POE MANUFACTURING
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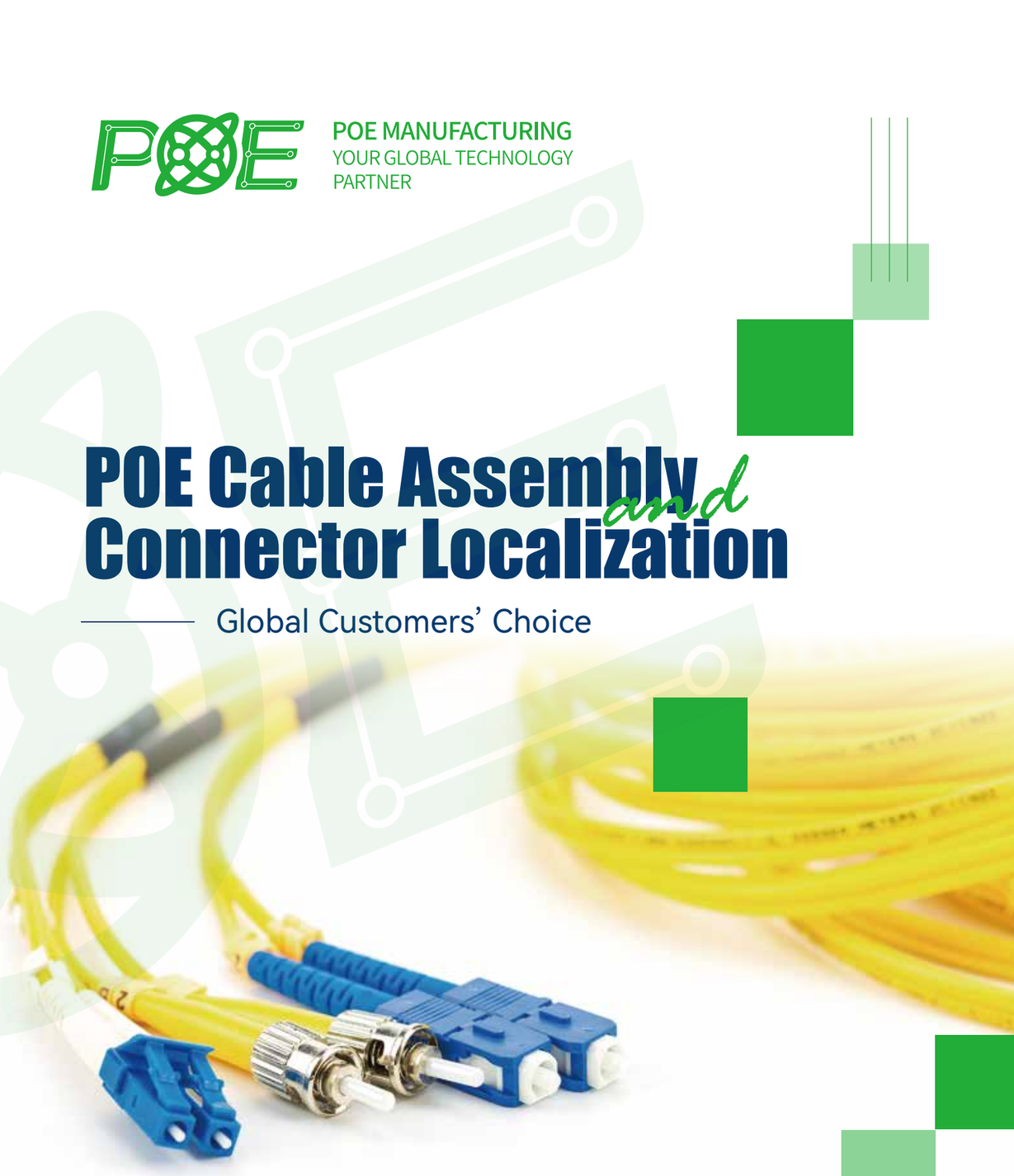
PARTNER

POE Cable Assembly and Connector Localization

Global Customers' Choice



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0755-25312250

Floor 3, Jinyuan Industrial Park, No.56 Tangtou Avenue, ShiyanTown, Bao'an, Shenzhen

www.poe-pcba.com / www.pcbamake.com

sales@poe-pcba.com / orders@pcbamake.com

ISO9001:2015 ISO14001:2015 ISO13485:2016 UL RoHS IPC SGS

POE MANUFACTURING
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CATALOGUE

POE Cable Assembly Service

Connectors Localization

POE MANUFACTURING
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POE Cable Assembly Service

Global Customers' Choice

Cables can be classified into various types based on their purpose and structure, including power cables, control cables, compensation cables, shielded cables, high-temperature cables, computer cables, signal cables, coaxial cables, fire-resistant cables, marine cables, mining cables, aluminum alloy cables, and so on. They are all composed of single or multiple wires and insulation layers, used to connect circuits, electrical appliances, etc.

01 TYPES OF CABLES

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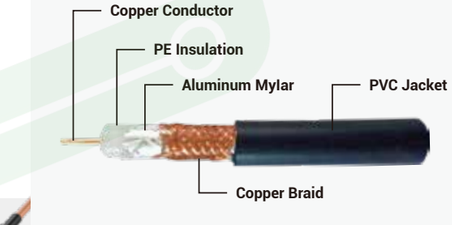
1. Single Conductors

Single conductor wires are composed of a solid strand of copper with color-coded PVC insulation. They are used when wire forming is required for routing or wire wrapping. Common uses include hooking up circuits either on PCBs as through-hole or wire wrap conductors, or for breadboard prototyping as poke-in circuit paths. Single strand wire is more durable than stranded wire but is not recommended for excessive or frequent flexing.

There are various colors available, such as red, yellow, blue, white, brown, orange, green, black, gray, purple, etc. There are also 8AWG-30AWG inner diameter sizes available.

2. Coaxial Cables (RF)

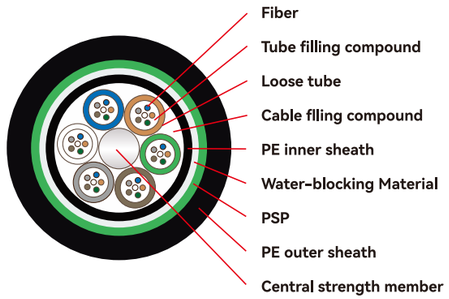
Coaxial cable is a type of wire and signal transmission line, usually made of four layers of materials: the innermost layer is a conductive copper wire, the outer layer of the wire is surrounded by a layer of plastic (used as an insulator or dielectric), the outer layer of the insulator is a thin mesh conductive material (usually copper or alloy), and the outer layer of the conductive material is the outermost insulating material as the outer layer.



Solid Core Coaxial Cable

3. Fiber Optic Cable

Optical fiber cable is a communication cable composed of two or more glass or plastic fiber cores. These fiber cores are located within a protective coating and are covered by a plastic PVC outer sleeve. Signal transmission along internal optical fibers generally uses infrared radiation.



Overview diagram of fiber optic cable

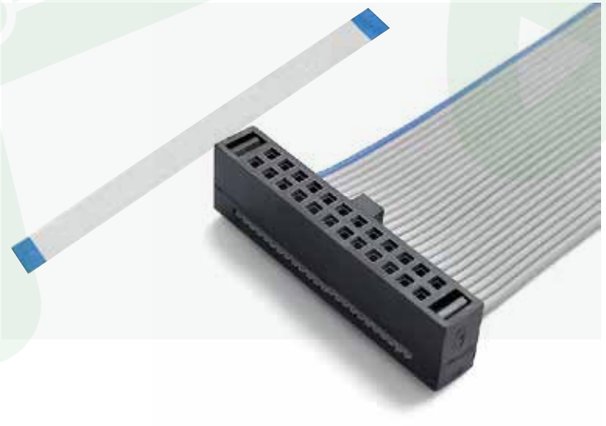
4. Flat Flex Cable(FFC , FPC)

Flexible Flat Cable (FFC) allows for arbitrary selection of the number and spacing of wires, making wiring more convenient, greatly reducing the volume of electronic products, lowering production costs, and improving production efficiency. It is most suitable for use as a data transmission cable between moving parts and motherboards, PCB boards to PCB boards, and in miniaturized electrical equipment. Ordinary specifications include various spacing flexible cables such as 0.5mm, 0.8mm, 1.0mm, 1.25mm, 1.27mm, 1.5mm, 2.0mm, 2.54mm, etc.

Widely used for the connection between various printer heads and motherboards, signal transmission and board connection of products such as plotters, scanners, copiers, speakers, LCD appliances, fax machines, and various DVD players. In modern electrical equipment, it is almost non-existent.

5. Flat Ribbon Cables

Flat Ribbon Cables are a series of single conductor wires placed parallel to each other and molded together. Most ribbon cables are color coded for pin one usually red in color. The cable types are Flat cable, Flat Jacket, Ground Plane, Round Jacket, Split Conductor, Flat Twin Axial, and Flat Twisted Pair with the number of conductors ranging from 2 to 154 and pitch ranging from 0.017” (0.43mm) to 0.394” (10.00mm).

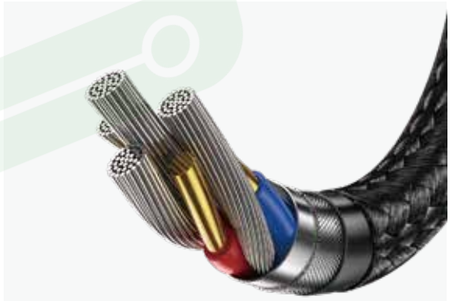


6. Modular -Flat Cables

Products in this family are cable products designed for use with a particular style of interconnect system known as "modular" connectors, commonly used in telecommunications applications such as wired Ethernet and telephone systems. Flat cable products are distinguished by their generally rectangular cross section, resulting from the individual conductors within being oriented side-by-side and maintaining their relative positions throughout the cable length. This arrangement provides for convenient connector application but reduces electrical performance, limiting their utility to low-speed applica-tions such as voice communications.

