



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 and 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.

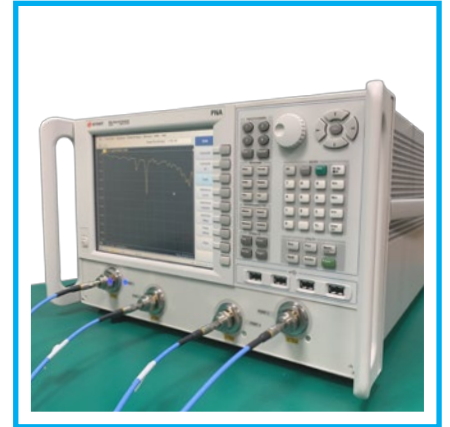
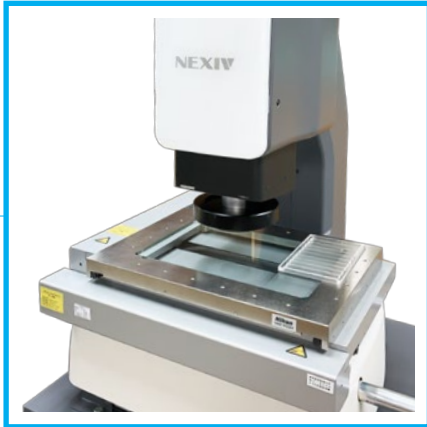


## The Core Competence of Chant Sincere Co.,Ltd. including.

- Over 34 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 outside of the traditional industries where a compact, reliable connection system with 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

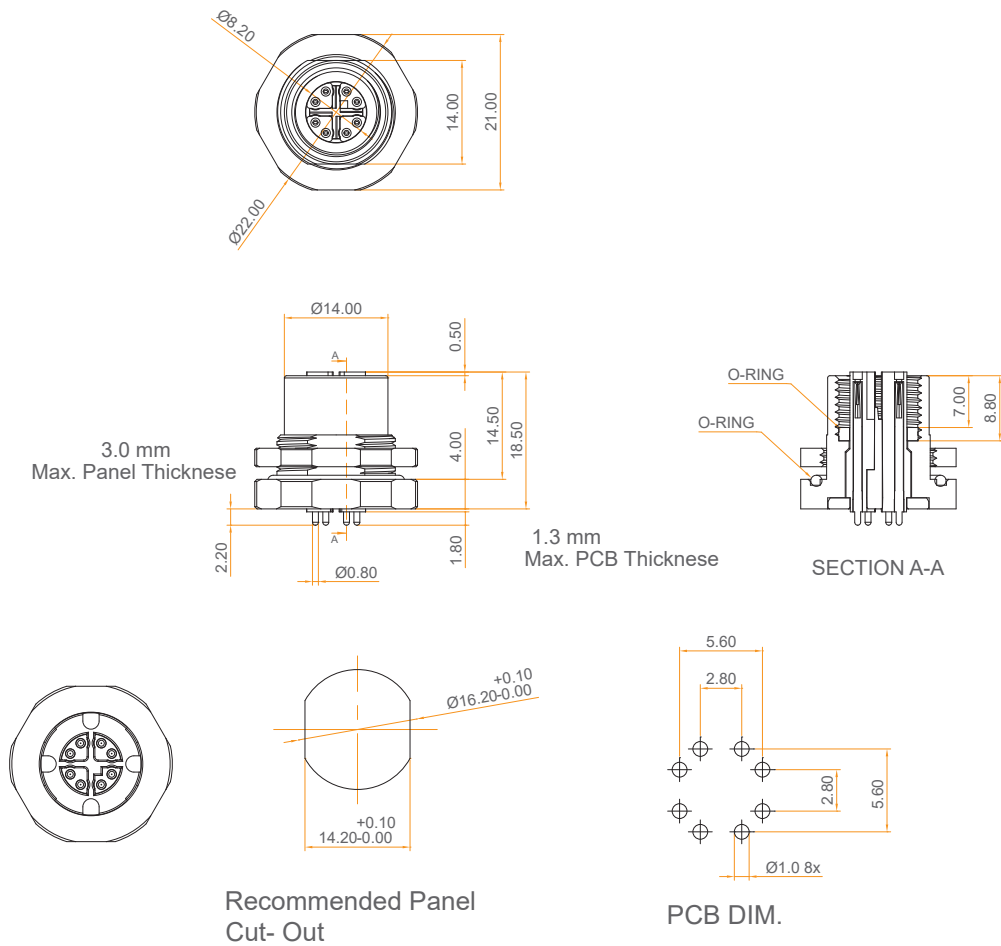
- Compact and reliable environmentally protected connection
- Signal and terminated cable assemblies of over-molded construction
- Supports higher-bandwidth needs up to 10GB/s

