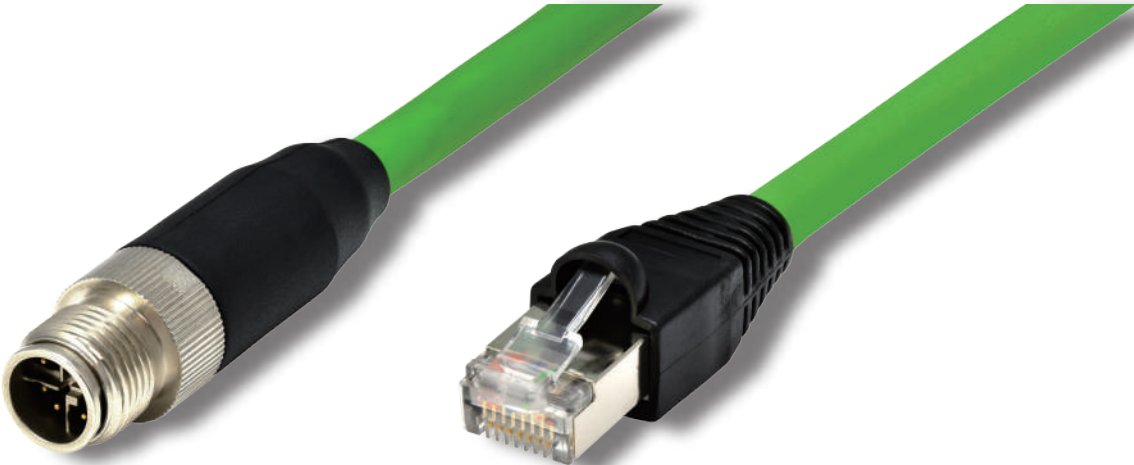


M12 Connector

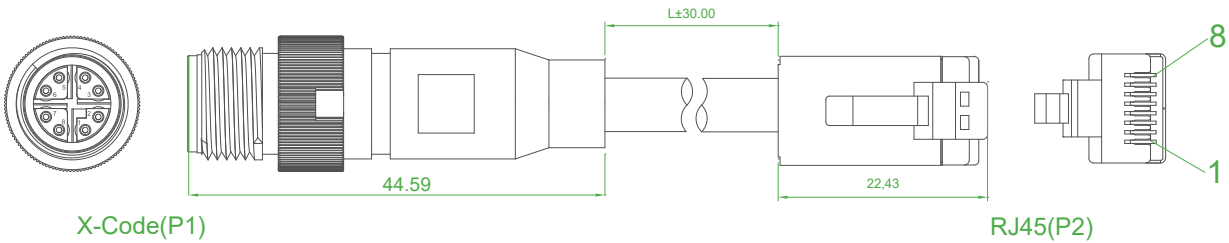
Application Type	Contact Type	Gender	Pin Count	A-Code	D-Code	Part no.
<div>Panel Mount (PG9)</div> 	Solder	Male	4	V	V	649AEXXMSSD4NXA3
			5	V	V	
			8	V		649AE08MSSD4NAA3
<div>Panel Mount (M16)</div> 	Solder	Male	4	V	V	649AEXXMSSD3NXA3
			5	V	V	
			8	V		649AE08MSSD3NAA3
<div>Cable End</div> 	Solder	Male	4	V	V	649AEXXMSSD5NXA3
			5	V		
			8	V		
		Female	4	V	V	649AEXXFSSD5NXA3
			5	V		
			8	V		
<div>Cable End</div> 	IDC	Male	4		V	649IFX4MXTD1XKD3



M12 X-Code to RJ45 Cable



Drawing



WIRING DIAGRAM

X-Code(P1)	RJ45(P2)
PAIR 1	1 WHITE/ORANGE
2	2 ORANGE
PAIR 3	3 WHITE/GREEN
4	6 GREEN
PAIR 5	7 WHITE/BROWN
6	8 BROWN
PAIR 7	5 WHITE/BLUE
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 VAC
	Insulation Resistance	> 100 MΩ
	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
	M12 X-Code, Male, 8Pin to M8 A-Code, Female 4Pin	CW0J84GADA01E15M



# M8



## M8 Application

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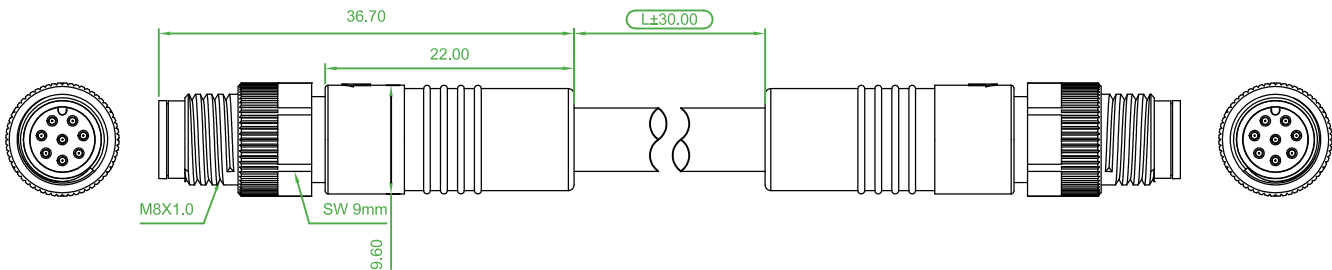
M8 A-Code 8Pin Male Cable Assembly



Specification

Description		M8 A-Code 8Pin Male Cable Assembly
Part no.		CW1508AABB01E1M0
Material	Insulator	PA66 (6410G5) UL94V-0
	Contact	Brass
	Shell	Brass
Contact Plating	Under Plate	50u" Min Nickel
	Contact Area	1u" Gold
Electrical	Operation Voltage	30 VAC/DC
	Current Rating	1.5 A
	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



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詮欣股份有限公司  
CHANT SINCERE CO., LTD.

7F-2, No.188, Sec. 3, Datong Rd., Xizhi Dist.,  
New Taipei City 221, Taiwan (R.O.C.)

TEL : 886-2-8647-1251 / FAX : 886-2-8647-1842

Mail : [service@coxoc.com.tw](mailto:service@coxoc.com.tw)