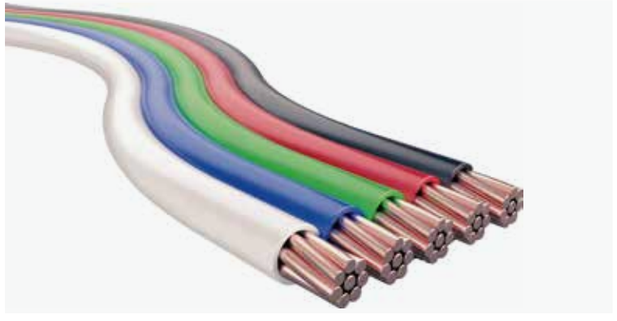
7. Multiple Conductor Cables

Multiple Conductor Cables are cables that are composed of separate individual wires that have been bundled together within a larger outer insulation jacket. With a variety of wire gauges, number of conductors and materials allowing a wide range of applications ranging from power to telecommunication data transfer. Lengths available range from 1 foot to over 5000 feet.



8. Single Conductor Cables(Hook-Up Wire)

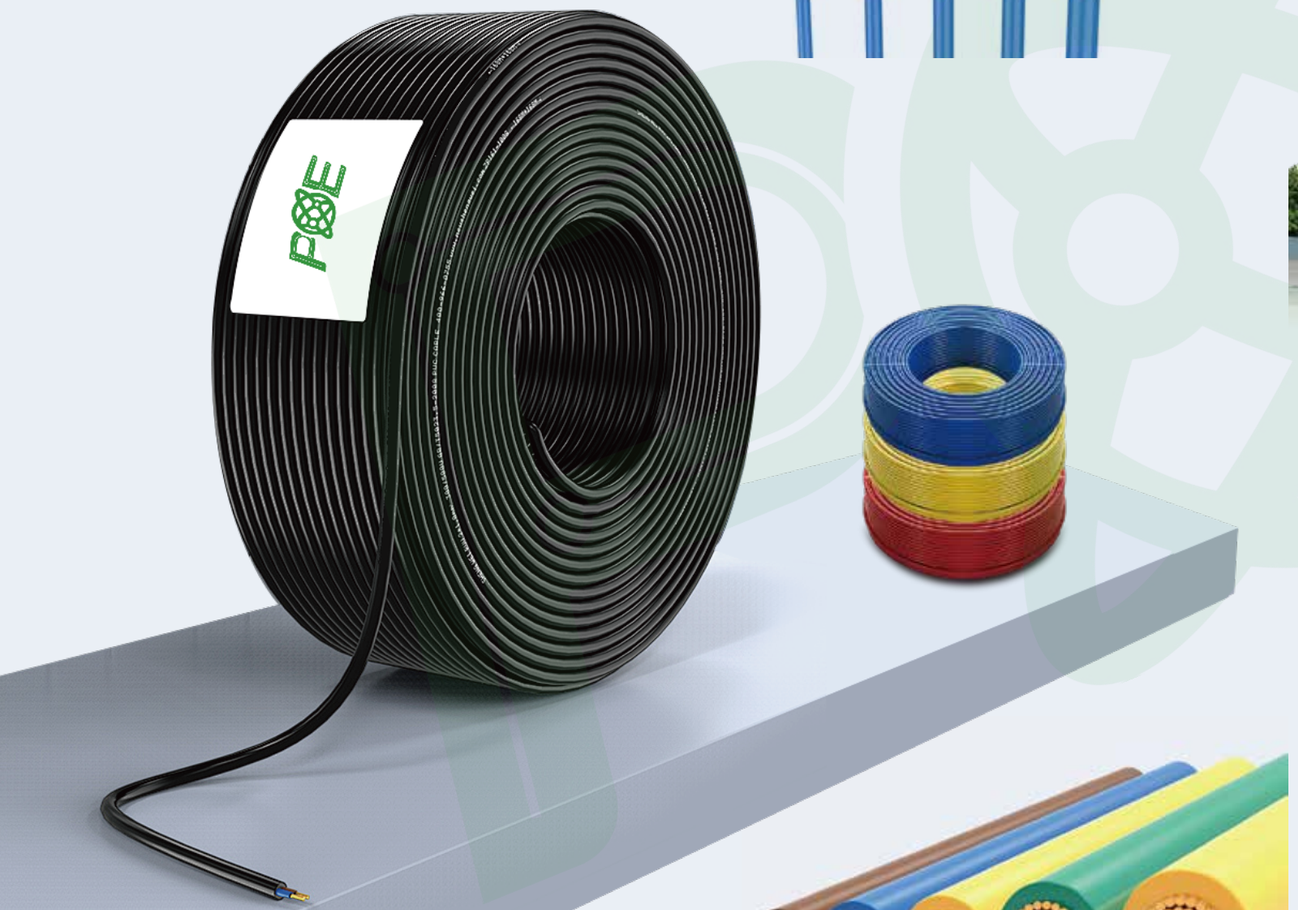
Single conductor cable and wire products include both insulated and non-insulated products adapted for a variety of uses, including point-to point signal wiring, test & measurement, and power transmission. Magnet wire, the material insulated with a thin film of polyurethane or similar material and commonly used for constructing motor winding, inductor, and other electromagnetic components is specifically excluded, and can be found in a separate product family.



9. Wire Wrap

An insulated single conductor wire with exposed ends that are wound around a contact.

There are various colors available, such as red, yellow, blue, white, brown, orange, green, black, gray, purple, etc. There are also 8AWG-30AWG inner diameter sizes available.



02 TYPES OF CABLE ASSEMBLY

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1. Cable Assembly Equipment

2. Cable Assemblies

A Barrel Connector Cables

Barrel Connector Cables consist of free-hanging barrel connectors factory installed on compatible cables categorized by their compatibility with free hanging, board, and panel mount mating connectors. Common configurations are jack to plug, plug to plug, jack to jack, and jack to wire leads with options for right angle styles and double connected ends.

Barrel Audio Cables

Barrel Power Cables

B Between Series Adapter Cables

Between series adapter cable products are terminated with connectors of different types or styles at either end, and commonly used for transitioning between connector styles in use or use of a connector type for non-traditional purposes. Examples include cables with USB-A connectors on one end and a power barrel plug on the other (used for drawing power from a USB port), cables with DVI and VGA connectors for connecting computer monitors to various video sources, RJ-45 and M12 circular connectors for industrial Ethernet application, and many others.

C Cable Assembly Kits

Cable assemblies are a length of electrical or fiber optic cable material terminated with some type of connector or contact at one or both ends. These include finished products such as standard USB, DVI, and HDMI cables, extension cords for AC utility power, network cables, and replacement power cords for appliances and consumer electronics. Partial assemblies designed for incorporation into other products are included, such as pre-crimped leads for a variety of common connector styles.

D Circular Cable Assemblies

Circular connectors consist of multiple pins or contacts used for transmitting power, signals, or data, and are a type of cylindrical electrical component that can withstand various harsh environments and has different sizes. This type of connector is also known as a circular interconnect device. The circular structure makes it more sturdy and durable, more resistant to vibration and impact, resists external signals or interference, prevents environmental pollutants from entering, and can withstand extreme pressure or temperature.

E Coaxial Cables (RF)

Radio frequency cables are cables that transmit electromagnetic energy within the radio frequency range. Radio frequency cables are essential components in various wireless communication systems and electronic devices, and are widely used in wireless communication and broadcasting, television, radar, navigation, computers, and instruments.

F D-Shaped, Centronics Cables

1.The width of the data channel transmitted in parallel, also known as the number of bits transmitted through the interface; 2. Characteristics of additional interface control lines or interactive signals used to coordinate parallel data transmission. The width of the data can range from 1 to 128 bits or wider, with the most commonly used being 8 bits, which can be transmitted 8 data bits at a time through an interface. The most commonly used parallel interface in the computer field is the LPT interface.

H D-Sub Cables

D-Sub interface is a common cable connector interface widely used for connecting computer devices and peripheral devices. Its name comes from its unique D-shaped appearance, where "D" represents "data". D-sub interfaces typically have 9, 15, 25, 37, or 50 pins, used to transmit different types of data, video signals, audio signals, etc., thus playing a crucial role in the connection of computer devices.

Economical D-Sub Cable

The economical D-Sub cable has stable performance, using 26 AWG multi strand wires and aluminum foil shielding, with good flexibility and shielding effect. Fully injection molded rear shell ensures connection stability. Suitable for application environments with certain requirements for cable flexibility.

Economical molded D-Sub Cable, DB15 male/DB15 female, 1.0 ft/0.3 m

Excellent D-Sub Cable

The excellent model is further upgraded on the basis of the economic model, using a copper shielding layer to further enhance the shielding effect. Gold plated contacts ensure reliable connections after repeated insertion and removal.

Excellent molded D-Sub Cable, HD15 male/female head, 0.3m

Premium D-Sub Cable

The connecting wire adopts 26 AWG multi strand wire, with copper braided layer and aluminum foil double-layer shielding, and flexible PVC sheath. Fully injection molded rear shell, paired with a special steel shielding box, truly achieves comprehensive shielding effect. Install reinforced 4-40 wing screws without the need for a screwdriver.

Premium molded D-Sub Cable, DB25 male/DB25 female, 1.0 ft/0.3 m

I Fiber Optic Cables

Fiber optic jumpers are used to make jumper wires from equipment to fiber optic cabling links. It has a thick protective layer and is generally used for the connection between optical transceivers and terminal boxes. It is applied in some fields such as fiber optic communication systems, fiber optic access networks, fiber optic data transmission, and local area networks.