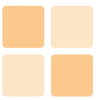


## M12 X-Code Female Panel



## Drawing





## Specification

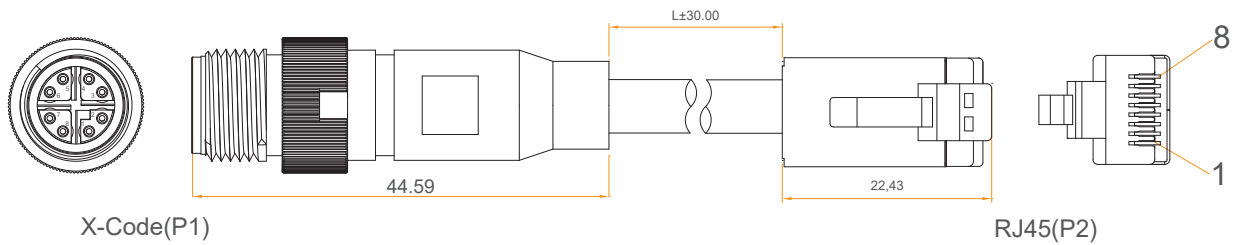
Description		M12 X-Code Panel Female Connector
Part no.		649EE08FDDDD2NEA3
Material	Insulator	Thermosetting polymer
	Contact	Copper Alloy
	Metal Part	Copper Alloy
Contact Plating	Underplate	50u"~200u" Nickel
	Contact Area	30u" Selective Gold
Electrical	Operation Voltage	48V AC(RMS)
	Current Rating	0.5 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 X-Code to RJ45 Cable

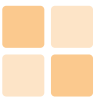


## ■ Drawing



### 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

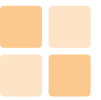
Description		M12 X-Code to RJ45 Cable
Part no.		CW0608EADB01EXMX
Part Description	Connector	M12 X-Code Male Connector Contact Gold Plate 30u" over 50~220u" Nickel
		RJ45 Cat 6A Male Connector Contact Gold Plate 50u"
	Cable	10G Cat 6A 26 AWG 4 Pairs
	Shielded	FTP Aluminium/ Polyester 4 Pairs
Electrical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




# M12 Connector

Application type	Contact type	Gender	Pin count	A-code	D-code	Part no.
Cable end(ass'y) 	Solder	Male	4	V	V	649AFXXMSTD1NXA3
			5	V	V	
		Female	4	V	V	649AFXXFSTD1NXA3
			5	V	V	
			8	V		649AE08FSSD1NAA3
		Panel Mount Male(M16 Thread) 	Solder	Male	4	V
5	V				V	
8	V					649AE08MSSD3NAA3
Panel Mount Male(PG9) 	Solder	Male	4	V	V	649AEXXMSSD4NXA3
			5	V	V	
			8	V		649AE08MSSD4NAA3
Panel Mount Male(Through) 	Solder	Male	4	V	V	649AEXXMSSD2NXA3
			5	V	V	
			8	V		649AE08MSSD2NAA3
Panel Mount Female 	Solder	Female	2	V		649AE02FSSD2NXA3
			3	V		649AE03FSSD2NXA3
			4	V	V	649AE04FSSD2NXA3
			5	V	V	649AE05FSSD2NXA3
			6	V		649AE06FSSD2NXA3
			7	V		649AE07FSSD2NXA3
			8	V		649AE08FSSD2NXA3
			9	V		649AE09FSSD2NXA3
			10	V		649AE10FSSD2NXA3
			11	V		649AE11FSSD2NXA3
			12	V		649AE12FSSD2NXA3





