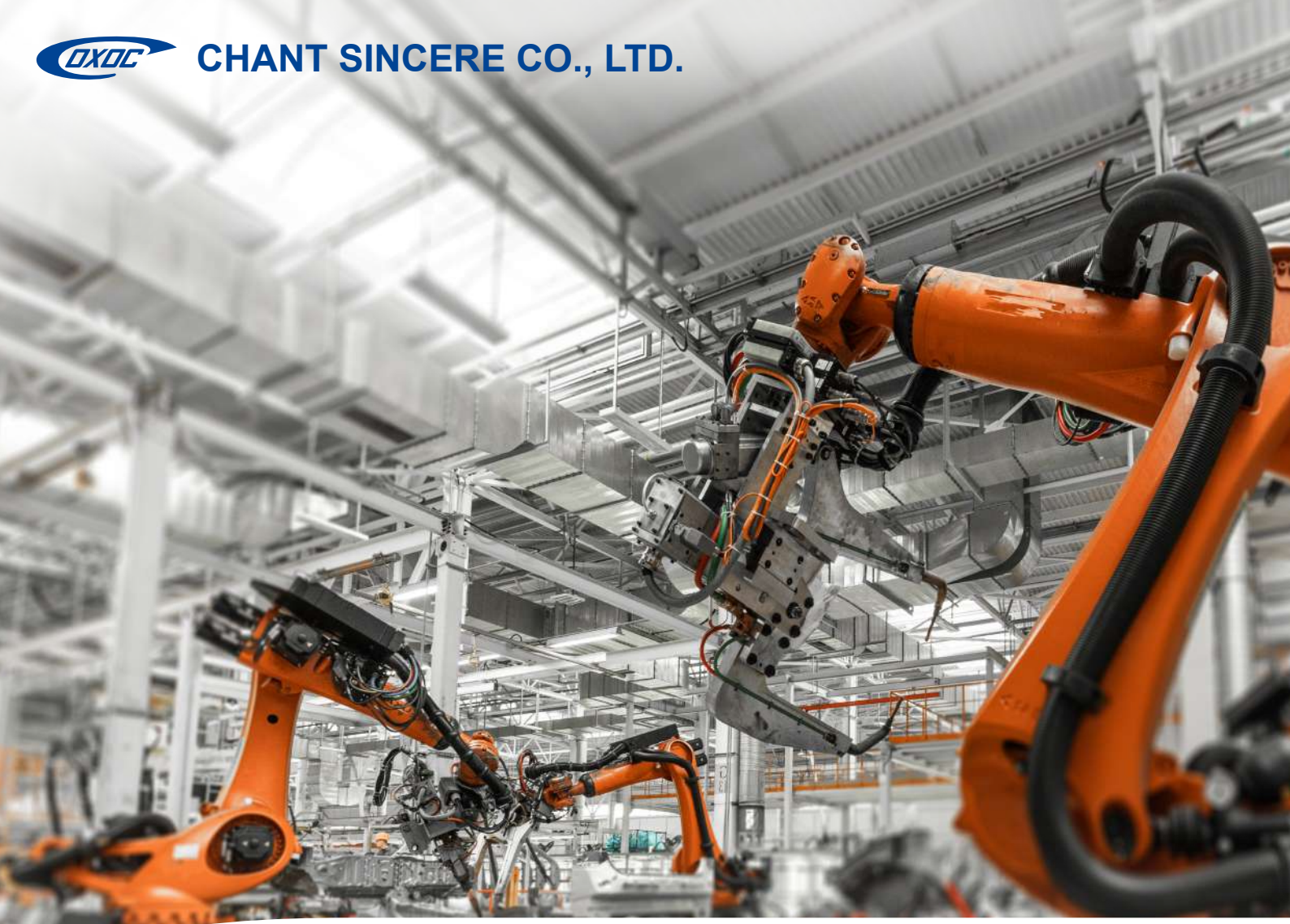
CHANT SINCERE CO., LTD.



