INGKE
TECHNOLOGY CO. LTD

INGKE TECHNOLOGY CO., LIMITED

Solution of Industrial Connector

M SERIES CONNECTOR

INGKE Technology specializes in producing M-series connector, Circular Connector and waterproof,finished wire harness and OEM/ODM business, to provide customers with a comprehensive professional connection solutions. Since its establishment 1993, with technology as dependence and the market as direction,we have developed to be a competitive high-tech enterprise and a leading manufacturer of connectors.

After years of development, because of excellent products, rich product lines and high cost performance, our company is more and more popular with the majority of customers. In the environment of unmanned driving and industry 4.0,INGKE TECHNOLOGY products are widely used in wind power generation, high-speed rail, automobile manufacturing, intelligent transportation, intelligent manufacturing and so on, and gradually become the backbone of domestic industrial connectors. We has passed the ISO9001 system certification, and the implementation of 6S management policy, effectively ensure the quality of products.

Our company's sales network has been gradually built, and offices will be set up in major cities in China and more partners will be established around the world. We take "professional focus to do a good job in each product" concept, "to the highest quality, sincere service" the purpose of sincere service for customers.

产品目录
DIRECTORY

ISO9001

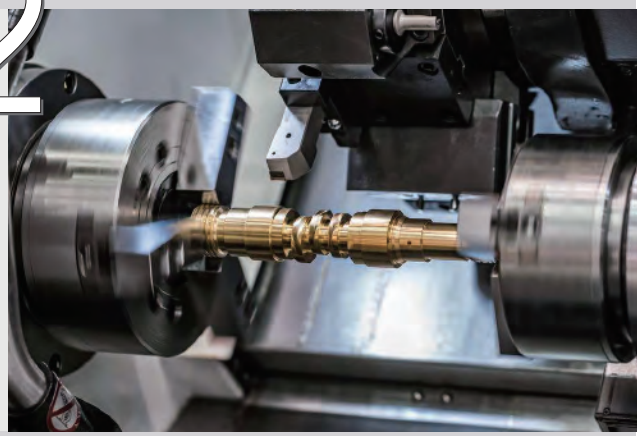
STRICTLY IN ACCORDANCE WITH THE ISO9001 QUALITY MANAGEMENT SYSTEM

1

Experienced R&D Team

From connector research and development, mold making to production and processing, each link is controlled by senior engineers, and the whole team has rich experience in connector and wire harness processing.

2



High quality production and testing equipment

From hardware processing, assembly, welding, injection molding and testing, we purchase advanced production equipment and testing equipment to ensure the production of high quality products, low production defect rate requirements.

3

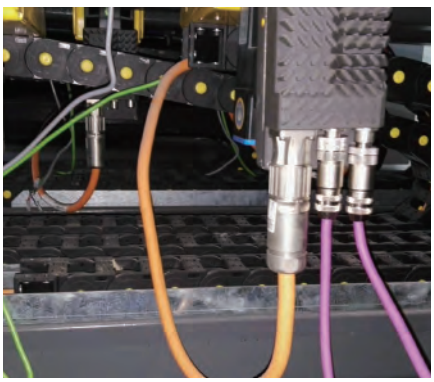
High quality production talents

With the rapid growth of business and the rapid growth of production personnel, we have also established a perfect pre-job training, on-the-job further education and other training systems, so as to create a group of high-quality production talents.

APPLICATION

PROFESSIONAL FOCUS ON PROVIDING A VARIETY OF
SIGNAL、DATA、POWER TRANSMISSION CONNECTORS

SERVO MOTOR



With the trend of networking and movement, the connection mode of servo motor is also upgraded, and the application of the connection demand of drag chain cable and high protection class is accelerated.
The M12 A, D, X, S, T types and The M17, M23 series developed by INGKE TECHNOLOGY meet the needs of various specifications of motors.

INDUSTRIAL CAMERA

The development of the Internet of Things I0T has promoted the rapid development of industrial cameras, which play a pivotal role in the industrial manufacturing and logistics industries. Harsh environment and ultra-high transmission requirements, INGKE TECHNOLOGY developed the M12 connector to better solve the industrial camera connection.

RENEWABLE ENERGY

Energy comes from natural processes. Solar energy, wind energy, geothermal energy, hydraulic power, and some forms of biomass are the most common, cleaner and moresustainable sources of energy. In accordance with the development of renewable energy technology trends, INGKE keeps pace with the times and develops connectors and wire harness assemblies for power, signal and hybrid transmission, which can be used in wind power stations, wind turbines, solarpower stations, inverters, and natural gas, hydraulic power plants, simple toinstall, fast and reliable. Customized solutions provide one-stop service for specific needs.

DESIGN AND MANUFACTURE OF PRECISION PERSONALIZED CONNECTION SOLUTIONS

AEROSPACE & DRONE

To support reliable signal and data transmission under harsh environment about civil aircraft, commercial aviation industry, military aviation, drones, GPS Navigation is the basic requirement for connector.
INGKE' M series and PUSH-PULL products can provide operable solution no matter how the environment is cold, vibration, high radiation, highhumidity.

INDUSTRIAL 4.0

INGKE' sensors/ actuators in the form of connectors, cable harness assemblies are perfectly suited for industrial equipment and machinery. They offer safety in harsh environmental conditions including corrosion, shock vibration, dust, moisture buildup as well as extremely adverse installation situations. The solutions act as a control system providing reliable connections in the key industrial machinery and factory automation markets.

SMART CITY

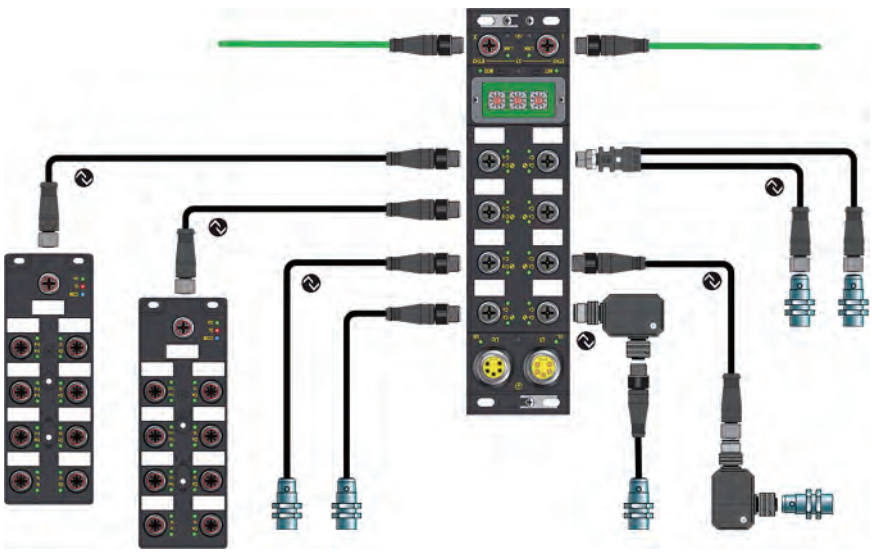
With the popularity of smart city, traffic intelligence, data collection and other industries have higher requirements for video transmission and data transmission. Traffic signals, video surveillance and other connectors and feeder cable have also been a large number of applications.

PROTOCOL

IO-LINK TECHNOLOGY

Standardized data interfaces are more and more widely used in industry to meet the distributed control of complex production systems and the increasing demand for rapid exchange of information and data. Different from the office field, the industrial environment applications put forward very strict requirements for connectors, connection technology and wiring,
INGKE electric products have covered most of the current mainstream network bus protocol and field bus protocol products.

The series of products include assembly, prefabricated cable, through panel mount, PCB board and other types of installation solutions in all aspects.



Schematic diagram of IO-link connection technology

CONNECTION TECHNOLOGY

CONNECTORS OR COMPONENTS FULLY MEETS THE CUSTOMER'S SPECIFICATIONS

Instructions for use: Connectors and accessories are not allowed to be operated with power on or with load under normal use.

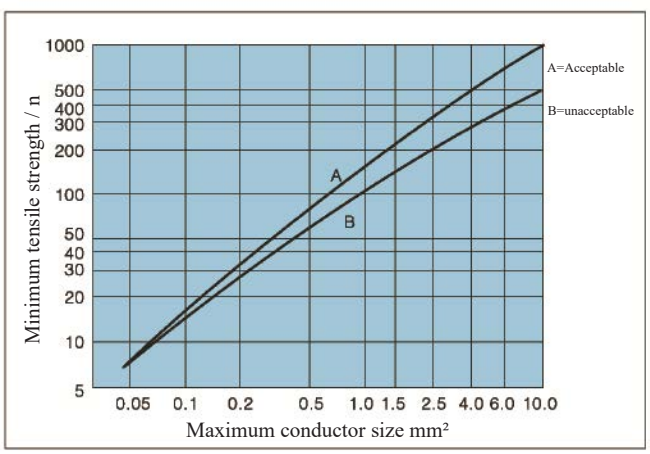
SCREW CONNECTION

- Screw connection is a detachable electrical connection between the guide wire, screw, and terminal. Designed according to DIN/EN 60999/VDE 0609.
- Wide range of applicable wire specifications, no special tools, can be operated on site.

Screw size	M2.5	M3	M3.5
Torque(Ncm)	40	50	60

CRIMP CONNECTION

- Crimp connection is to use crimping tools to physically twist wires and conductors together, is a non-detachable electrical connection. Connection requirements according to DIN IEC 60352 Part 2.
- Suitable for field wiring, high reliability, high connection density characteristics.



SOLDERING CONNECTION

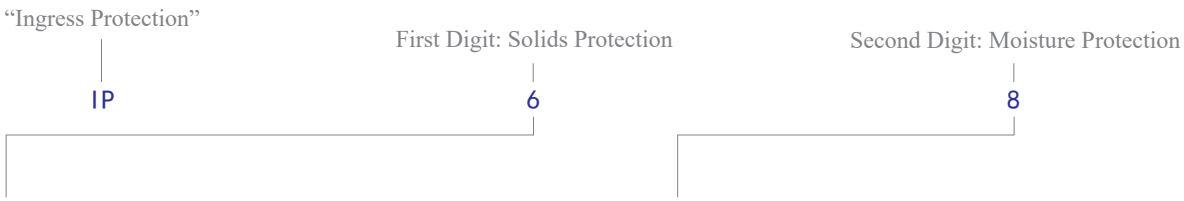
- Welding connections can be wired to conductors via electro-solder irons and weld`ers, or connectors to printed circuit boards.Solder joints and accessories are tested and signed according to DIN EN 60068 part 2-20 operation.
- Suitable for prefabricated cable connection, printed circuit board, easy and fast operation, high pin density.