J Firewire Cables (IEEE 1394)

Cables have interconnects and meet the IEEE 1394 specification, which is also commonly known as FireWire, on one or both ends of the cable. These devices are often used to transmit data to and from a computer and external devices. While not commonly in use today, some older equipment may still have active connection points.

It is a serial interface standard with video data transmission speed developed by the IEEE standardization organization. It supports hot plugging of external devices, provides power to peripherals, eliminates the need for built-in power supply, and supports data synchronization transmission.

IEEE-1394 has significant advantages over other transmission cables of its time, including :
(1) Transmitting data in digital form;
(2) Support hot swapping;
(3) Adopting a bus structure with read/write mapping space;
(4) Better compatibility, compatible with interfaces such as SCSI, RS232, IEEE-1284, etc.
(5) Other advantages include smaller connectors, easy installation, and no patent issues.

IEEE-1394 Firewire Cable, Type 1 Male/Type 1 Male (6-pin)

Aluminum foil and braided dual shielding are used to maximize the prevention of electromagnetic interference/radio frequency interference. The molded back shell provides durability and improves strength for cable entry points.

Self locking IEEE-1394 live Wire Cable, Type 1 Male/Type 1 Male (6-pin)

The self-locking connector provides mechanical retention to engage the connector, ensuring reliable connection every time. The connector can be easily separated by lowering the release mechanism. And it is equipped with gold-plated contacts to provide reliable connections for repeated insertion.

The following three models have a similar structure to the 6-pin model, using aluminum foil and braided double shielding, and adopting a molded shell to improve durability.

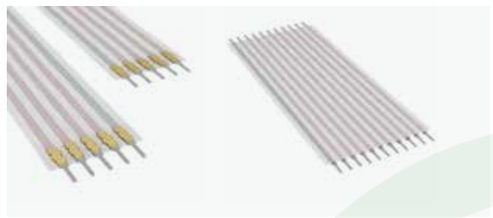
IEEE-1394 live wire cable, Class 1 (6-pin) to Class 2 (4-pin) connectors

IEEE-1394b live wire cable, B-type male (9-pin) -1-type male (6-pin)

IEEE-1394b live wire cable, B-type male head (9-pin) - B-type male head

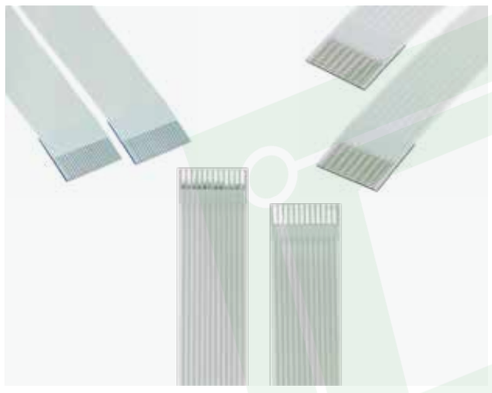
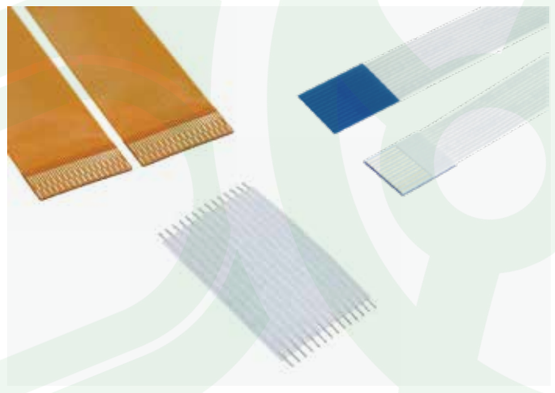
K Flat Flex Jumpers, Cables (FFC, FPC)

Flat Flex Cables (FFC, FPC) FFC cables are a series of single flat conductor wires placed parallel to each other and molded together. The cables have a pitch of 0.050" (1.27mm) or 0.100" (2.54mm) with the number of contact ranging from 2 to 55 in lengths from 5' (1.52m) to 500' (152.4m). The FFC cables have assemblies with a contact termination of receptacle to receptacle, receptacle to solder tab, or solder tab to solder tab.

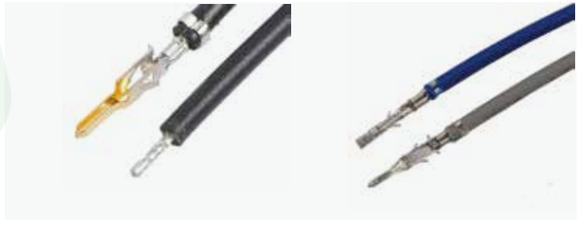
L Flat Flex Ribbon Jumpers, Cables

Lengths of flat, thin cable which house flat conductors placed parallel to each other that have the conductors exposed on both ends of the cable.

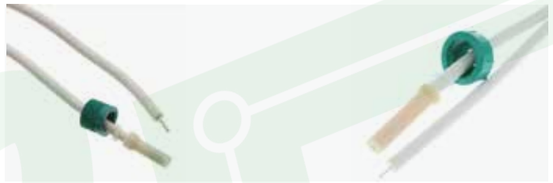
M Jumper Wires, Pre-Crimped Leads

Jumper Wires or Pre-Crimped Leads are single conductor devices with the same or different contact ends. The wire leads measure in length from 2.00" to 18.0" with wire gauges of 8 AWG to 32 AWG and wire colors of black, blue, brown, gray, green, green-yellow, orange, red, slate, violet, white, and yellow.

N LGH Cables

LGH Cables are circular or rectangular connectors used for high voltages from 4.5 kV to 50 kV, in lengths from 3.94* (100.00 mm) to 40.03' (12.20 m), shielded or unshielded in wire gauges of 6 AWG to 26 AWG.




Color - Cap	Black / Gray / Green / No Cap / Red
Color - Wire	Black / Blue / Brown / Green / Multiple Colors / Red / White / White, Yellow Stripe / Yellow
Material - Cap	Aluminum / Aluminum Alloy / Brass / Epoxy / Epoxy , Glass Filled / Polycarbonate / Polyester , Glass Filled / Silicone Rubber

O Modular Cables

Modular cable assemblies consist of a length of appropriate cordage terminated with a style of interconnect product known as a "modular connector". Commonly used in telecommunications applications such as wired Ethernet and telephone networks, modular cables can be broadly divided into two classes based on their use of flat or round cable types. Flat modular cables provide ease of termination at cost of electrical performance and are used in low-speed applications such as baseband voice communications; whereas round cables (having their inner conductors twisted together in pairs) can be used for high-speed applications such as gigabit Ethernet.


P Pluggable Cables

Products in the pluggable cable family are connectorized lengths of suitable cable materials designed to meet industry standard specifications and used primarily for interconnecting computer hardware and data network infrastructure components. Products based on electrical and optical interconnections are represented, including SATA, eSATA , SFP, SFP+, micro SFP+, PCIe, QSFP, and others.


Q Power, Line Cables and Extension Cords

Power, Line Cables and Extension Cords are cables with interconnects on one or both ends. The interconnects on these devices are designed to transfer power from a wall outlet to an external equipment. The connector types are AFSNIT 107-2-D1, AS3112, BS 546, BS1363, CEE (7/16, 7/4, 7/7, 7/VII), CEI 23-(16/7, 50), IEC 309, IEC 320, IEC 62196, IEC 884, IRAM (2063, 2073), NEMA (1, 10, 14, 5, 6, L14,L15, L16, L21, L5, L6), SANS, SEV, and SI 32.


R Rectangular Cable Assemblies

Rectangular cable assemblies contain a rectangular interconnect on one or both ends of a specified length of cable. Connector types include card edge, DIP, PCB, plug, SAE, socket, etc. Cable lengths range from 1/2 inch to over 80 feet. Usages include adapters, extensions, power splitter, patch, board in, etc.


Cable Termination	Crimp, IDC, Solder
Contact Finish	Brass / Gold / Gold, GXT™ / Gold, Tin / Nickel / Palladium / Palladium-Nickel / Silver / Tin / Tin-Lead

S Smart Cables

Smart Cables are cables with interconnects on one or both ends that have electronic components built into one or both of the terminating connectors. The characteristics are usage, convert from, convert to, length, and shielding. The usage includes USB null modem, USB to IEEE 1284, USB to MPSSE, USB to RS232, USB to RS422, USB to RS485, USB to TTL Serial (1.8V,3.3V,5V), USB to UART, and USB to UART/ Raspberry Pi (RPi).

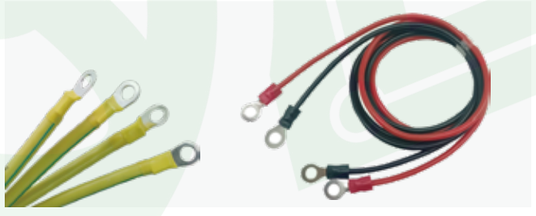

T Solid State Lighting Cables

Solid state lighting cables are designed to work with specific solid state lighting equipment. There are a variety of connector options, color options, lengths, and features. Connector options are: blade and receptacle - multi position, outlet - mini HVL, plug - mini HVL, sockets, etc. Each of the connector types offer different position options.


Color	Black / Black, Red / Black, White / Blue, White / Brown, Red / Multiple / Multiple, Individual / Natural, Orange Stripe / Red / Red, White / White

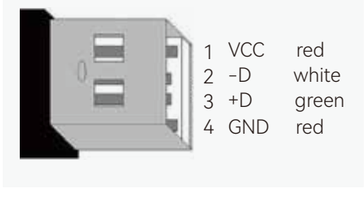
U Specialized Cable Assemblies

Products in the specialized cable assembly family incorporate cordage and connectors in combinations that are purpose specific, non-standard, uncommon, or which are otherwise ill-suited for classification among cable assemblies of some other type. Grounding and bonding straps, photovoltaic power cables, and backplane cables are among included products.