Industrial

M Series

M5 / M8 / M12 / M16

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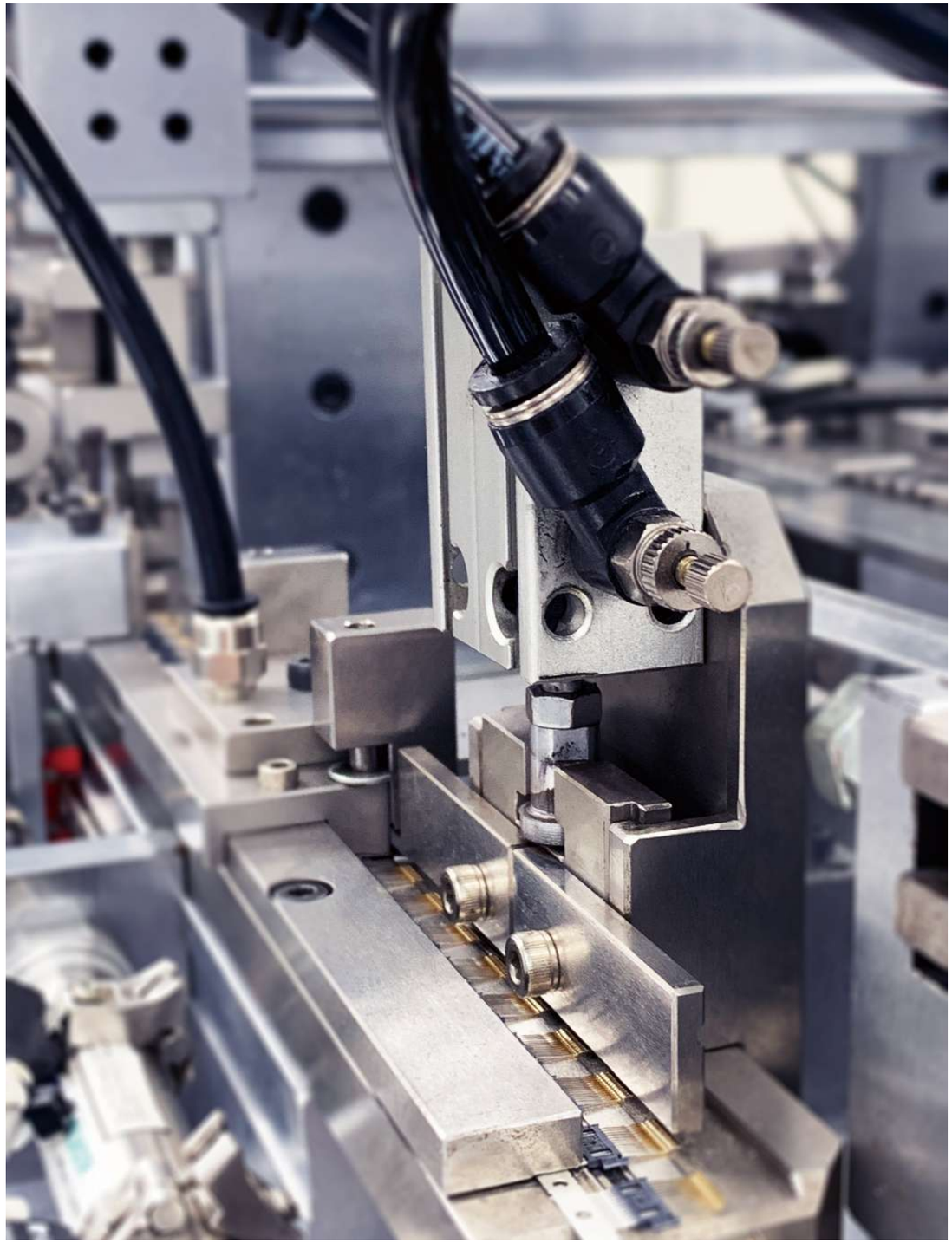
About Chant Sincere