Ingress Protection

PROFESSIONAL ANTI-SOLID PROTECTION AND IP WATERPROOF PROTECTION

The housing, seals and latching devices on the connector protect the electrical part of the connector from external environmental influences such as shock, foreign bodies, moisture, dust, water or detergents, coolants, oils and other liquids.

BELOW IS A LIST OF PROTECTION LEVELS



Protection Level	First Digit: Solids Protection
0	Not rated for protection against contact or ingress (or no rating supplied).
1	Protection against solid objects larger than 50 mm (e.g. accidental contact with any large surface of the body, but not deliberate body contact).
2	Protection against solid objects larger than 12 mm (e.g. accidental finger contact).
3	Protection against solid objects larger than 2.5 mm (e.g. tools).
4	Protection against solid objects larger than 1 mm (e.g. small objects such as nails, screws, insects).
5	Dust protected: partial protection against dust and other particulates (permitted ingress will not compromise the performance of internal components).
6	Dust tight: full protection against dust and other particulates.

Protection Level	Second Digit: Moisture Protection
0	Not rated (or no rating supplied) for protection against ingress of this type.
1	Protection against vertically dripping water. No harmful effects when the item is upright.
2	Protection against vertically dripping water. No harmful effects when tilted up to 15°from normal position.
3	Protection against water sprayed directly at any angle up to 60°off vertical.
4	Protection against splashing water from any direction. No harmful effects when tested for at least 10 minutes with an oscillating spray (limited ingress permitted).
5	Protection against low-pressure jets. No harmful effects when water projected in jets from 6.3 mm nozzle, from any direction.
6	Protection against powerful water jets. No harmful effects when water projected in jets from 12.5 mm nozzle, from any direction.
7	Protection against full immersion at up to 1 meter depth for up to 30 minutes. Limited ingress permitted with no harmful effects.
8	Protection against immersion beyond 1 meter. Equipment is suitable for continuous immersion in water. The manufacturer may specify conditions.

HOW TO ORDER (PART NUMBER)

YK B 08 - P 1 03 A SR M - L
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

①Shielded / Unshielded
P = Unshielded
B = Shielded Pin(Ground Pin)
S = Shielded

②Connector's Size
05 = M5 | 08 = M8 | 09 = M9 |
12 = M12 | 16 = M16 | 23 = M23
78 = 7/8 Connector

③Housing Material
M = Metal (Brass, Nickel Plated)
S = Metal (Brass, Nickel Plated)
Panel-Mounting Connector > Shielding Pin.
N = Metal (Brass, Nickel Plated)
Overmolded-Connector > With Shielding Cable.
P = Plastic (Nylon + GF, UL Approval).
E = Metal with Electronic Wire

④Connector Gender
1 = Male | 2 = Female
3 = Male+Female

⑤Number of Pins
M5, see page 12 electrical parameters.
M8, see page 21 electrical parameters.
M9, see page 26 electrical parameters.
M12, see page 40 43 47 48 electrical parameters. M16, see page 54 electrical parameters.
M23, see page 57 58 electrical parameters.
7/8, see page 63 electrical parameters.

⑥Coding A, B, C, D, E, K, L, M, P, S, T , X or Y...

⑦⑧Connector Type

Panel Side Connector
⑦
SR = Solder Bucket Pin, Rear Mounting
SF = Solder Bucket Pin, Front Mounting
PR = PCB Pin, Rear Mounting
PF = PCB Pin, Front Mounting
RP = R/A PCB Pin, Rear Mounting
⑧
L = PG7 | P = PG9 | N = M12*1.0 | M = M16*1.5

Cable Size Connector
⑦
SN = Straight Over-molded Connector.
RN = R/A Over-molded Connector.
⑧Cable Material
V = PVC | U = PUR | T = TPU ...

Field-Attachable Connector
⑦
FN = Straight Field-Attachable Connector
FR = Right Angle Field-Attachable Connector
⑧
L = Screw Connection
H = Soldering Connection
Y = Crimp Connection

SMT(SMD) Connector
SDT = With Screw Nut.(Shown as follow 1)
RST = With Screw Nut.(Shown as follow 2)
FWT = Without Screw Nut

⑨Cable Length(mm)
100 = 100mm
1000 = 1000mm
...

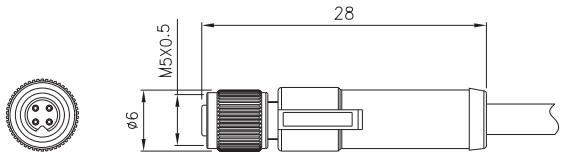
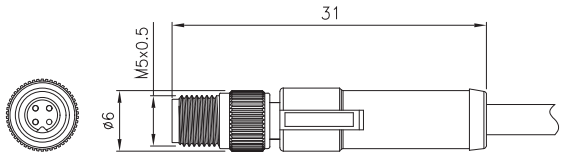
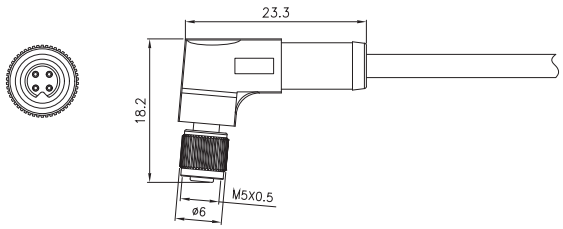
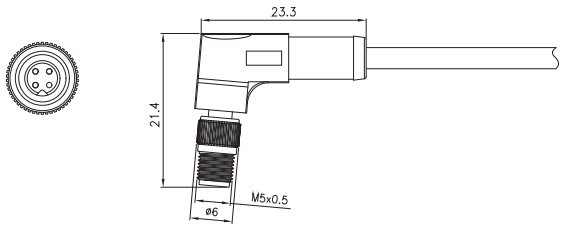
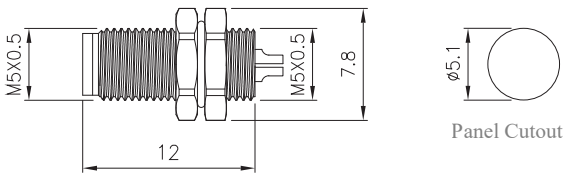
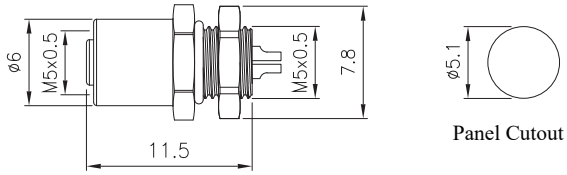
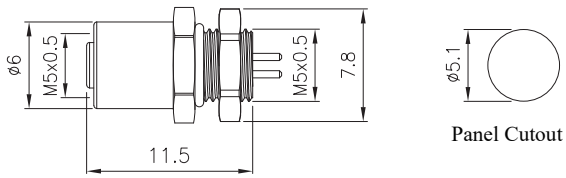
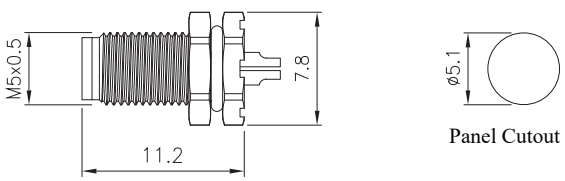
*Customized products and some products are not included in this list.

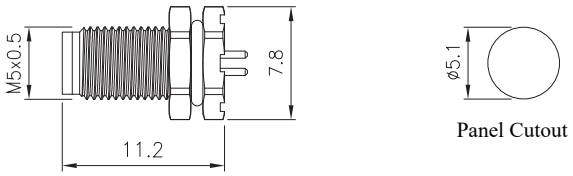
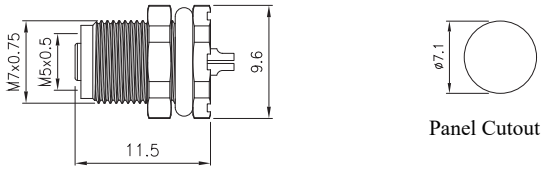
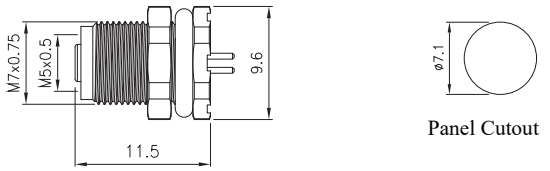
M5 Series

Pins number: 3-4 pins
Plug: The length of cable can be customized
Socket: Front Mount Solder Type, Back Mount Solder Type and PCB board type
Waterproof grade: IP65 IP67 IP68
The products comply with IEC 61076-2-105 standard

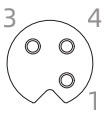
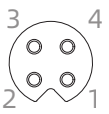
PRODUCT PARAMETERS

Shell material: Brass nickel plated	Contact impedance: ≤3mΩ
Sealing material: Epoxy resin/Rubber	Durability: ≥500 Cycles
Contact material: Phosphorus copper/Brass gold-plated	Insultion impedance: ≥100MΩ
Insulator material: PA66	Temperature: -25℃ ~ +85℃
Molding material: TPU/PVC	

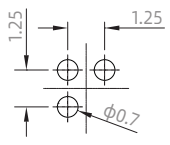
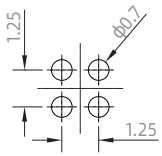
Examples Picture	Drawing NO. and Description	Examples Drawing
Shielded/Unshielded 	C0502S01 M5 Straight Female Overmolded plug	
Shielded/Unshielded 	C0501S02 M5 Straight Male Overmoled plug	
Shielded/Unshielded 	C0502R03 M5 Angled Female Overmolded plug	
Shielded/Unshielded 	C0501R04 M5 Angled Male Overmoled plug	
	X0501F05 M5 Male Front Mount Socket (Solder, Screw M5*0.5)	
	X0502F06 M5 Female Front Mount Socket (Solder, Screw M5*0.5)	
	B0502F07 M5 Female Front Mount Socket (PCB Mount, Screw M5*0.5)	
	X0501H08 M5 Male Rear Mount Socket (Solder, Screw M5*0.5)	