V USB Cables

USB Cables have a USB interconnects on one or both ends of the cable. These devices are often used to transmit data to and from a computer and external devices or used to power/charge an electronic device. The characteristics are configuration, length, specifications, wire gauge, shielding, and style with configurations of female to female, female to male, male to male, female to cable, and male to cable using USB-A female/male, USB-B female/male, micro B female/male, micro A female/male, C female/male, mini A female/male, mini B female/male, and power male plug.



USB interface definition

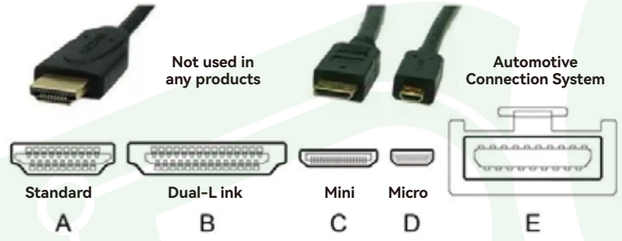
Video Cables (DVI, HDMI)

Video Cables (DVI, HDMI) have interconnects on one or both ends of the cable. These devices are often used for connecting to or between video sources. The characters are connector type, length, cable type, shielding, and usage. The usages are CCD camera, digital visual interface, high definition multimedia interface, multi media, patch, and Raspberry Pi.

It is a fully digital video and audio transmission standard that can provide high-definition video and multi-channel audio signals. The HDMI interface transmits uncompressed audio and video signals through a single cable, simplifying the connection process and improving signal quality.

There are multiple specifications for HDMI interfaces, including HDMI Type A (Standard HDMI), HDMI Type B, HDMI Type C (Mini HDMI), and HDMI Type D (Micro HDMI).

HDMI:

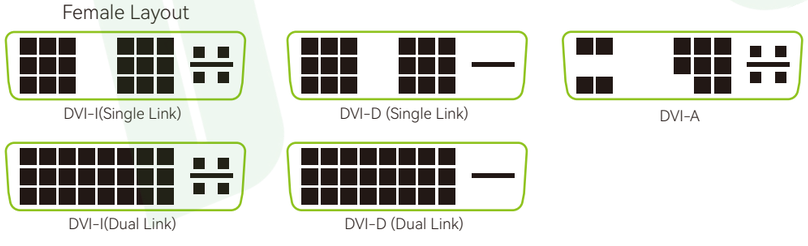


DVI is a video interface standard designed to transmit uncompressed digital video. Widely used in display devices such as LCD and digital projectors. The DVI interface can send uncompressed digital video data to display devices. This specification is partially compatible with the HDMI standard.

In addition to the digital signal pins specified by the DVI standard, DVI connectors can also include pins for traditional analog signals (VGA). This design is to maintain the universality of DVI so that different forms of displays can share the same connection cable. With different implementation functions, DVI connectors are divided into three types:

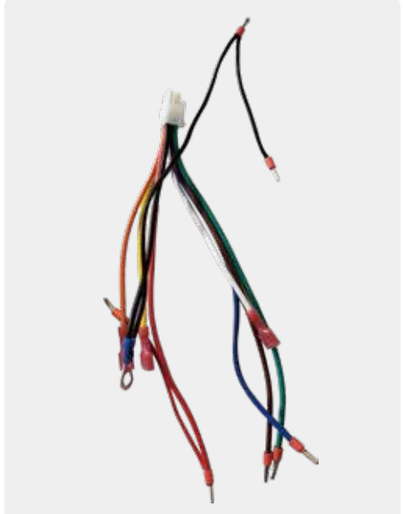
DVI-D (Digital Digital Signal); Single link or dual link)
DVI-A (Analog Analog Signal)
DVI-I (Integrated Hybrid); Both digital and analog signals are acceptable; Single link or dual link)

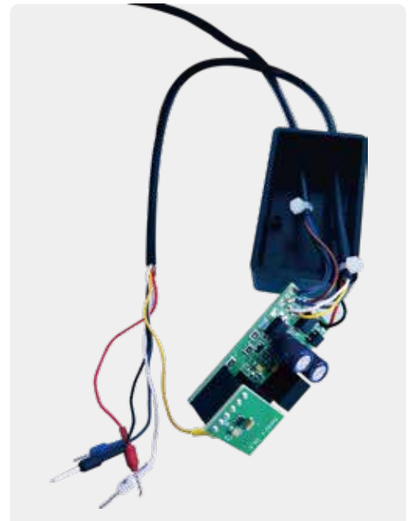
DVI Interface :



Customized Cable Components

Ping Cable v2





03 APPLICATION
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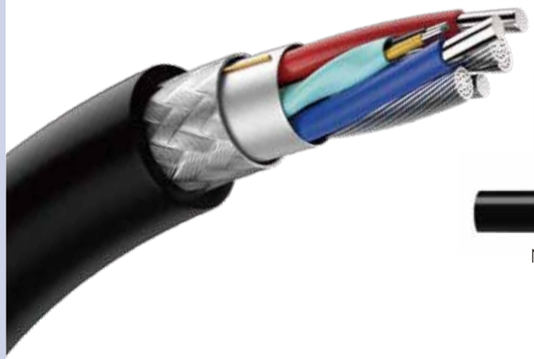
Barrel Connector Cables

Application

Intelligent Connection Cable Solution




Intelligent security cable


Audio cable


Network cable

Green Energy Cables

Photovoltaic connection line

Y-shaped tee connecting line

Special photovoltaic extension cord for solar panels

MC4 photovoltaic connector

Controller-battery cable

Medical Harness

Mixed cable for patient monitoring instruments

Cable suitable for multifunctional C-arm

Medical spring cable

Robot Cables

5 million to 2 million
high flexibility drag chain cables

Servo coding line
servo power cable

Industrial communication cables
CAN BUS, CC-LINK

Industrial Ethernet (Ethernet cable)
CAT5e、CAT6、CAT6A、 CAT7、 CAT8

EV Charging Cables

Electronic wiring for
new energy vehicles

New energy vehicle charging
gun cable

Automotive connection cable

Controller-battery cable

Automotive high-voltage cable

DC charging cable

Automotive Interior Cable Solution

New energy hybrid cable

New energy high-temperature internal wires and cables

Data transmission electronic cable

Automotive internal electronic wiring

Security Cables

Video cable

PTZ control cable

Camera power cable

Monitoring cable

RVVP audio cable

04 WHAT DO WE NEED FOR **CABLE ASSEMBLY?**

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1. PDF drawing including below :

- Bill of Materials
- From xx to xx connection of each connectors
- Notes about cable assembly if needed
- Cable (Manufacturer, Color, Gauge)
- Cable length

2. Or cable samples for our engineering and production team

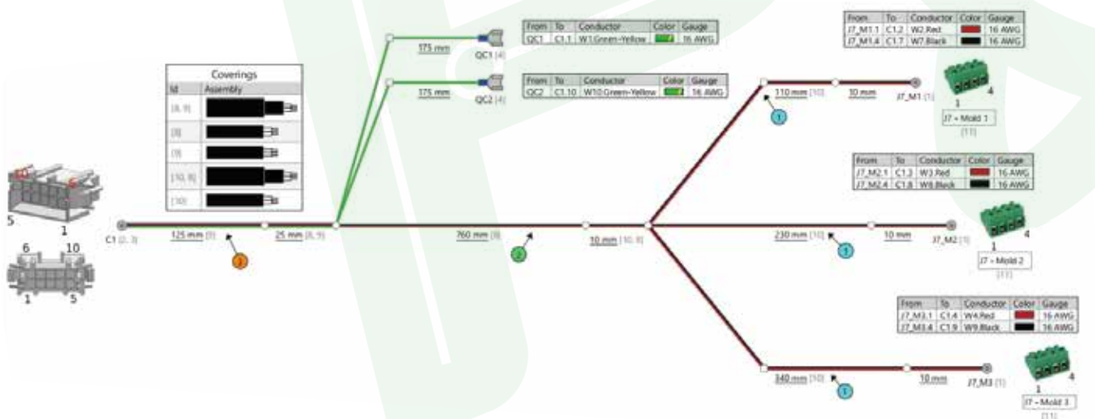
(See below some drawings for your reference)

No.1

Revisions			
Rev.	Date	Author	Description
C	2021-05-14	amaud noblesse	Remplace le cable 6 conducteurs pa 6 fils. Ajoute de la agine thermoretractable pour proteger les fils.
B	2019-02-08	LC	
A	2018-12-11	LC	

Bill of Materials				
Id	Type	Manufacturer	Part Number	Quantity
1	Connector	Phoenix Contact	1934887	3
2	Connector	Molex	1506-0106	1
3	Contact	Molex	46012-3242	8
4	Quick Connect Terminal	Molex	19017-0037	2
5	Wire	Alpha Wire	6716 RD005	3515mm
6	Wire	Alpha Wire	6716 BK005	3470mm
7	Wire	Alpha Wire	6716 GY005	650mm
8	Tubing	3M	FP301-1/2-48" -Black	795mm
9	Tubing	3M	FP301-3/4-48" -Black	150mm
10	Tubing	3M	FP301-1/4-48" -Black	690mm
11	Label	Brother	TZEN201	60mm

From	To	Conductor	Color	Gauge	From Contact PN
C1.1	QC1	W1.Green-Yellow		16 AWG	46012-3242
C1.2	J7_M1.1	W2.Red		16 AWG	46012-3242
C1.3	J7_M2.1	W3.Red		16 AWG	46012-3242
C1.4	J7_M3.1	W4.Red		16 AWG	46012-3242
C1.7	J7_M1.4	W7.Black		16 AWG	46012-3242
C1.8	J7_M2.4	W8.Black		16 AWG	46012-3242
C1.9	J7_M3.4	W9.Black		16 AWG	46012-3242
C1.10	QC2	W10.Green-Yellow		16 AWG	46012-3242