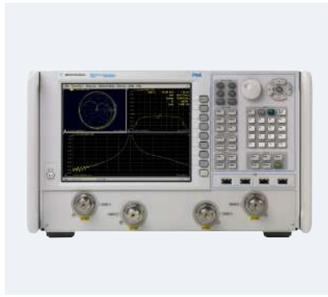
Chant Sincere Co., Ltd. was set up in 1985, with the management concept of “Integrity, Innovative, Quality, Sustainability” to design and manufacture connector and cable. Keep developing new innovative products and integrating vertically from R&D, tooling, assembly and quality control to meet the demands (quality-cost/delivery) from customers. Chant Sincere Co., Ltd. has been constructing several of product families to provide a total solution to customers.
The connector and cable products are widely used in many different applications, 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 & Video connector and cable (HDMI, DisplayPort)...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 40 Years Manufacture Experience
- National Awards Rising Sun Awards/Best Supplier Awards
- Vertical Integration (Design, Tooling, Manufacturing, Test)
- Automation Capability
- Precise Tooling Center
- Wide Range of Product Line
- ODM/OEM Capability
- Customized Capability
- Quality System (ISO, IATF)
- Systematic Testing Process





Quality Systems

Chant Sincere (hereinafter referred to as C.S.) 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 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, C.S. integrated supply chain and devoted staff has enabled us to build a solid foundation and core capability to better serve our customers. It is principal to always meet and exceed customer expectation by providing superior products and services. Our ultimate goal is to create value for our customers by building collaborative and mutually beneficial relationships.

ISO 14064-1 / ISO 9001 / ISO 14001 / IATF 16949 / ISO 13485

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 connector 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 Gbps, 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 several 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 transmits data at 400Gbps speed.
At this speed, stringent requirement for signal integrity and operating temperature is inevitable 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.

M Series

M5 / M8 / M12 / M16

M Series Application

M Series connectors are key solutions for industrial automation and smart manufacturing, used for signal and power transmission between sensors, actuators, industrial equipment, and communication modules. With a robust design and standardized sizes, they offer IP67 or higher protection, making them suitable for harsh environments. Ranging from the ultra-compact M5 to the high-power M20 connectors, the M Series meets diverse needs with high reliability, modularity, and easy installation.

- **M5**

Ultra-compact solution for tight spaces, ideal for miniature sensors and medical devices. Offers precise signal transmission with 3–4 pin options and flexible cable assemblies for dense installations.

- **M8**

Compact and durable for sensor and I/O connections in automation systems. Available in 3–8 pins, IP67 rated, with robust cable options for reliable performance in limited-space applications.

- **M12**

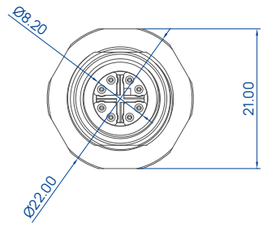
Versatile industrial standard supporting signal, power, and data. Multiple coding types (A/B/D/X), IP67/IP68 rated, suitable for Ethernet and fieldbus systems with a wide range of cable types.

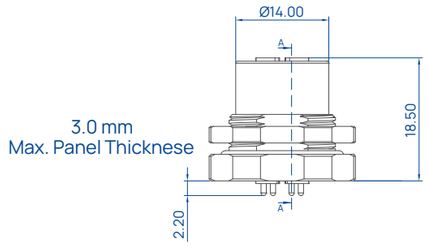
- **M16**

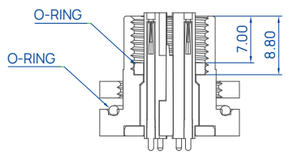
Medium-sized solution for higher current or complex signals. Ideal for control cabinets and test systems, with secure locking and shielded cables for stable, noise-resistant connections.

Model	Application	Product Characteristics
M5	• Miniature sensors • Medical devices • Compact automation units	• Ultra-compact design for tight spaces • 3–4 pin configurations • Precision signal transmission
M8	• Sensors • I/O boxes • Factory automation	• Compact and rugged • IP67 rated • Supports 3–8 pins with molded cable assemblies
M12	• Industrial machinery • Factory automation • I/O boxes • Sensors • Switches	• Reliable and protected connection • Supports signal, power, and data • Up to 10Gbps bandwidth support
M16	• Control cabinets • Test and measurement • Automation systems	• Supports medium current and complex signals • Shielded cables for EMI resistance • Secure locking

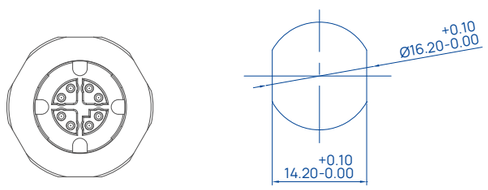
M12, Female, Through Panel, DIP, X-Code



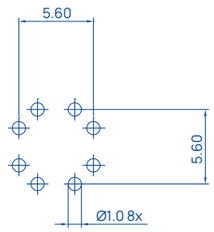




SECTION A-A



Recommended Panel
Cut- Out



PCB DIM.