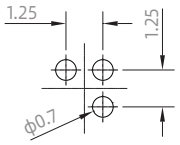
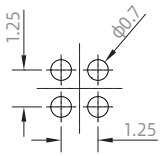
Examples Picture	Drawing NO. and Description	Examples Drawing
	B0501H09 M5 Male Rear Mount Socket (PCB Mount)	
	X0502H10 M5 Female Rear Mount Socket (Solder)	
	B0502H11 M5 Female Rear Mount Socket (PCB Mount)	

M5●ELECTRICAL PARAMETERS

Pins	Male	Rated current	Rated voltage		Conductor size		Female
			A/C	D/C	AWG	mm²	
3		1A	60V	60V	26	0.14	
4		1A	60V	60V	26	0.14	

M5●PCB PINS ARRANGEMENT

Pin	3	4
Male		

Pin	3	4
Female		

M5●WIRE DEFINITION

Pins	Wire color
	3 Pins
1	BN
2	-
3	BU
4	BK

Pins	Wire color
	4 Pins
1	BN
2	WH
3	BU
4	BK

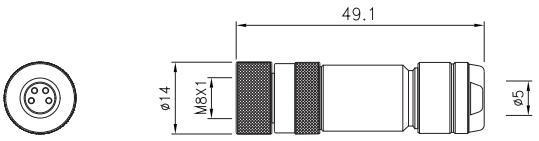
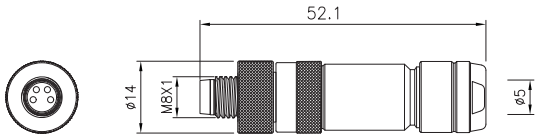
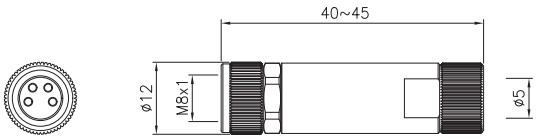
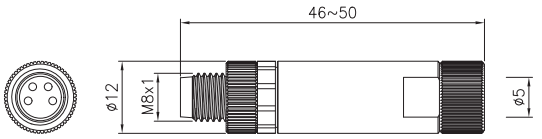
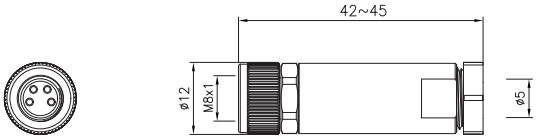
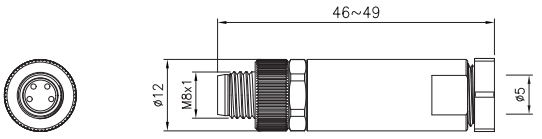
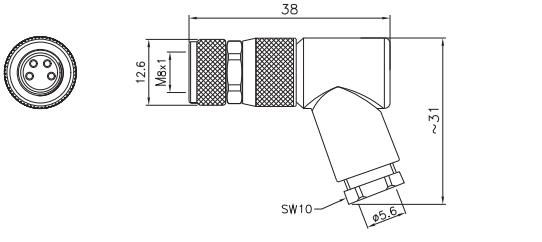
* Wiring definition according to conventional standards, if according to the agreement or other please contact us

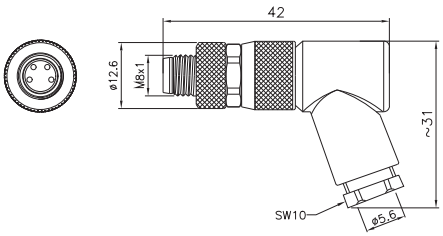
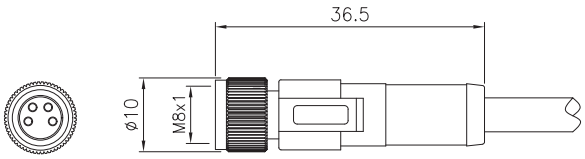
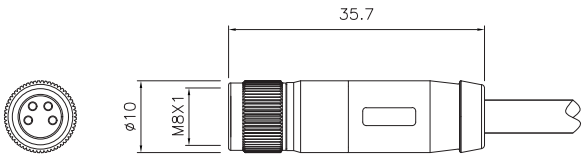
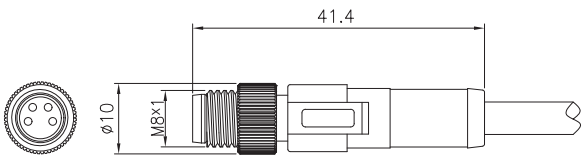
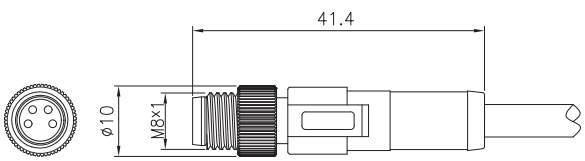
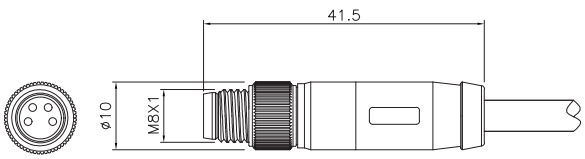
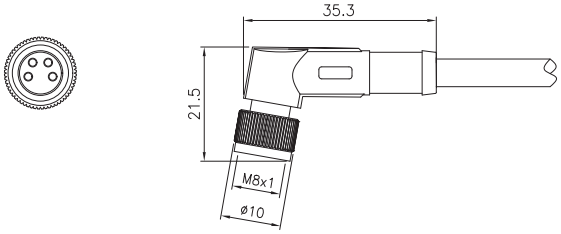
M8 Series

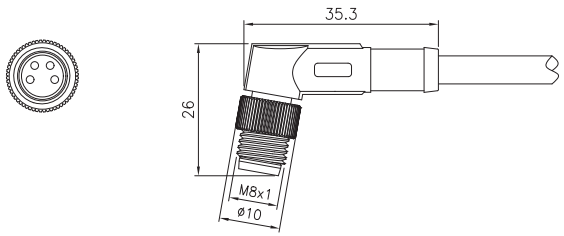
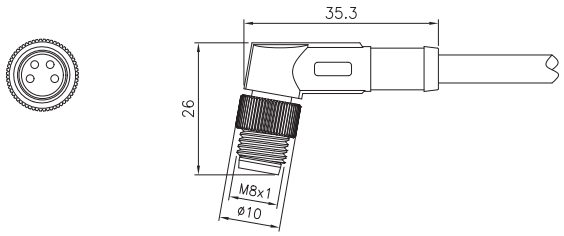
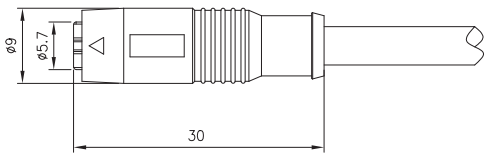
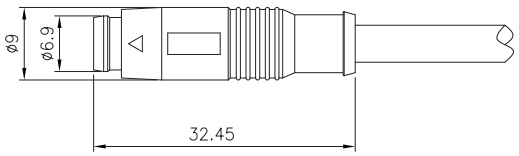
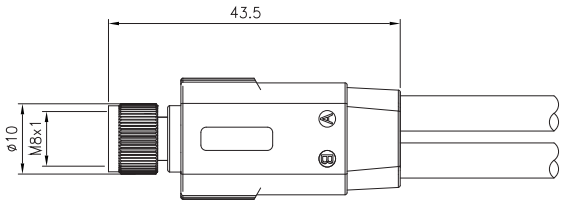
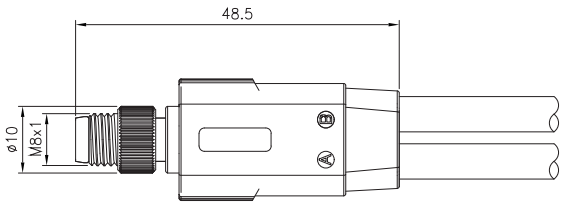
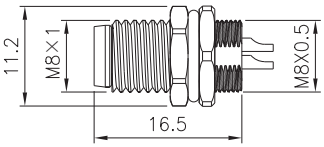
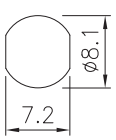
Pins Number: 3 4 5 6 8 pins
Plug: assembly, overmolded cable type (length can be customized at will)
Most connectors are excellent for full shielding at 360 degrees
Socket: Front Mount Solder Type, Back Mount Solder Type and PCB board type
Waterproof grade: Ip65 IP67 IP68
Products comply with IEC 61076-2-104 standard

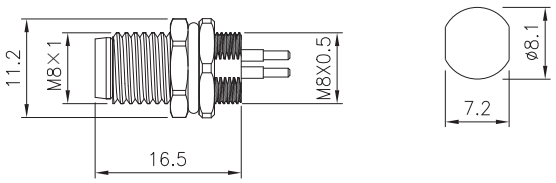
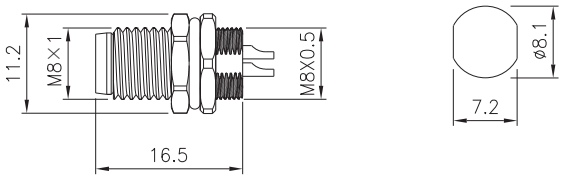
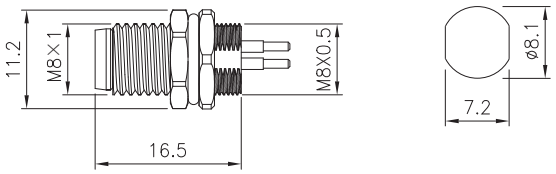
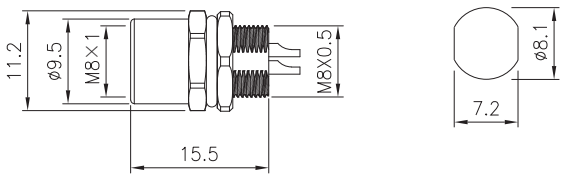
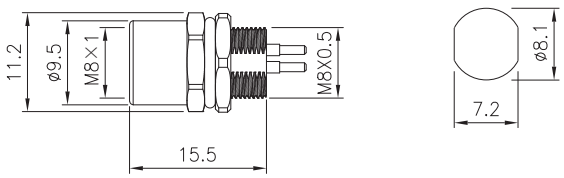
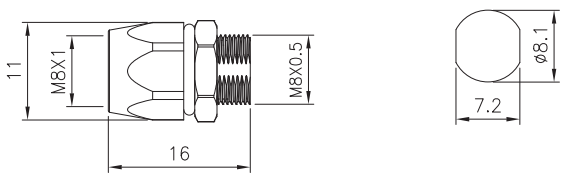
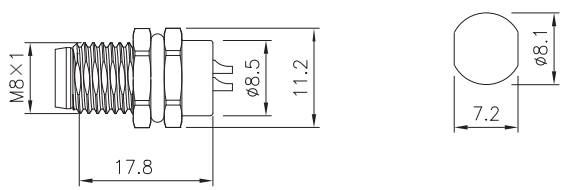
PRODUCT PARAMETERS