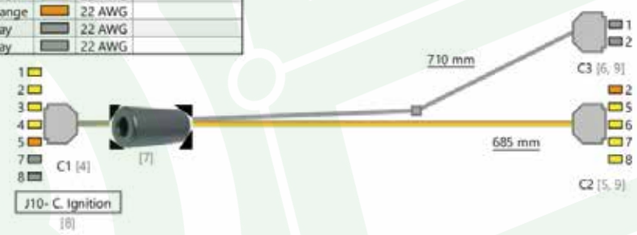
No.2

Revisions			
Rev.	Date	Author	Description
A	2020-06-25	amaud noblesse	First Release

Id	Type	Manufacturer	Part Number	Quantity
6	Connector	Molex	10-01-3026	1
5	Connector	Molex	10-01-3086	1
4	Connector	Phoenix Contact	1934926	1
9	Contact	Molex	39-00-0022	7
7	Ferrite	Laird	28B0590-000	1
8	Lable	Brother	TZEN201	1
2	Wire	Alpha Wire	6713 OR005	685mm
3	Wire	Alpha Wire	6713 SL005	1420mm
1	Wire	Alpha Wire	6713 YL005	2740mm

From	To	Conductor	Color	Gauge	From Contact PN
C1.1	C2.5	W4.Yellow		22 AWG	
C1.2	C2.6	W3.Yellow		22 AWG	
C1.3	C2.7	W2.Yellow		22 AWG	
C1.4	C2.8	W1.Yellow		22 AWG	
C1.5	C2.2	W5.Orange		22 AWG	
C1.7	C3.1	W6.Gray		22 AWG	
C1.8	C3.2	W7.Gray		22 AWG	

From	To	Conductor	Color	Gauge	From Contact PN
C3.1	C1.7	W6.Gray		22 AWG	39-00-0022
C3.2	C1.8	W7.Gray		22 AWG	39-00-0022



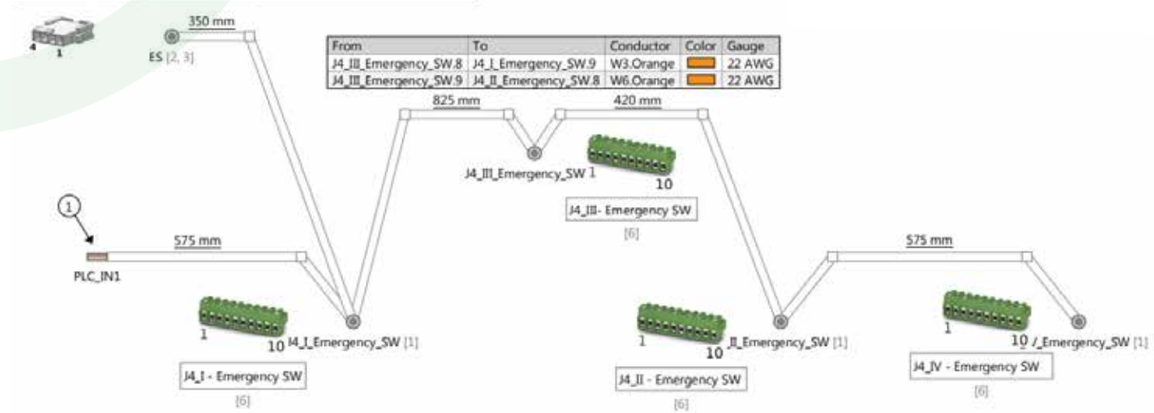
From	To	Conductor	Color	Gauge	From Contact PN
C2.2	C1.5	W5.Orange		22 AWG	39-00-0022
C2.5	C1.1	W4.Yellow		22 AWG	39-00-0022
C2.6	C1.2	W3.Yellow		22 AWG	39-00-0022
C2.7	C1.3	W2.Yellow		22 AWG	39-00-0022
C2.8	C1.4	W1.Yellow		22 AWG	39-00-0022

No.3

Revisions			
Rev.	Date	Author	Description
B	2020-12-01	arnaud noblesse	Ajust length
A	2020-07-17	arnaud noblesse	Initial release

Bill of Materials				
Id	Type	Manufacturer	Part Number	Quantity
1	Connector	Phoenix Contact	1934942	4
2	Connector	Molex	39-01-4043	1
3	Contact	Molex	39-00-0433	2
4	Wire	Alpha Wire	6713 OR005	2745 mm
5	Wire	Alpha Wire	6713 YL005	350 mm
6	Label	Brother	TZEN201	200 mm

From	To	Conductor	Color	Gauge	From Contact PN
ES.1	J4_I_Emergency_SW.7	W1.Yellow		22 AWG	39-00-0433
ES.2	J4_I_Emergency_SW.8	W2.Orange		22 AWG	39-00-0433



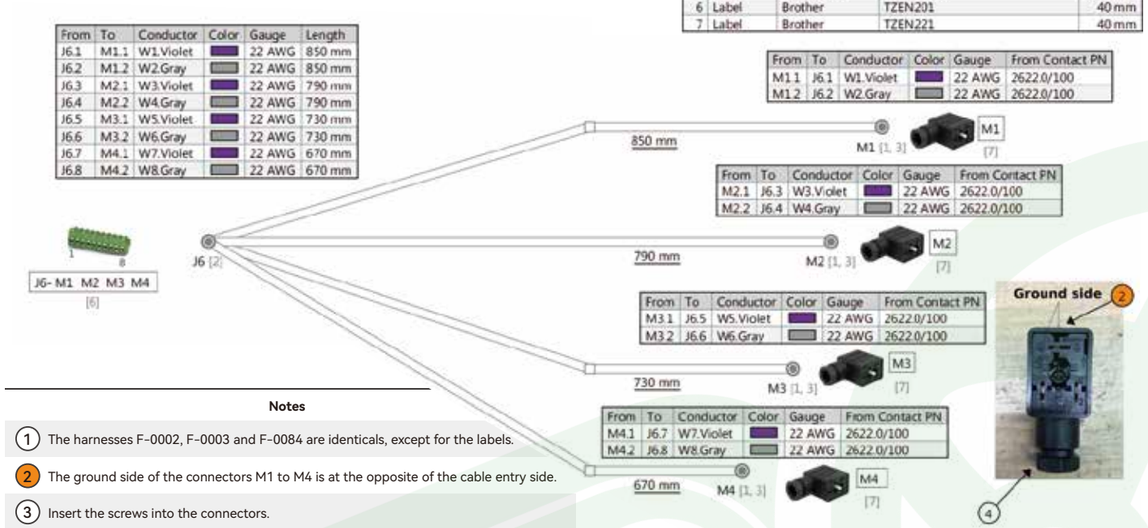
From	To	Conductor	Color	Gauge
J4_I_Emergency_SW.7	ES.1	W1.Yellow		22 AWG
J4_I_Emergency_SW.8	ES.2	W2.Orange		22 AWG
J4_I_Emergency_SW.9	J4_III_Emergency_SW.8	W3.Orange		22 AWG
J4_I_Emergency_SW.10	PLC_IN1	W4.Orange		22 AWG

From	To	Conductor	Color	Gauge
J4_II_Emergency_SW.8	J4_III_Emergency_SW.9	W6.Orange		22 AWG
J4_II_Emergency_SW.9	J4_IV_Emergency_SW.8	W5.Orange		22 AWG

No.4

Revisions			
Rev.	Date	Author	Description
F	2020-06-26	arnaud noblesse	- Add Connectors Hirschmann M1, M2, M3 and M4 - Ajust M2, M3 and M4 wires length
A	2015-04-07	arnaud noblesse	First Release

Bill of Materials				
Id	Type	Manufacturer	Part Number	Quantity
1	Connector	Hirschmann	932977100 GM 209 NJ SCHWARZ	4
2	Connector	Phoenix Contact	1934926	1
3	Contact	Altech	2622.0/100	8
4	Wire	Alpha Wire	6713 SL005	3040 mm
5	Wire	Alpha Wire	6713 Vl005	3040 mm
6	Label	Brother	TZEN201	40 mm
7	Label	Brother	TZEN221	40 mm



Notes

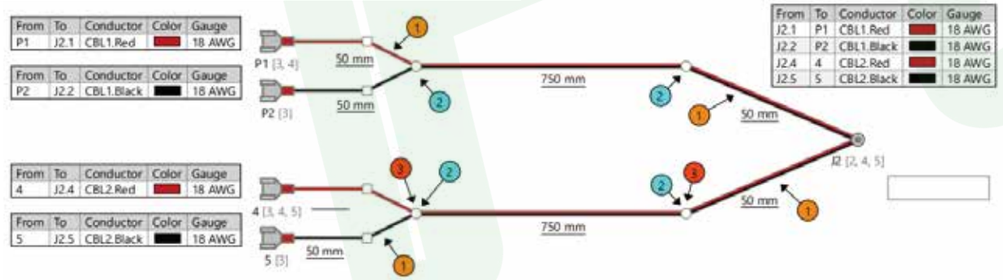
1. The harnesses F-0002, F-0003 and F-0084 are identicals, except for the labels.
2. The ground side of the connectors M1 to M4 is at the opposite of the cable entry side.
3. Insert the screws into the connectors.
4. Screw the strain relief of the connectors M1 to M4.

No.5

Revisions

Rev.	Date	Author	Description
C	2021-05-13	amaud noblesse	Diver correctifs. Change 1 cable 4 conducteurs pour 2 cables 2 conducteurs.
B	2019-12-01	LC	Ajustement longueur. Note: Pas sur que cette version ait ete produite.
A	2018-12-06	LC	Initial Release

Id	Type	Manufacturer	Part Number	Quantity
1	Cable	Alpha Wire	881802 SL005	1700mm
2	Connector	Phoenix Contact	1934890	1
3	Quick Connect Terminal	Molex	19003-0001	4
4	Heat Shrink	3M	FP301-3/8-48" -Black	120mm
5	Heat Shrink	3M	FP301-1/4-48" -Red	20mm
6	Lable	Brother	TZEN201	25mm



Notes

1. Degainer sur 50 mm.
2. Ajouter 30 mm de gaine thermoretractable a cheval sur la gaine.
3. Ajouter 10 mm de gaine thermoretractable rouge pour discriminer les 2 cables.