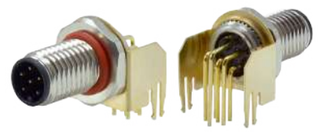
Specification

Part No.	54902080010
Material	
Insulator	Thermosetting Polymer
Contacts	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 / Minute
Temperature Range	-40°C to +70°C

M5 Connector

Product List	Description		Part No.
	M5, Male, Front Mount, DIP ・A-Code	3Pin	5494501001A
		4Pin	5494501002A
	M5, Female, Front Mount, DIP ・A-Code	3Pin	5494601001A
		4Pin	5494601002A
	M5, Male, Front Mount, Solder ・A-Code	3Pin	54947010010
		4Pin	54947010020
	M5, Female, Front Mount, Solder ・A-Code	3Pin	5494801001A
		4Pin	5494801002A
	M5, Male, Back Mount, Solder ・A-Code	3Pin	5494901001A
		4Pin	5494901002A

M8 Connector

Product List	Description		Part No.
	M8, Male, Front Mount, DIP ・A-Code	2-8Pin	54952XXXX
	M8, Female, Front Mount, DIP ・A-Code	2-8Pin	54953XXXX
	M8, Male, Front Mount, DIP, 90° ・A-Code	2-8Pin	54954XXXX
	M8, Male, Front Mount, Solder ・A-Code	2-8Pin	54956XXXX
	M8, Female, Front Mount, Solder ・A-Code	2-8Pin	54957XXXX
	M8, Male, Back Mount, Solder ・A-Code	2-8Pin	54958XXXX
	M8, Female, Back Mount, Solder ・A-Code	2-8Pin	54959XXXX

M12 Connector

Product List	Description		Part No.
	M12, Male, Cable End, Solder ・A-Code ・D-Code	4-5Pin	5492901XXXX
	M12, Female, Cable End, Solder ・A-Code ・D-Code	4-5Pin	5493001XXXX
		8Pin	5493002XXXX
	M12, Male, Cable End, IDC ・A-Code ・D-Code	4-5Pin	5493101XXXX
	M12, Female, Cable End, IDC ・A-Code ・D-Code	4-5Pin	5493201XXXX
	M12, Male, Cable End, Crimp ・X-Code	8Pin	5492701XXXX
	M12, Female, Cable End, Crimp ・X-Code	8Pin	5492801XXXX
	M12, Male, Cable End, IDC ・X-Code	8Pin	5493103XXXX

M12 Connector

Product List	Description		Part No.
	M12, Male, Cable End, Solder ・A-Code ・D-Code (No 8Pin)	4-8Pin	5492902XXXX
	M12, Female, Cable End, Solder ・A-Code ・D-Code (No 8Pin)	4-8Pin	5493003XXXX
	M12, Male, Cable End, IDC ・D-Code	4Pin	5493102XXXX
	M12, Female, Back Mount, Solder ・A-Code ・D-Code (Only 4Pin)	2-12Pin	5492602XXXX
	M12, Female, Through Panel, DIP ・X-Code (PG9)	8Pin	54902090010
	M12, Female, Panel Mount, DIP ・X-Code	8Pin	54902080010
	M12, Male, Through Panel, Solder ・A-Code ・D-Code	4-5Pin	5492502XXXX
		8Pin	5492501XXXX

M12 Connector

Product List	Description		Part No.
	M12, Male, Front Mount, Solder ・A-Code ・D-Code	4-5Pin	5490101XXXX
	M12, Female, Front Mount, Solder ・A-Code ・D-Code	4-5Pin	5490203XXXX
	M12, Male, Back Mount, Solder ・A-Code (PG9) ・D-Code (PG9)	4-5Pin	5490301XXXX
		8Pin	54903020020
	M12, Male, Back Mount, Solder ・A-Code (M16) ・D-Code (M16) (No 8Pin)	4-5Pin	5490301XXXX
		8Pin	54903020010
	M12, Male, Front Mount, Solder ・A-Code (PG9/M16) ・B-Code (PG9/M16) ・D-Code (PG9/M16)	2-12Pin	5492503XXXX
	M12, Female, Front Mount, DIP ・A-Code	2-12Pin	5490206XXXX