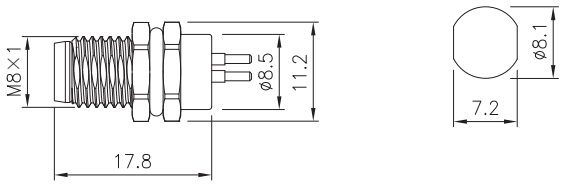
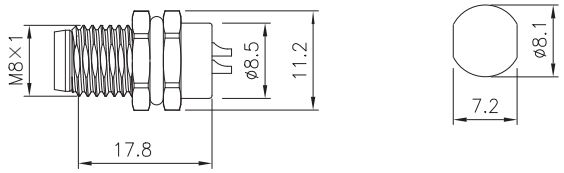
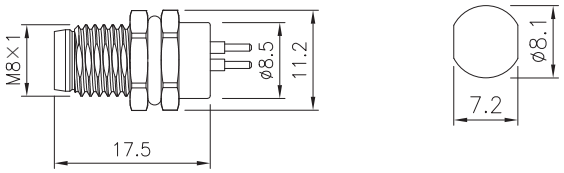
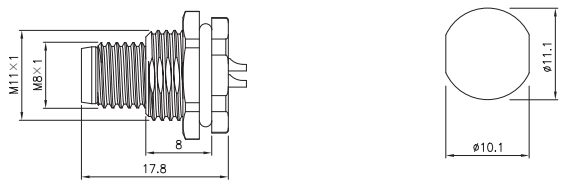
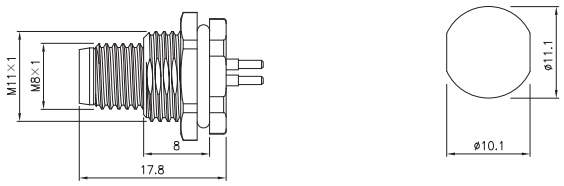
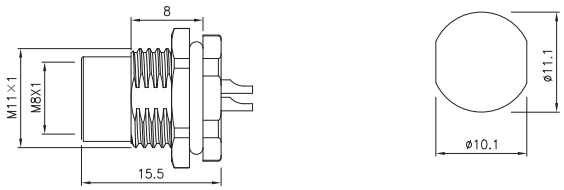
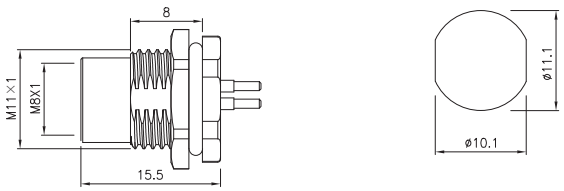
Shell material: Brass nickel-plated/Zinc alloy nickel-plated	Contact impedance: ≤5mΩ
Sealing material: Epoxy resin/Rubber	Durability: ≥500 Cycles
Contact material: Brass/Phosphorus copper gold-plated	Insulation impedance: ≥100MΩ
Insulator material: PA66	Temperature: -40℃ ~ +85℃
Molding material : TPU/PVC	

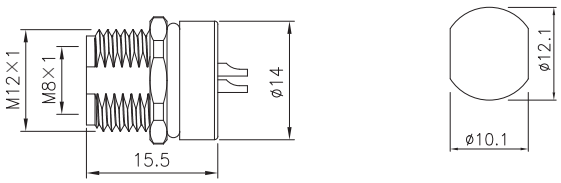
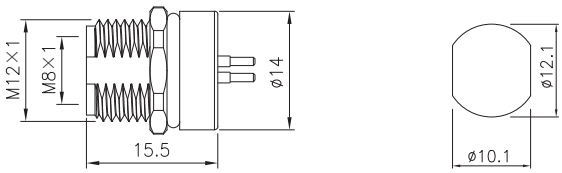
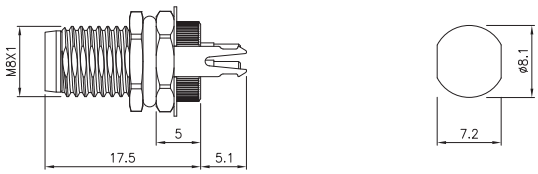
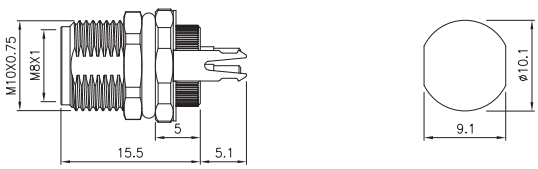
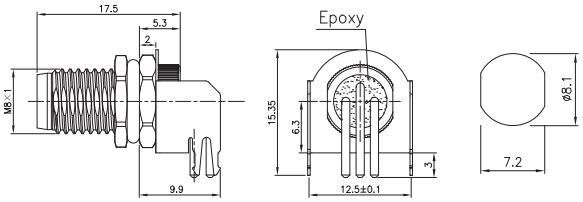
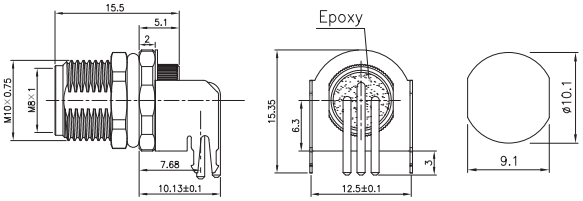
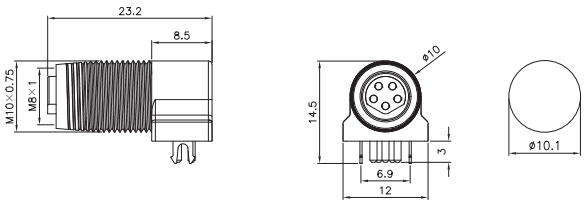
Examples Picture	Drawing NO. and Description	Examples Drawing
	Z0802S01 M8 Straight Female Metal Plug (Screw terminal)	
	Z0801S02 M8 Straight Male Metal Plug (Screw terminal)	
	Z0802S03 M8 Straight Female Metal Plug (Screw terminal)	
	Z0801S04 M8 Straight Male Metal Plug (Screw terminal)	
	Z0802S05 M8 Straight Female Plastic Plug (Screw terminal)	
	Z0801S06 M8 Straight Male Plastic Plug (Screw terminal)	
	Z0802R07 M8 Angled Female Plastic Plug (Screw terminal)	

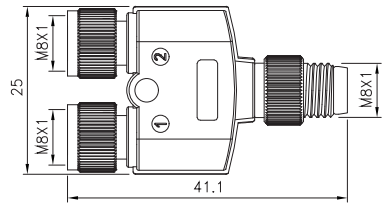
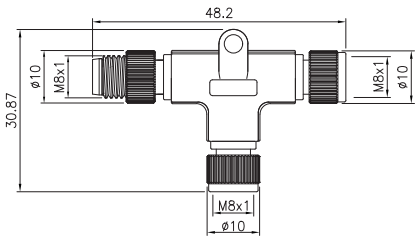
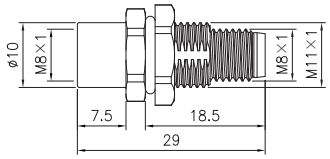
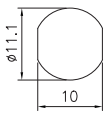
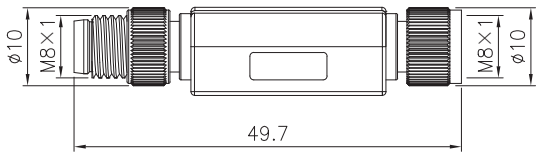
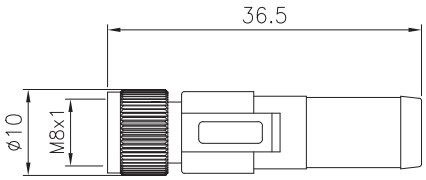
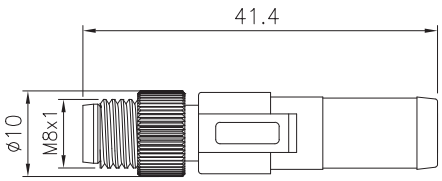
Examples Picture	Drawing NO. and Description	Examples Drawing
	Z0801R08 M8 Angled Male Plastic Plug (Screw terminal)	
Shielded/Unshielded 	C0802S09 M8 Straight Female overmolded plug	
Shielded/Unshielded 	C0802S10 M8 Straight Female overmolded plug (with damping)	
Shielded/Unshielded 	C0801S11 M8 Straight Male overmolded plug	
Shielded/Unshielded 	C0801S12 M8 Straight Male overmolded plug (Metal interface)	
Shielded/Unshielded 	C0801S13 M8 Straight Male overmolded plug (with damping)	
Shielded/Unshielded 	C0802R14 M8 Angled Female overmolded plug	

Examples Picture	Drawing NO. and Description	Examples Drawing
Shielded/Unshielded 	C0801R15 M8 Angled Male overmolded plug	
Shielded/Unshielded 	C0801R16 M8 Angled Male overmolded plug (Metal interface)	
	C0802S17 M8 Straight Female overmolded plug (push-pull)	
	C0801S18 M8 Straight Male overmolded plug (push-pull)	
Shielded/Unshielded 	F0802S19 M8 Female 1 to 2 overmolded plug	
Shielded/Unshielded 	F0801S20 M8 Male 1 to 2 overmolded plug	
	X0801S21 M8 Male Front Mount Socket (Solder, Screw M8*0.5)	 Panel Cutout 