No.6

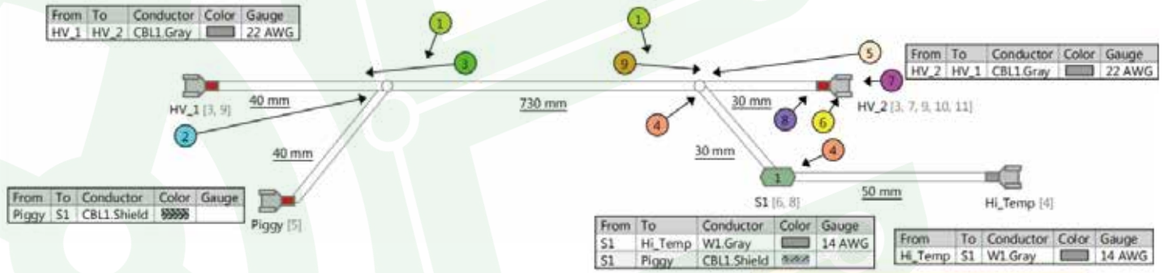
Revisions

Rev.	Date	Author	Description
D	2021-06-16	amaud noblesse	Ajoute des notes d'assemblage
B	2016-08-23	amaud noblesse	Wire change to coaxial
A	2015-07-03	amaud noblesse	Initial Release

Bleu

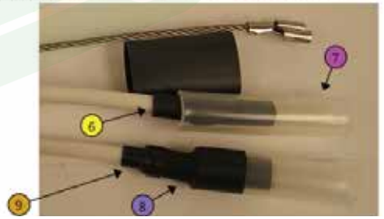
Bill of Materials

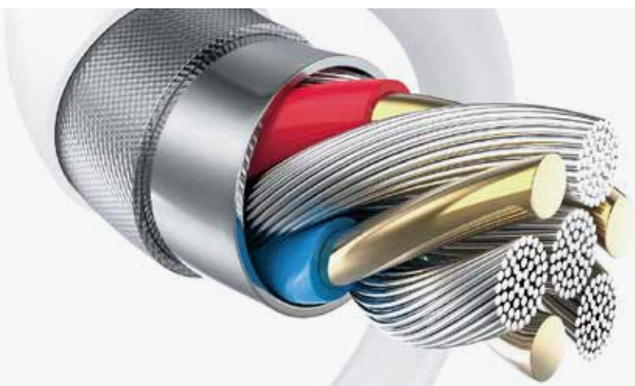
Id	Type	Manufacturer	Part Number	Quantity
1	Cable	Telepro	167-9346 White	800mm
2	Wire	McMaster	3461T633	50mm
3	Quick Connect Terminal	Molex	19002-0016	2
4	Quick Connect Terminal	3M	MU14-250DFHTX	1
5	Quick Connect Terminal	Molex	19011-0035	1
6	Splice	TE Connectivity	31818	1
7	Heat Shrink	3M	FP301-1/4-48" -Black	60mm
8	Heat Shrink	TE Connectivity	DWP-125-1/8-0-STK	55mm
9	Heat Shrink	Raychem	ATUM-6/2-0	90mm
10	Heat Shrink	Raychem	RNF-3000-12/4-0-SP	53mm
11	Heat Shrink	Raychem	RNF-3000-24/8-X-SP	40mm



Notes

1. Commencer par inserer 2 morceaux de 30 mm de gaine thermoretractable 1/4" sur le fil.
2. Inserer 50mm de gaine ATUM jusqu'au blindage, puis la retracter.
3. Glisser la gaine Thermo 1/4" : Recouvrement de 10 mm sur la gaine ATUM.
4. Inserer les 55mm de gaine thermo 1/8" jusqu'au pied du bindage.
5. Inserer 40mm de gaine ATUM jusqu'au blindage, puis la retracter.
6. Placer 28mm de gaine RNF3000 12/4 sur la cosse, puis la retracter.
7. Retracter 40mm de gaine RNF3000 24/8, puis l'inserer sur la cosse sur environ 15mm.
8. Inserer 25mm de gaine RNF3000 12/4 a cheval sur la gaine RNF3000 24/8 pour la maintenir, puis la retracter.





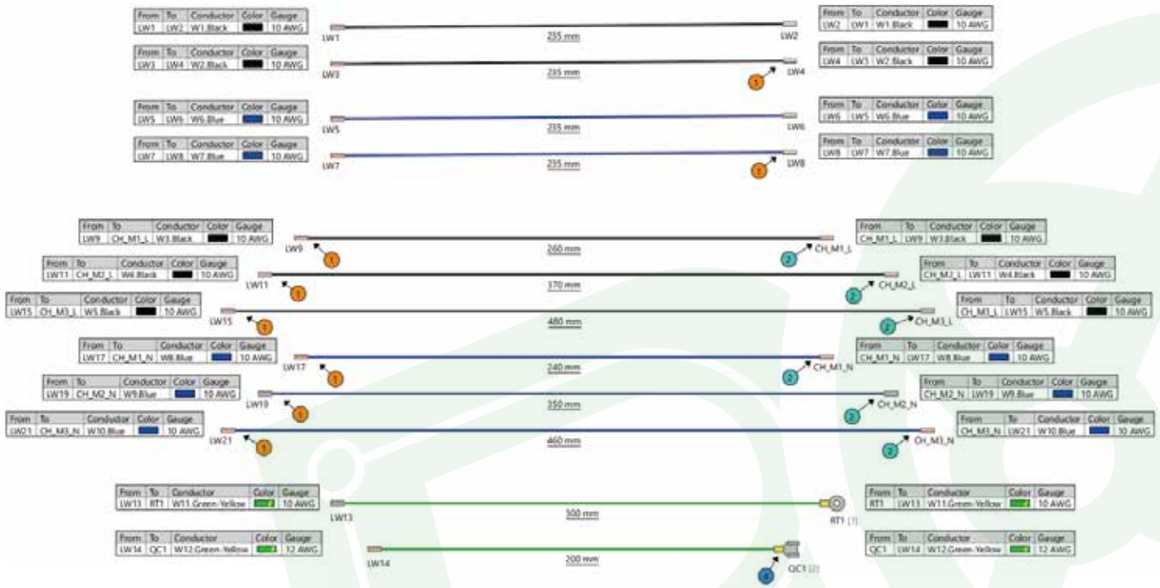
No.7

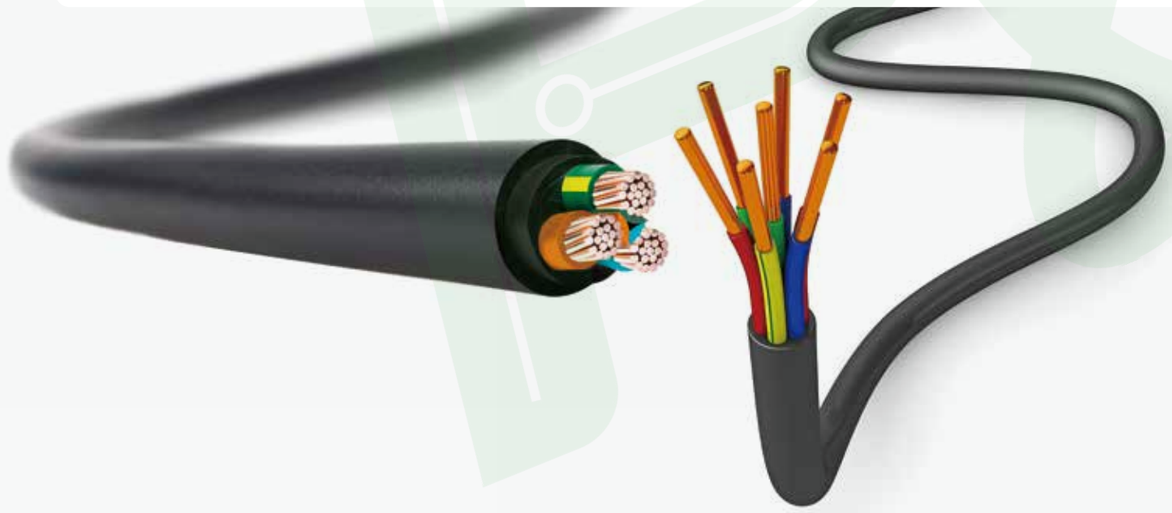
Revisions

Rev.	Date	Author	Description
A	2021-05-17	amaud noblesse	Version Initiale. ==> Remplace F-0090, F-0091, F-0092 et , F-0093 en Monophase.