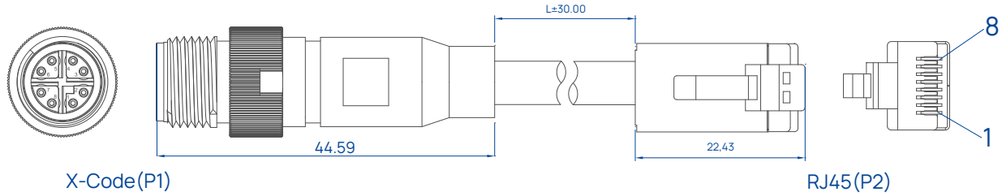
M12 Connector

Product List	Description		Part No.
	M12, Female, Front Mount, Solder ・A-Code(PG9/M16) ・B-Code(PG9/M16) ・D-Code(PG9/M16)	2-12Pin	5492605XXXX
	M12, Male, Front Mount, DIP, 90° ・A-Code	3-5Pin	5490501XXXA
	M12, Female, Front Mount, DIP, 90° ・X-Code	8Pin	5490403XXXX
	M12, Female, Front Mount, Solder ・X-Code	8Pin	5492606XXXX
	M12, Female, Back Mount, Solder ・X-Code	8Pin	5490601XXXX
	M12, Female, Back Mount, Solder ・A-Code	9-17Pin	5490602XXXX

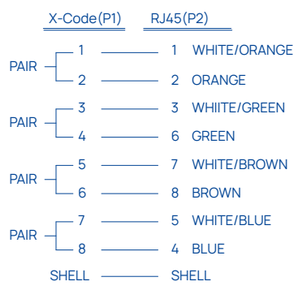
M16 Connector

Product List	Description		Part No.
	M16, Male, Front Mount, Solder ・A-Code	2-5Pin	5498001XXXX
		6-14Pin	5498002XXXX
	M16, Female, Front Mount, Solder ・A-Code	2-5Pin	5498101XXXX
	M16, Male, Front Mount, DIP ・A-Code	6-14Pin	5498201XXXX

M12 X-Code to RJ45 Cable



WIRING DIAGRAM



Specification

Part No.	1490601XXXX
Material	
Contact	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