Examples Picture	Drawing NO. and Description	Examples Drawing/Panel Cutout
	B0801S22 M8 Male Front Mount Socket (PCB, Screw M8*0.5)	
	X0801S23 M8 Male Front Mount Socket (Solder, Screw M8*0.5) (Metal interface)	
	B0801S24 M8 Male Front Mount Socket (PCB, Screw M8*0.5) (Metal interface)	
	X0802S25 M8 Female Front Mount Socket (Solder, Screw M8*0.5)	
	B0802S26 M8 Female Front Mount Socket (PCB, Screw M8*0.5)	
	X0802S27 M8 Female Front Mount Socket (Solder, Screw M8*0.5) (bullet type)	
	X0801S28 M8 Male Back Mount Socket (Solder, Screw M8*1)	

Examples Picture	Drawing NO. and Description	Examples Drawing/Panel Cutout
	B0801S29 M8 Male Back Mount Socket (PCB, Screw M8*1)	
	X0801S30 M8 Male Back Mount Socket (Solder, Screw M8*1) (Metal interface)	
	B0801S31 M8 Male Back Mount Socket (PCB, Screw M8*1) (Metal interface)	
	X0801S32 M8 Male Back Mount Socket (Solder, Screw M11*1)	
	B0801S33 M8 Male Back Mount Socket (PCB, Screw M11*1)	
	X0802S34 M8 Female Back Mount Socket (Solder, Screw M11*1)	
	B0802S35 M8 Female Back Mount Socket (PCB, Screw M11*1)	

Examples Picture	Drawing NO. and Description	Examples Drawing/Panel Cutout
	X0802S36 M8 Female Back Mount Socket (Solder, Screw M12*1)	
	B0802S37 M8 Female Back Mount Socket (PCB, Screw M12*1)	
	B0801G38 M8 Female Back Mount Socket (PCB, Screw M8*1) Grounded type	
	B0802G39 M8 Female Back Mount Socket (PCB, Screw M10*0.75) Grounded type	
	B0801R40 M8 Angled Male Back Mount Socket (PCB, Screw M8*1) Grounded type	
	B0802R41 M8 Angled Female Back Mount Socket (PCB, Screw M10*0.75) Grounded type	
	S0802R42 M8 Angled Female Socket (PCB, Screw M10*0.75)	

Examples Picture	Drawing NO. and Description	Examples Drawing
	Y0803C43 M8 Y Type Adapter (PSS)	
	T0803C44 M8 T Type Adapter (PSS)	
	I0801S45 M8 I Type Adapter (PS) (Screw M11*1)	  Panel Cutout
	I0801S46 M8 I Type Adapter (PS)	
	P0802S47 M8 Female Ohm terminal plug 120Ω	
	P0801S48 M8 Male Ohm terminal plug 120Ω	

M8 · DUST COVER

M8 Plastic Dust Cover (Inner screw)		
	Ring inner diameter	Drawing NO.
	φ 7.5mm	C0801P49

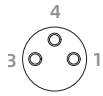
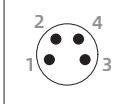
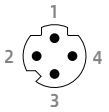
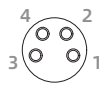
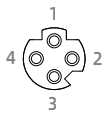
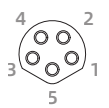
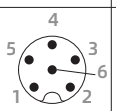
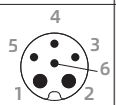
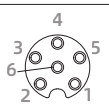
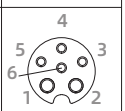
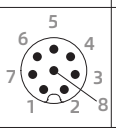
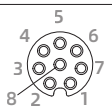
M8 Plastic Dust Cover (Outer screw)		
	Ring inner diameter	Drawing NO.
	φ 7.5mm	C0802P52

M8 Plastic Dust Cover (Outer screw)		
	Ring inner diameter	Drawing NO.
	φ M8	C0802P55

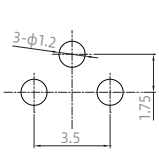
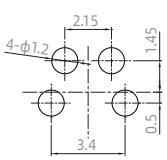
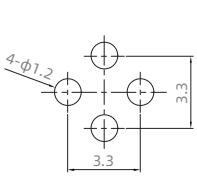
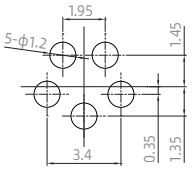
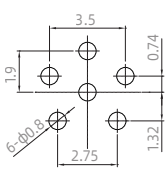
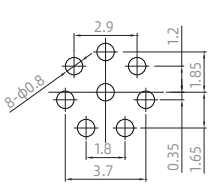
M8 All-Metal Dust Cover (Inner screw)		
	Ring inner diameter	Drawing NO.
	φ 8mm	C0801M50
	φ 10mm	C0801M51

M8 All-Metal Dust Cover (Outer screw)		
	Ring inner diameter	Drawing NO.
	φ 8mm	C0802M53
	φ 10mm	C0802M54

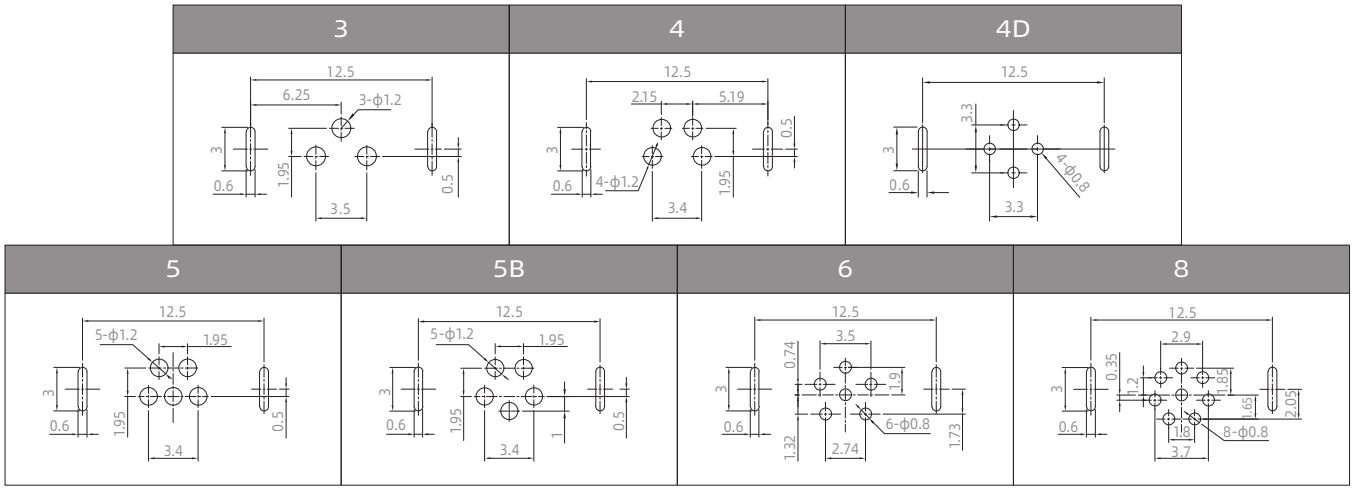
M8·ELECTRICAL PARAMETERS

Pins	Male Code(Orientation)			Rated Current	Rated voltage		Wire Gauge		Female Code(Orientation)		
	A	B	D		A/C	D/C	AWG	mm²	A	B	D
3				3A	60V	60V	24	0.25			
4				(A-Code):3A (D-Code):4A	60V	60V	24	0.25			
5				3A	30V	30V	24	0.25			
6				1.5A	30V	30V	26	0.14			
8				1.5A	30V	30V	26	0.14			

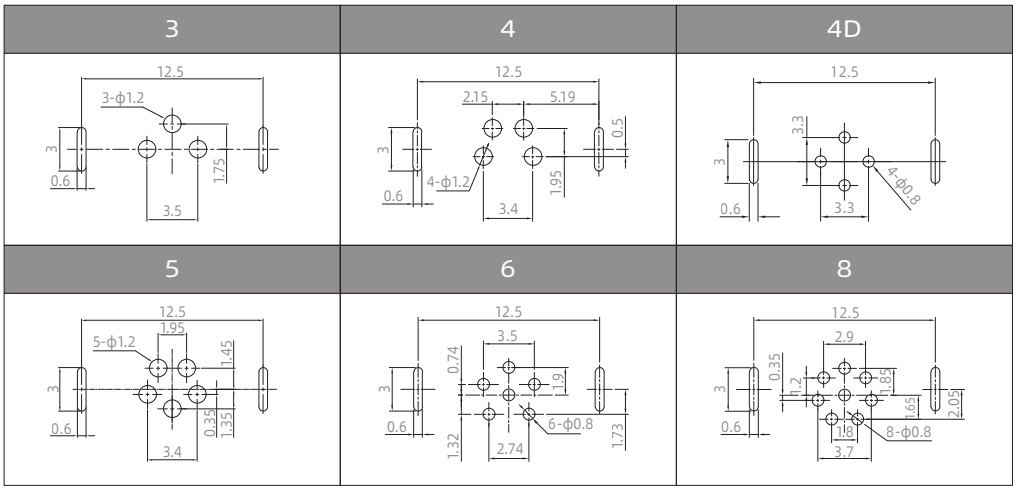
M8·PCB PINS ARRANGEMENT

3	4	4D	5B	6	8
					

M8 ·PCB ANGLED PINS ARRANGEMENT



M8 ·PCB STRAIGHT PINS ARRANGEMENT



M8 ·WIRE DEFINITION

Pins	Wire core color
	3 Pin
1	BN
2	-
3	BU
4	BK

Pins	Wire core color		
	4 Pin A-Code		4 Pins D-Code
1	BN		YE
2	WH		WH
3	BU		OG
4	BK		BU

Pins	Wire core color			
	5 Pins A-Code		5 Pins B-Code	
1	BN		BN	
2	WH		WH	
3	BU		BU	
4	BK		BK	
5	GY		GY	

Pins	Wire core color
	6 Pin
1	BN
2	WH
3	BU
4	BK
5	GY
6	PK

Pins	Wire core color
	8 Pin
1	WH
2	BN
3	GN
4	YE
5	GY
6	PK
7	BU
8	RD

* Wiring definition according to conventional standards, if according to the agreement or other please contact our sales.