Application type	Contact type	Gender	Pin count	A-code	D-code	Part no.
Shield Type 	Solder	Male	4	V	V	649AE04MSND5NXA3
			5	V	V	649AE05MSND5NXA3
			8	V		649AE08MSND5NAA3

Application type	Contact type	Gender	Pin count	X-code	Part no.
Cable End Connector 	Solder/Crimp	Female	8	V	649AE08MDDD1NED3
Panel Female Connector 	PCB	Male	8	V	649EE08FDDD2NEA3
IDC Type Connector 	IDC	Male	8	V	649IE08MBTD1NFD3



## M12 Cable

Application type	Description	Part no.
D-Code Plug To D-Code Plug Cable 	Solder Type, Male, 4Pin, D-Code, 1~2M	CW0504DADB01EXXX
X-Code Plug To X-Code Plug Cable 	Crimp Type, Male, 8Pin, X-Code, 1M	CW0508EADB01EXMX
X-Code Plug To RJ45 Plug Cable 	Crimp Type, Male, 8Pin, X-Code, 1M	CW0608EADB01EXMX
X-Code Plug To X-Code Plug Cable For OD 8.5 	Crimp Type, Male, 8Pin, X-Code, 1M	CW0508EADB02EXXX



**M8**



## M8 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 outside of the traditional industries where a compact, reliable connection system with 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

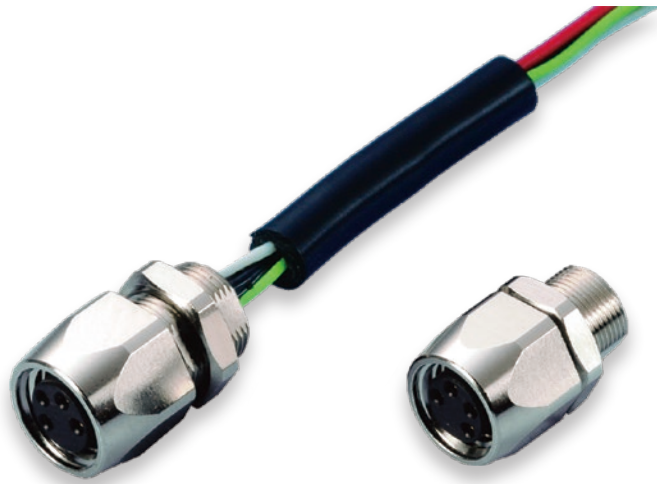
- Industrial machinery
- Factory automation
- I/O boxes
- Sensors
- Switches