Bill of Materials

Id	Type	Manufacturer	Part Number	Quantity
1	Ring Teminal	Molex	19070-0132	1
2	Quick Connect Terminal	Molex	19019-0052	1
3	Wire	Alpha Wire	6718 GY005	200mm
4	Wire	Alpha Wire	6719 BK005	1580mm
5	Wire	Alpha Wire	6719 BL005	1520mm
6	Wire	Alpha Wire	6719 GY005	300mm



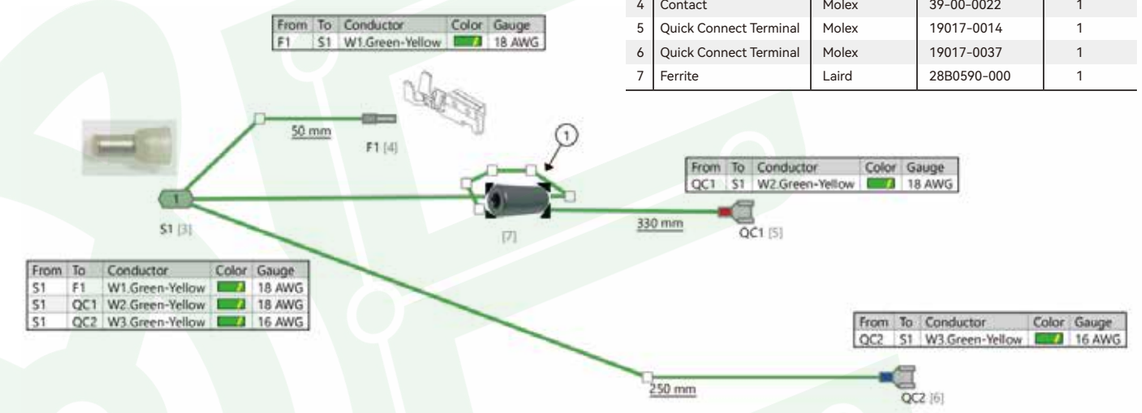


No.8

Revisions

Rev.	Date	Author	Description
A	2017-03-03	amaud noblesse	Initial Release

Id	Type	Manufacturer	Part Number	Quantity
1	Wire	Alpha Wire	6715 GY005	380mm
2	Wire	Alpha Wire	6716 GY005	250mm
3	Splice	Molex	19160-0009	1
4	Contact	Molex	39-00-0022	1
5	Quick Connect Terminal	Molex	19017-0014	1
6	Quick Connect Terminal	Molex	19017-0037	1
7	Ferrite	Laird	28B0590-000	1



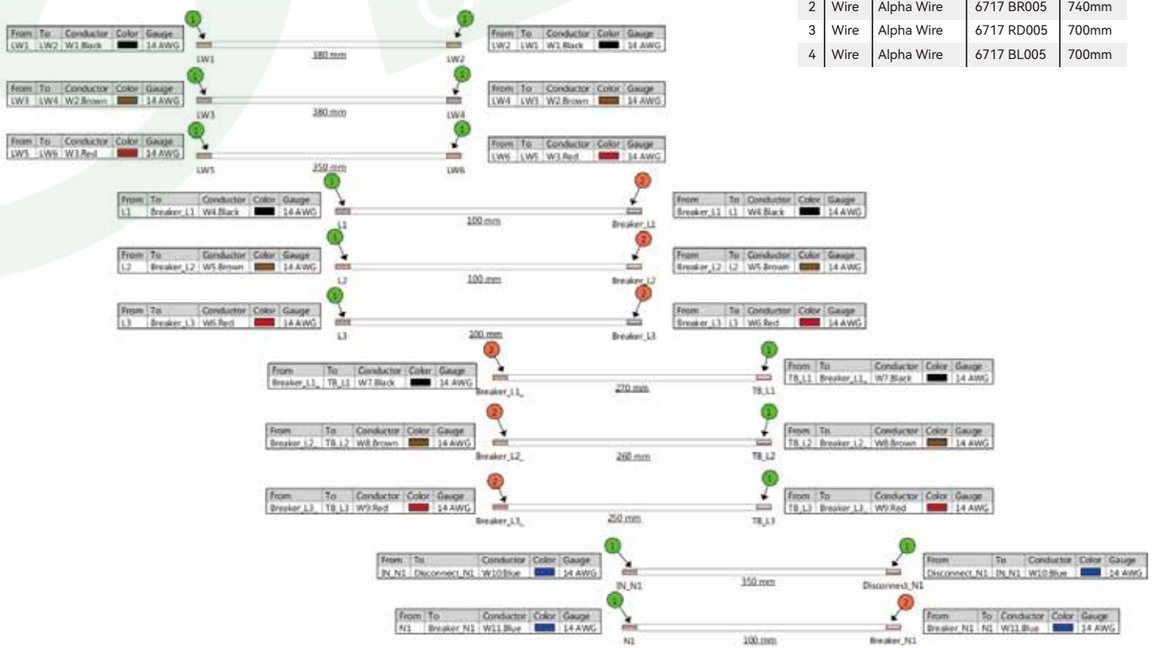
No.9

Revisions

Rev.	Date	Author	Description
	2023-07-11	Michel Brochu	Initial Release

Bill of Materials

Id	Type	Manufacturer	Part Number	Quantity
1	Wire	Alpha Wire	6717 BK005	750mm
2	Wire	Alpha Wire	6717 BR005	740mm
3	Wire	Alpha Wire	6717 RD005	700mm
4	Wire	Alpha Wire	6717 BL005	700mm



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1. Committed to the localization of imported connectors.

2. Connector pitch ranges from 0.5mm to 21.2mm, and current from 0.5A to 50A to provide internal connection system solutions.

3. Connectors are used in communication equipment, medical equipment, automotive electronics, automotive new energy BMS, charging piles, rail transit industries, storage servers, household appliances, smart homes, drones, membrane switches, touch screens/touch buttons, lighting, LED display, Fitness equipment, smart communication equipment and other consumer electronics and smart wearables, security equipment, power supply equipment, radio systems and modern office equipment.

TE connectivity, molex, JST, Amphenol COMMUNICATIONS SOLUTIONS, STOCKO, YEONHO ELECTRONICS, J.A.M., samtec, I-PEX, 3M, Lumberg passion for connections, JAE, HRS, NICOMATIC, KIET, Fujikura, SMK, HARWIN, KYOCERA

03 CONNECTORS CATALOGUE

www.poe-pcba.com

A D-Sub, D-Shaped Connectors

D-subminiature connectors are named for the D-shaped shroud present at their mating end and the relatively high interconnect density offered at the time of their introduction. Products in this family, which are described as "connectors", incorporate the electrical contacts and the insulation system holding them in position as an integral unit. They are commonly used for board mount applications, although they can also be used for solder terminated cable mount.

D-DMRC15PM-E001

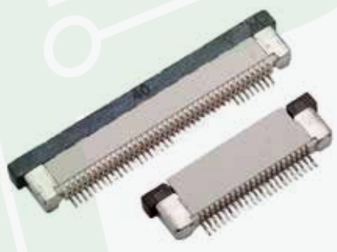
DMRC-15P Second Row Male Head
Bend insertion
Car needle
Rivet lock screw
Full gold
Bending 7.2
With black adhesive baffle
White rubber core

B FFC, FPC (Flat Flexible) Connectors

Products in this family are interconnect products used in conjunction with Flat Flexible Cable (FFC) and Flexible Printed Circuit (FPC) materials and are predominantly of the sort which perform a cable-to-board interconnect function, being mounted to a printed circuit board, and providing both electrical connection and mechanical retention for an inserted FFC or FPC cable.

0.5FPC Connector

Product type: FPC0.5-XP
Spacing: 0.5mm
Needle count: 4-60P
Rated current: 0.4A
Rated voltage: 50V
Contact resistance: 20 Milliohms Max
Insulation resistance: 500 MQ2 Min
Working temperature range: -25oC+85oC
Voltage endurance: 200V AC r.m.s
Metal material: brass/phosphor bronze
Electroplating type: Conventional tin plating, gold plating with minimum order quantity



C Fiber Optic Connectors

Fiber Optic Connectors are the ends used to terminate optical fiber cables. The connector styles are DNP, ESCON, FC, FDDI, FSD, FSMA, LC, MPO, MT-RJ, MU, SC, SCRJ, SCRJ and Power Jack, SMA, ST, TNC, and VF-45. The mode options are multimode (OM1, OM2, OM3, OM4), POF, and Singlemode (OM1). These connectors accept fiber core diameters ranging from 3 µm to 1000 µm.

Fiber Optic Connectors

Product subcategory: C1802 series
Product spacing: 6.00mm (. 236in)
Material - Resin and Flame Retardant: Nylon 66 UL94V-0
Working voltage (VAC/DC): 300
Rated current per contact (Max) (A): 15

D Heavy Duty Connectors

Heavy Duty Connectors are known for their large size, current, and voltage ratings. These are typically rectangular in shape and come in a variety of position options. Included in the category are accessories, full assemblies, contacts, frames, housings, inserts, and more.

16 pin, perforated base with cover, side outlet M25 kit

Crimping method: screw crimping
Shell opening method: docking and ejecting
Circuit: 16
Supply voltage: 250V
Working current: 16A

E Keystone Connectors

Keystone Accessories are supplementary items used with keystone connector types like adapters, backup plate/Herman Miller, blank faceplate, blank insert/module, cover, cover/icon, DIN rail adapter, ground clip to wire, housing, icon wheel, jack housing, label/designation strip, marker tag, terminal block, and terminal module in assorted colors.



F LGH Connectors

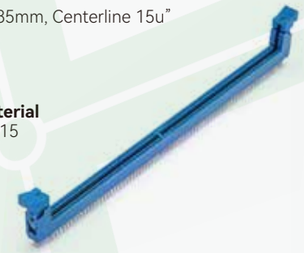
Products in the LGH connector family are specialized interconnect products used for high voltage applications involving electric potentials of a few kV to several tens of kV. Based on a circular connector design, single- and multi-position connectors are available. Products in this family include bulkhead/application mounted and cable mounted connector types for use with suitable cabling material.