M9 Series

Pins Number: 2-8 pins

Most connectors are excellent for full shielding at 360 degrees

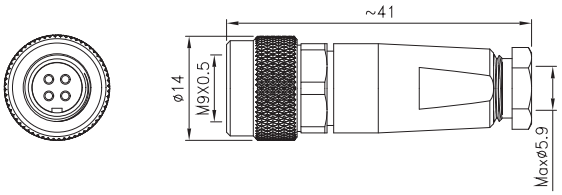
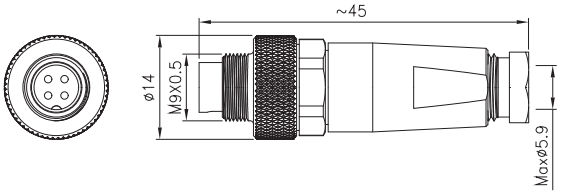
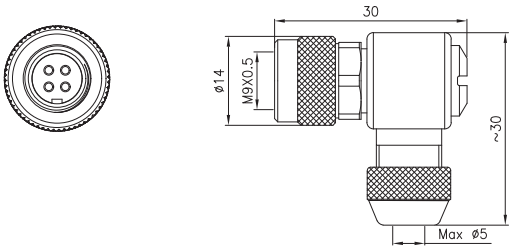
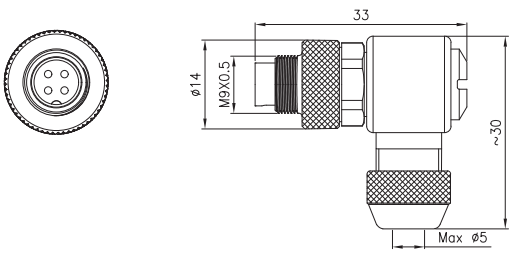
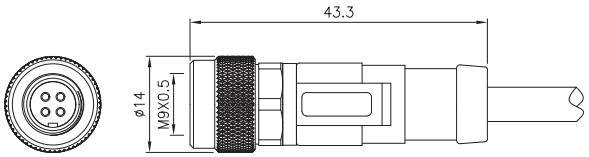
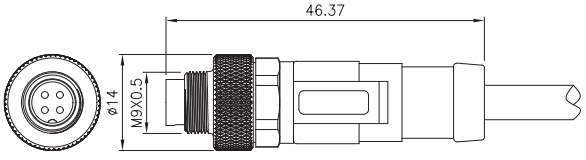
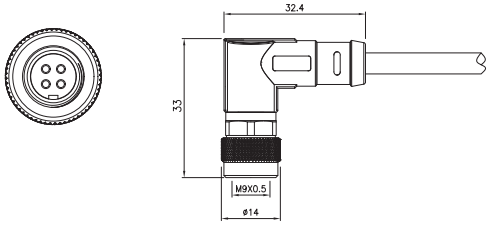
Plug: assembly, overmolded cable type (length can be customized at will)

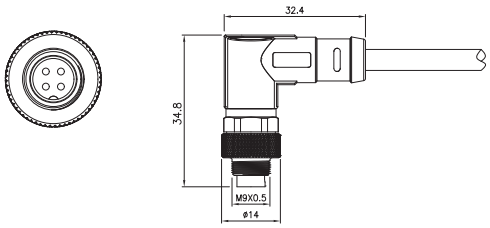
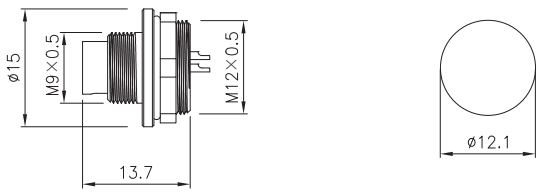
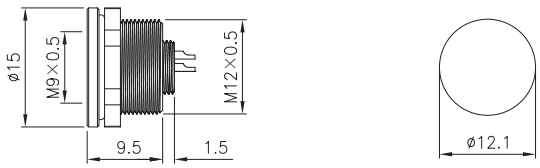
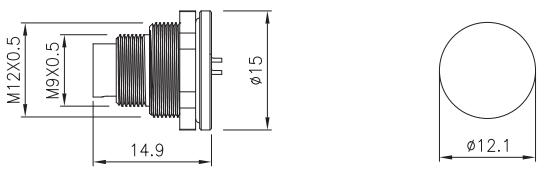
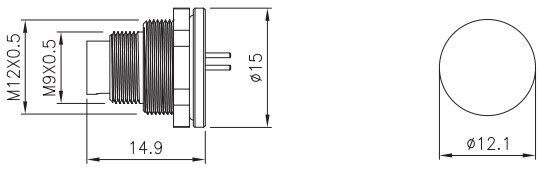
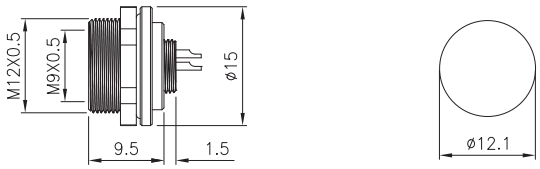
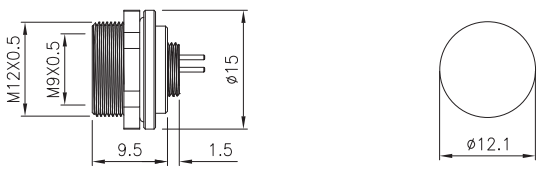
Socket: Front Mount Solder Type, Back Mount Solder Type and PCB board type

Waterproof grade: IP65 IP67 IP68

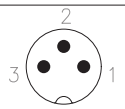
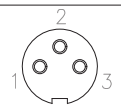
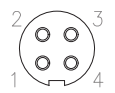
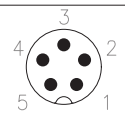
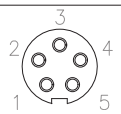
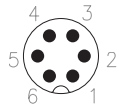
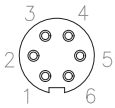
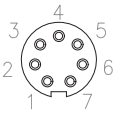
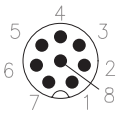
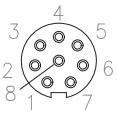
PRODUCT PARAMETERS

Shell material: Brass nickel-plated/Zinc alloy nickel-plated	Contact impedance: ≤3mΩ
Sealing material: Epoxy resin/Rubber	Wiring range: 3.0~5.0mm
Contact material: Brass/Phosphorus copper gold-plated	Insulation impedance: ≥100MΩ
Insulator material: PA66	Temperature: -40℃ ~ +85℃
Molding material: TPU/PVC	

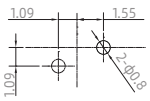
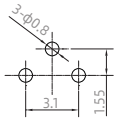
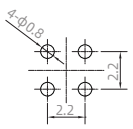
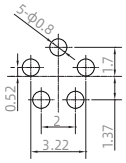
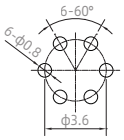
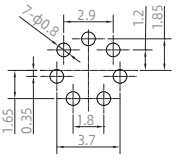
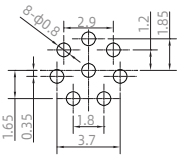
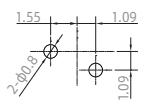
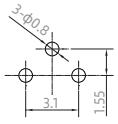
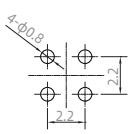
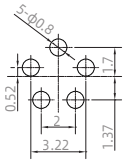
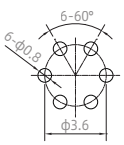
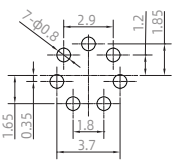
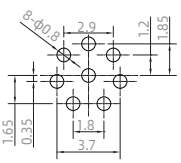
Examples Picture	Drawing NO. and Description	Examples Drawing
	Z0902S01 M9 Straight Female Metal Plug (Solder)	
	Z0901S02 M9 Straight Male Metal Plug (Solder)	
	Z0902R03 M9 Angled Female Metal Plug (Solder)	
	Z0901R04 M9 Angled Male Metal Plug (Solder)	
Shielded/Unshielded 	C0902S05 M9 Straight Female Overmolded plug	
Shielded/Unshielded 	C0901S06 M9 Straight Male Overmoled plug	
Shielded/Unshielded 	C0902R07 M9 Angled Female Overmolded plug	

Examples Picture	Drawing NO. and Description	Examples Drawing/Panel Cutout
Shielded/Unshielded 	C0901R08 M9 Angled Male Overmoled plug	
	X0901S09 M9 Male Front Mount Socket (Solder)	
	X0902S10 M9 Male Front Mount Socket (Solder)	
	X0901S11 M9 Male Back Mount Socket (Solder)	
	B0901S12 M9 Male Back Mount Socket (PCB)	
	X0902S13 M9 Female Back Mount Socket (Solder)	
	B0902S14 M9 Female Back Mount Socket (PCB)	

M9 · ELECTRICAL PARAMETERS

Pins	Male	Rated Current	Rated voltage		Wire Gauge		Female
			A/C	D/C	AWG	mm²	
2		4A	125V	125V	24	0.25	
3		4A	125V	125V	24	0.25	
4		3A	125V	125V	24	0.25	
5		3A	125V	125V	24	0.25	
6		1A	125V	125V	26	0.14	
7		1A	125V	125V	26	0.14	
8		1A	125V	125V	26	0.14	

M9 · PCB PINS ARRANGEMENT

Pins	2A	3A	4A	5A	6A	7A	8A
Male							
Female							

M9 · WIRE DEFINITION

Pin	Wire core color
	2 Pin
1	BN
2	BU

Pin	Wire core color
	3 Pin
1	BN
2	BU
3	BK

Pin	Wire core color
	6 Pin
1	BN
2	WH
3	BU
4	BK
5	GY
6	PK

Pin	Wire core color
	7 Pin
1	WH
2	BN
3	GN
4	YE
5	GY
6	PK
7	BU

Pin	Wire core color
	8 Pin
1	WH
2	BN
3	GN
4	YE
5	GY
6	PK
7	BU
8	RD

Pin	Wire core color
	4 Pin
1	BN
2	WH
3	BU
4	BK

Pin	Wire core color
	5 Pin
1	BN
2	WH
3	BU
4	BK
5	GY

* Wiring definition according to conventional standards, if according to the agreement or other please contact our sales.