## Product Characteristics

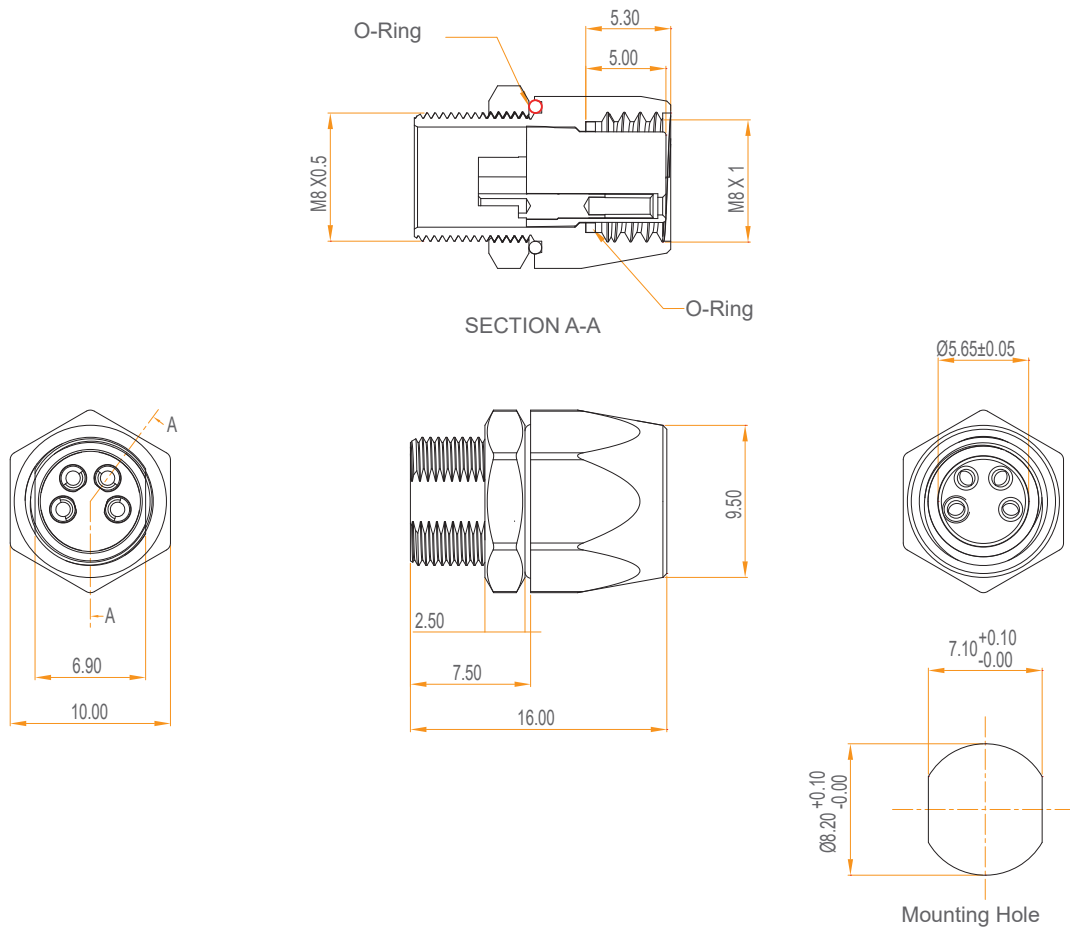
- Compact and reliable environmentally protected connection
- Signal and terminated cable assemblies of over-molded construction
- Supports higher-bandwidth needs up to 10GB/s

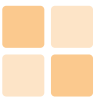


## M8 A-Code 4Pin Panel Mount Connector



### Drawing





## Specification

Description		M18 A-Code 4Pin Panel Mount Connector
Part no.		649AE04FSSE2NAA3
Material	Insulator	Thermosetting polymer
	Contact	Brass
	Shell	Brass
Contact Plating	Underplate	50u" min Nickel
	Contact Area	1u" Gold
Electrical	Operation Voltage	50V AC(RMS)
	Current Rating	3 Amps min.
	Contact Resistance	0.5m Ohms max.
	Insulation Resistance	100M Ohm min @ 500 VDC
	Dielectric Withstanding Voltage	500 VAC/ minutes
	Temperature Range	-25°C TO +85°C
	Operating Degree	IP67



# M8 Connector

Application type	Contact type	Gender	Pin count	A-code	B-code
<p>Panel Mount Connector</p>  <p>Part no. 649AE04FSSE2NAA3</p>	Solder	Female	4	V	V
<p>Panel Mount Connector</p>  <p>Part no. 649AE05FSSE2NBA3</p>	Solder	Female	5	V	V
<p>Plug 180 Deg Conn.</p>  <p>Part no. 649AE08FSSE1NAA3</p>	Solder	Female	8	V	V
<p>Plug 180 Deg Conn.</p>  <p>Part no. 649AE08MSSE1NAA3</p>	Solder	Male	8	V	V





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詮欣股份有限公司  
CHANT SINCERE CO., LTD.

7F-2, No.188, SEC.3, Ta Tung Road, Hsi Chih City,  
Taipei Hsien, Taiwan, R.O.C.  
TEL : 886-2-8647-1251 FAX : 886-2-8647-1842  
Mail : [service@coxoc.com.tw](mailto:service@coxoc.com.tw)