Style: LGH
Connector Type: Body Seat
Pin count: 2
Shape: Rectangular
Installation type: Free hanging


G Memory Connectors

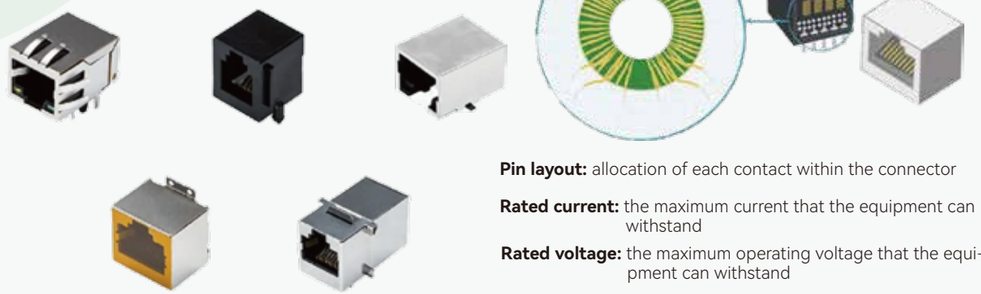
Memory Connectors are an interconnect system created for use with memory products. Included in this category are Inline Module Sockets, PC Card Sockets, PC Card Adapters, and Accessories. When looking for connectors to be used in tandem with SDRAM, DDR, DRAM, RAM, SGRAM, SD, miniSD, etc. Memory Connectors are where they are found.

Description: HSG&BLK LATCH 0.85mm, Centerline 15u"
Number of Positions: 288
Centerline (spacing): 0.85mm
Thickness of electroplating material in terminal bonding area (µin): 15




H Modular Connectors

Modular connectors are a series of standardized interconnect products commonly used in wired information and telecommunications networks. Those in this family are receptacles which integrate magnetic components needed for common applications such as Ethernet. Plugs and receptacles/jacks which do not integrate these magnetic components which are used for low-speed applications such as voice networks are catalogued separately.This category includes Adapters, Jacks, Plugs, Housings, Wiring Blocks, Accessories, and More.



Pin layout: allocation of each contact within the connector
Rated current: the maximum current that the equipment can withstand
Rated voltage: the maximum operating voltage that the equipment can withstand
Contact size: defines the maximum diameter wire that a connector can accommodate
Number of contacts: always even

I Photovoltaic (Solar Panel) Connectors

Photovoltaic Connectors are designed specifically to be used with solar panels. The types of connectors include combiner box, converter receptacle, end cap, female coupler, male coupler, junction box, and socket.

Photovoltaic (Solar Panel) connector accessories are designed to add features, provide protection or adapt between solar panel connector types. Added features may include dust caps, filler and fuse plugs, grounding bolts, clips and lugs, locking collars, latches, junction boxes, safety clips and test plugs. Some accessories provide coding or keying elements such as minus and plus symbols or coloration.

Model: Photovoltaic MC4 connector 1500V
Connector type: photovoltaic line connector
Contact coating: 275
Contact material: Oxygen free copper
Core material: Copper plated with tin, open type
Working current: ≤ 35A
Working voltage: ≤ 0.5MΩ

J Pluggable Connectors

Products in the pluggable connector family are of types commonly used for internal computer and network infrastructure cable-to-board applications. Example connector types include CFP, QSFP, SAS, SAS Mini, SATA, SFP, and others.

Interface type: AC/DC
Card reading type: CF
Exterior structure: Straight type
Production process: Cold pressing

K Rectangular Connectors

Rectangular Connectors include a wide variety of connector solutions for power, data, and signal applications. As the name implies, they are rectangular in shape, available in multiple mounting options and can provide ease to the design process. Many of the most commonly found connectors and connector accessories fall into this category.

Rated current: 16A
Rated voltage: 250V/400V
Wiring form: screw crimping

L Shunts, Jumpers

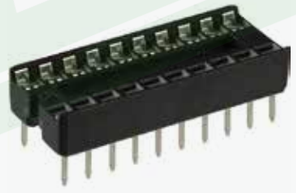
Shunts or Jumpers are designed to connect two pin contacts for an electrical connection that are separated by a specific distance or pitch. The types are Closed Top/Grip, Insulated, Non-Insulated, and Open Top/Grip with a pitch range from 0.050" (1.27mm) to 1.00" (25.40mm) and the number of positions ranging from 1 (1 x 1) to 48 (1 x 24) or 4 (2 x 2) to 26 (2 x 13).

Usage environment: -40~60 ° C, relative humidity ≤ 95% (35 ° C)
Overload performance: rated current of approximately 120% for about 2 hours
Rated voltage: 50mV, 60mV, 75mV, 100mV
Load temperature: Temperature rise tends to stabilize.
Current below 50A ≤ 80 ° C,
rated current above 50A ≤ 120 ° C

M Sockets for ICs, Transistors

Sockets provide for repeated insertion, removal, substitution, and replacement of Integrated Circuits (ICs) and transistors in a circuit. Mounting types include chassis, panel, connector, board surface and through-hole. Socket features include board guides, carriers, flanges, and open and closed framing. They are differentiated by post pitch, contact material and finish, termination style and contact finish.

Pin position or number of pins: 20 (2 x 10)
Spacing - Matching: 0.100 "(2.54mm)
Contact Material - Matching: phosphor bronze
Installation type: through-hole
End connection: welding
Spacing: 0.100 "(2.54mm)
Working temperature: -55 ° C~85 ° C
Terminal column length: 0.124 "(3.15mm)
Rated current (ampere): 1A
Contact resistance: 30 milliohms



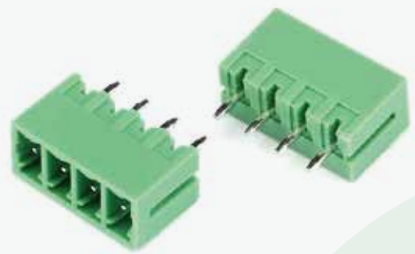
N Solid State Lighting Connectors

Products in the solid-state lighting connector family are interconnected products designed and marketed with particular focus on the needs of LED-based illumination applications. In general, this implies a focus on low product and assembly costs, predominantly for wire-to-board applications with relatively low mating cycle life expectancies and current capacities of a few amperes or less.

Rated voltage: 400VAC
Rated current: 5A
Working temperature range: -40-105 ° C

O Terminal Blocks

Terminal Blocks are insulated, modular style connectors that are used to secure a connection between two or more wires. They come in various configurations and termination styles including wire to board, panel mount & more. These are often used in high-current applications, but their purpose is simply to create safe electrical connections.



P Terminal Junction Systems

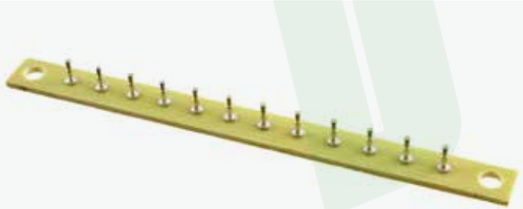
Products in the terminal junction system family are a system of environmentally resistant interconnect products used for the interconnection of wiring and incorporation of passive components, commonly pursuant to or derived from the MIL-T-81714 standard. Sizing designations for the contact systems used in this interconnect family are similar to those used for MIL-spec circular connectors.

Communication terminal equipment connector

Needle count: 4 cores
Number of cores: 4 cores
Features: Waterproof
Application field: Network communication
Application scope: PCB

Q Terminal Strips and Turret Boards

Products in the terminal strip and turret board family are interconnect products consisting of an array of solderable terminals or terminal posts mounted to a sheet of insulating material, most commonly used as a junction point between the inner workings of a device or system and the external wiring connected to it during the course of installation. Relatively simple and inexpensive to produce, they're often found in older equipment, though solderless terminal blocks are generally preferred for such tasks in modern applications.



R Terminals

Terminals are the endpoint of a wired connection. These include barrel or bullet connectors, foil connectors, knife connectors, PC Pin connectors, quick connects, rectangular connectors, ring connectors, screw connectors, solder lug connectors, spade connectors, turret connectors, wire pin connectors, wire splice connectors, wire to board connectors, and more.

952K (BULK)
Quick Disconnect Terminal 14-18AWG Blue F Scotchlok™ Bulk

Ring Connectors

PC Pin, Single Post Connectors

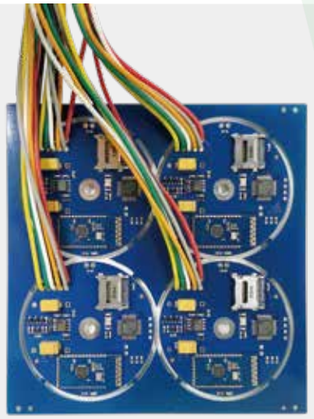
S USB, DVI, HDMI Connectors

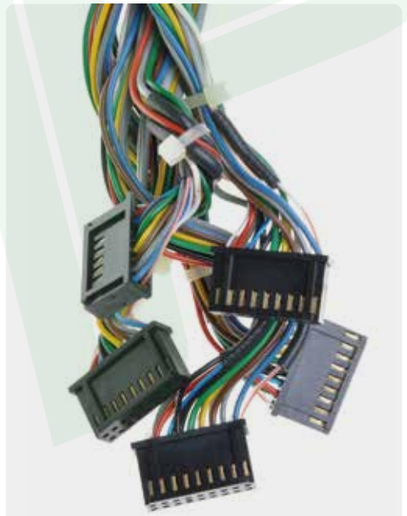
USB, DVI, and HDMI Connectors are devices most often used to provide a connection port between a computer and some other device for audio and video interface. The characteristics being connector type, number of contacts, gender, mounting type, current rating, and voltage rating. The connector types are DisplayPort, DMS-59, DVI- (A, D, or I), Firewire , HDMI (micro, mini), and USB (A, B, C, micro, mini) .

Product : HDMI-19P-STM-A Type - Copper Shell (1310)
Rated current: 1.0A
Contact resistance: 30 Millohns Max
Insulation resistance: 1000M Min
Voltage withstand range: AC 500V
Operating temperature: -40 ℃ -+105℃

Samples Showcase

- Commited to the localization of imported connectors.
- Connector pitch ranges from 0.5mm to 21.2mm, and current from 0.5A to 50A to provide internal connection system solutions.
- Free samples and free freight from China to worldwide.
- 7*24 service of POE engineering suggestions.
- Certified for global products.





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POE is actively practicing social responsibility and exploring sustainable development roads with customers, employees, partners, the environment, and communities.