M12 Series

Metal housing connector excellent 360° full shielding, new more damped design

Products comply with IEC 61076-2-101 Industry 4.0 agreement, NEMA2000 standard

Plug: assembled type, injection molding with cable type (length can be customized)

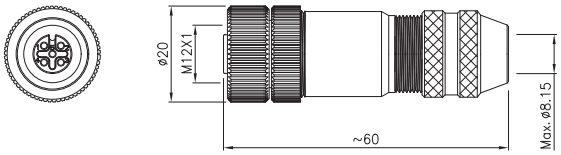
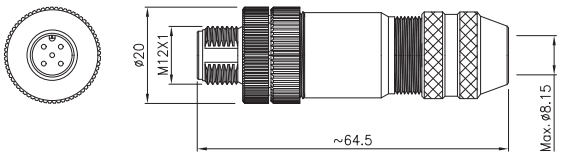
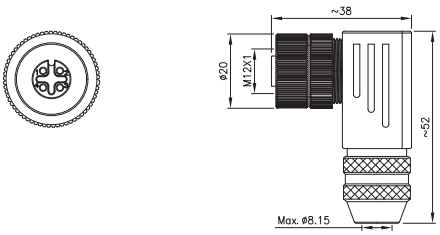
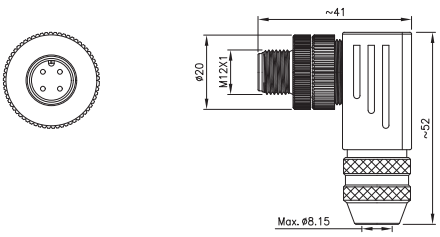
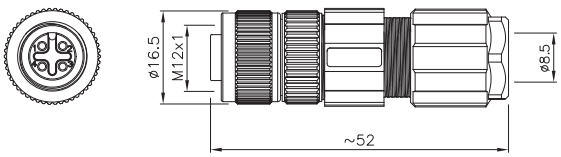
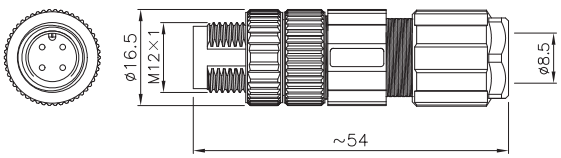
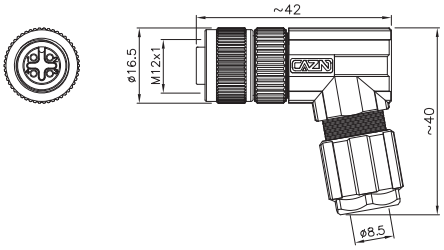
Socket: Front Mount Solder type, Back Mount Solder type and PCB type

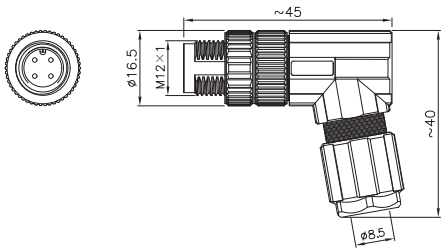
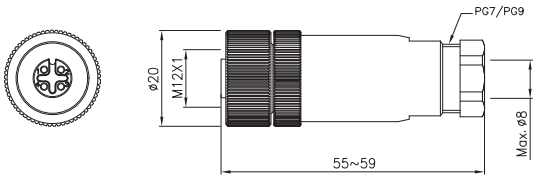
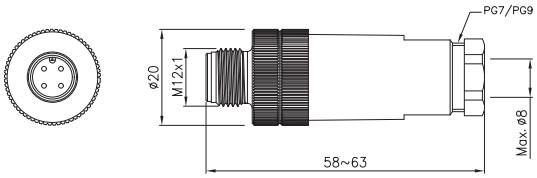
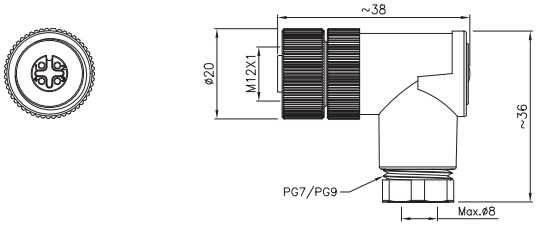
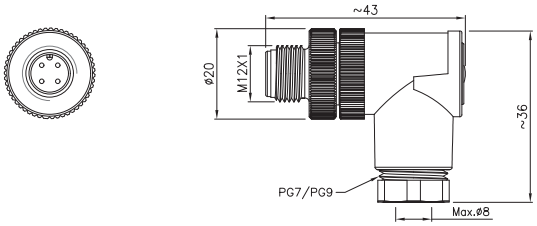
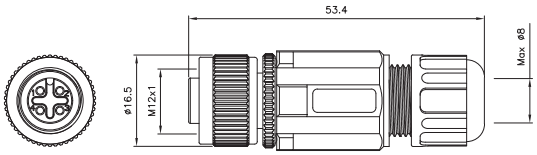
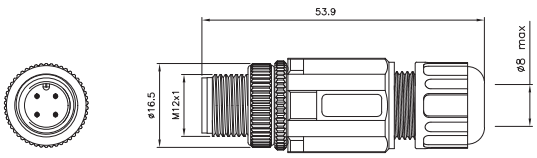
Number of pins: 2, 3, 4, 5, 6, 8, 12, 17 pins

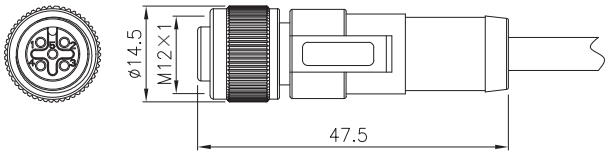
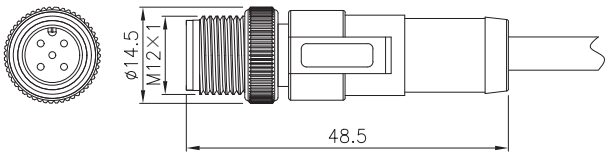
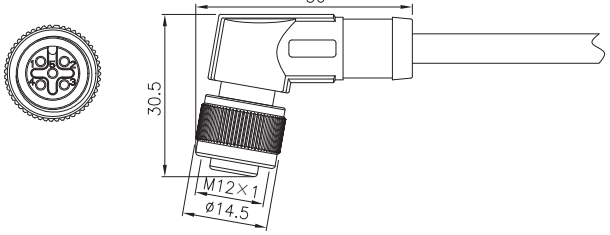
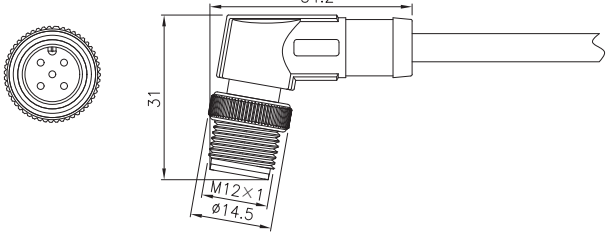
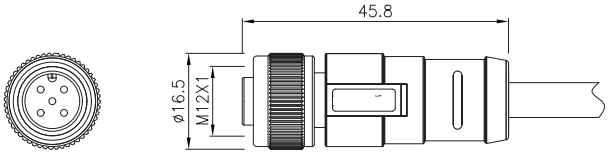
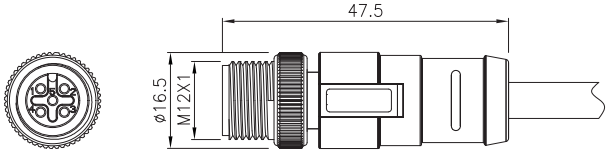
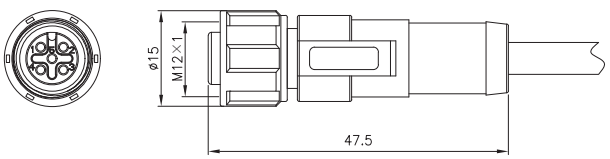
Waterproof grade: IP65 IP67 IP68

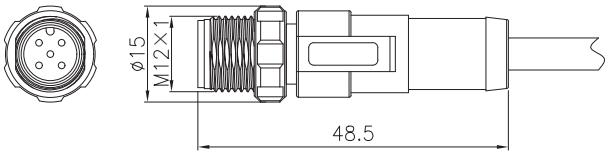
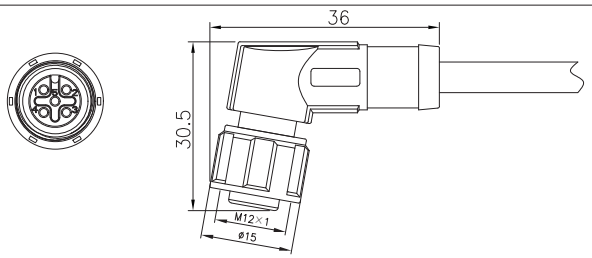
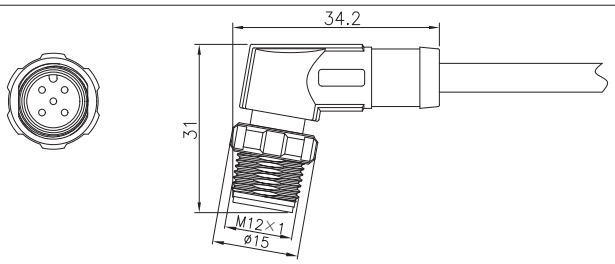
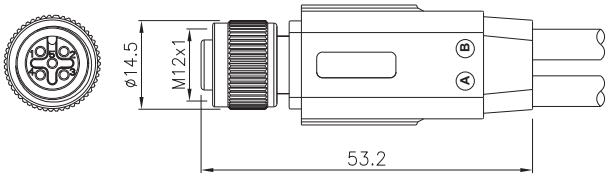
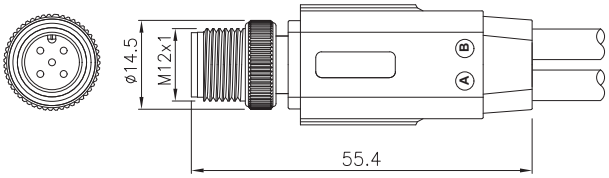
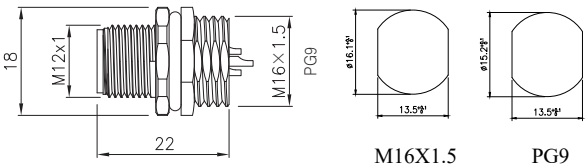
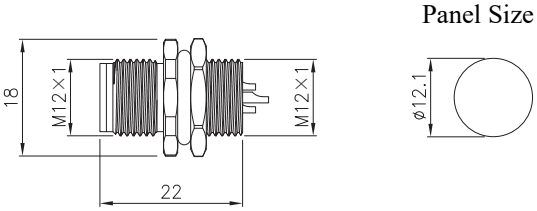
PRODUCT PARAMETERS