M8 Cable

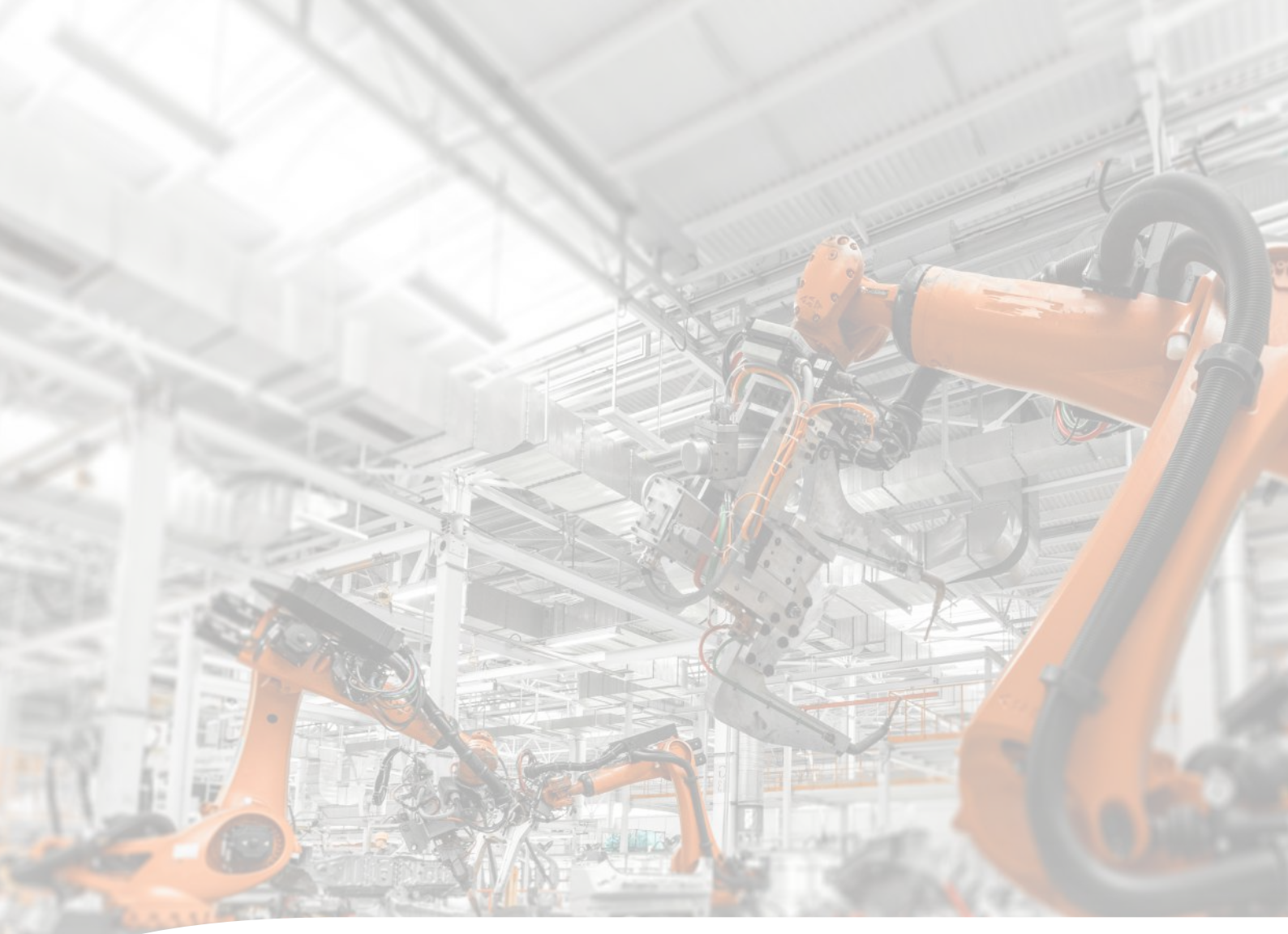
Product List	Description		Part No.
	M8, Male, A-Code, 180°	4Pin	149XXXXXXXX
	M8, Male, A-Code, 180°	8Pin	149XXXXXXXX
	M8, Female, A-Code, 180°	3Pin	149XXXXXXXX
	M8, Female, A-Code, 180°	4Pin	149XXXXXXXX

M12 Cable

Product List	Description		Part No.
	M12, Female, A-Code Rear Mount, Free End	4Pin	1490301XXXA
		5Pin	
	M12, Male, A-Code Front / Rear Mount, Free End	4Pin	1490401XXXA
		5Pin	
	M12, Female, A-Code Rear Mount, Free End	12Pin	149XXXXXXXX
	M12, Female, A-Code, 180°	2Pin	149XXXXXXXX
	M12, Male, A-Code, 180°	4Pin	149XXXXXXXX
	M12, Male, A-Code to Wafer, 180°	12Pin	149XXXXXXXX

M12 Cable

Product List	Description		Part No.
	M12, Male, A-Code, 180°	4Pin	14902XXXXXX
		5Pin	
		8Pin	
	M12, Male, D-Code, 180°	4Pin	
		5Pin	
	M12, Male, X-Code, 180°	8Pin	1490202XXXX
	M12, Male, X-Code to RJ45, 180°	8Pin	1490601XXXX
	M12, Male, A-Code to RJ45, 180°	4Pin	1490602001A
		8Pin	
	M12, Male, D-Code to RJ45, 180°	4Pin	1490603001D
	M12, Female, 5Pin, A-Code to USB2.0 AM, 180°	5Pin	1490701002A
	M12, Female, 8Pin, X-Code to RJ45, 180°	8Pin	1490501XXXX
	M12, X-Code, Male, to M8, A-Code, Female, 180°	M12 8Pin	14901010010
		M8 4Pin	



CHANT SINCERE CO., LTD.

7F-2, No 188, Sec. 3, Datong Road
Xizhi, New Taipei City 22103, Taiwan
www.coxoc.com.tw
+886-2-8647-1251
service@coxoc.com.tw

www.coxoc.com.tw/en