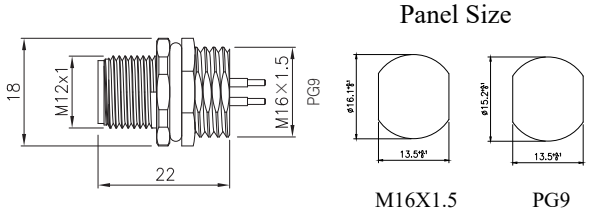
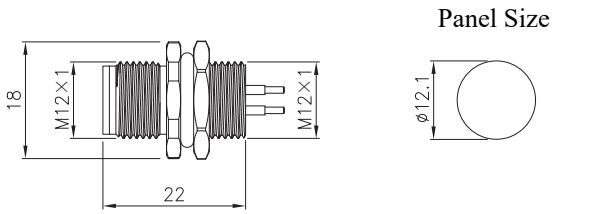
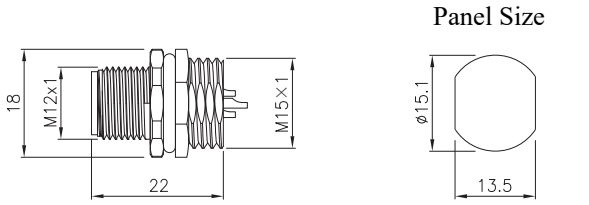
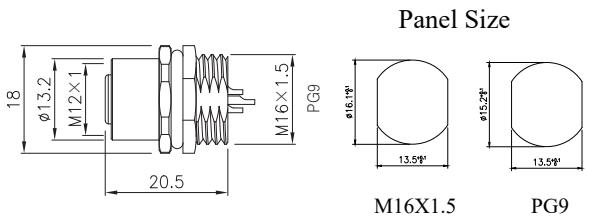
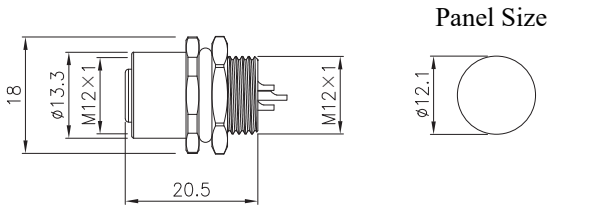
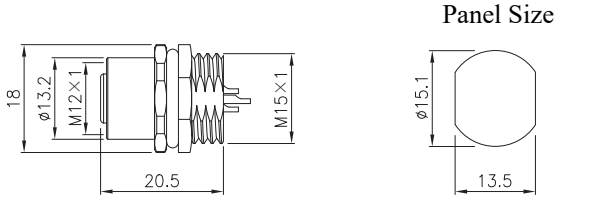
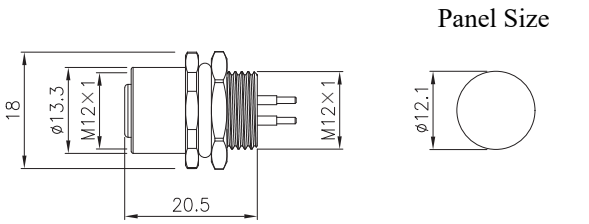
Shell material: Brass,Zinc alloy nickel-plated/PA-GF	Contact impedance: ≤5mΩ
Sealing material: Epoxy resin/Rubber	Durability: ≥500 Cycles
Contact material: Brass/Phosphorus copper gold-plated	Execution standard: IEC 61076-2-101(A,B,C,D,P Code) IEC 61076-2-111(K,L,M,S,T Code) IEC 61076-2-109(X-Code)
Insulator material: PA+GF/TPU	Temperature: -40℃ ~ +85℃
Molding material: TPU/PVC	Waterproof grade: IP67 IP68

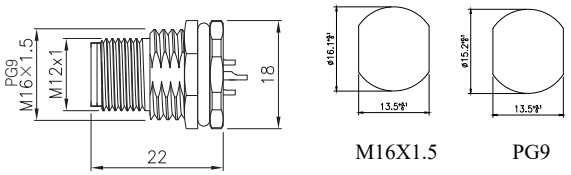
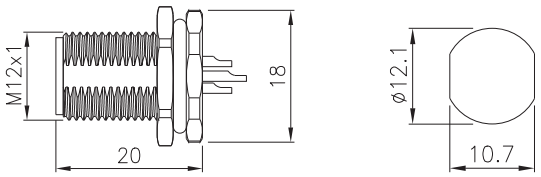
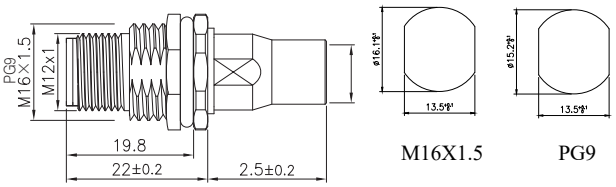
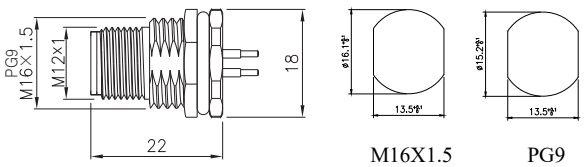
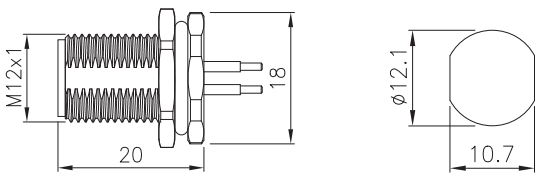
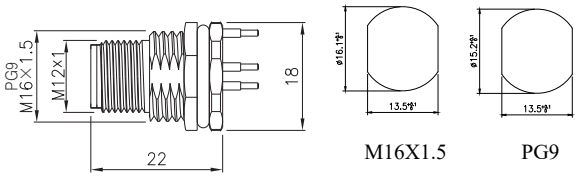
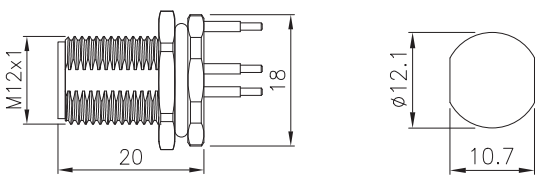
Examples Picture	Drawing NO. and Description	Examples Drawing
	Z1202S01 M12 Straight Female Metal Plug (Screw)	
	Z1201S02 M12 Straight Male Metal Plug (Screw)	
	Z1202R03 M12 Angled Female Metal Plug (Screw)	
	Z1201R04 M12 Angled Male Metal Plug (Screw)	
	Z1202S05 M12 Straight Female Metal Plug (Solder)	
	Z1201S06 M12 Straight Male Metal Plug (Solder)	
	Z1202R07 M12 Angled Female Metal Plug (Solder)	

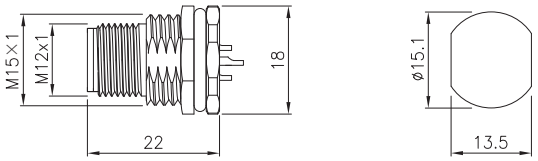
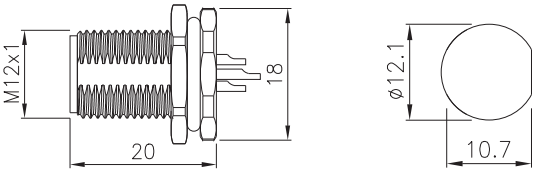
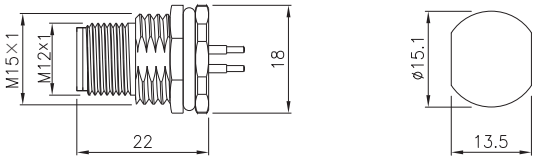
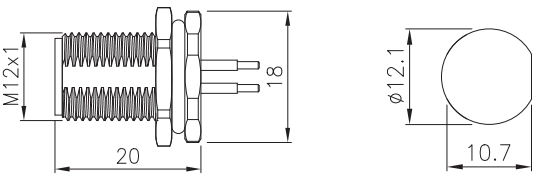
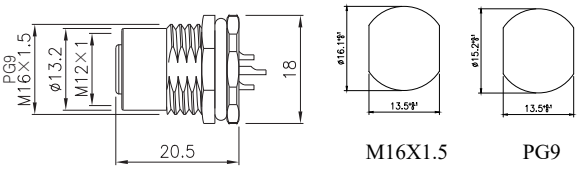
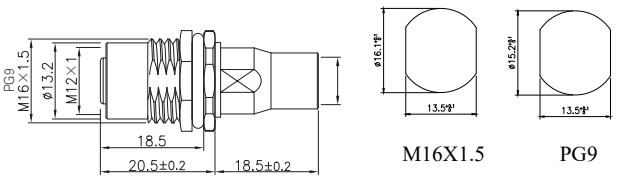
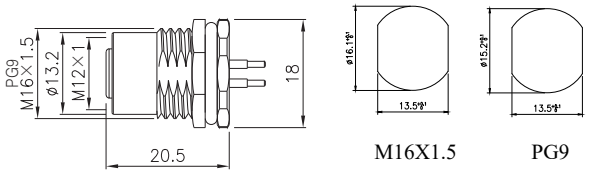
Examples Picture	Drawing NO. and Description	Examples Drawing
	Z1201R08 M12 Angled Male Metal Plug (Solder)	
	Z1202S09 M12 Straight Female Plastic Plug (Screw)	
	Z1201S10 M12 Straight Male Plastic Plug (Screw)	
	Z1202R11 M12 Angled Female Plastic Plug (Screw)	
	Z1201R12 M12 Angled Male Plastic Plug (Screw)	
	Z1202S13 M12 Straight Female Plastic Plug (Solder)	
	Z1201S14 M12 Straight Male Plastic Plug (Solder)	

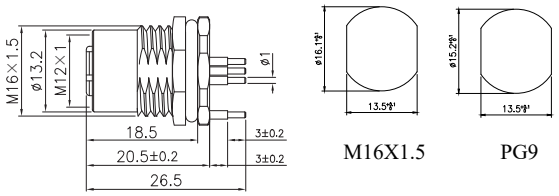
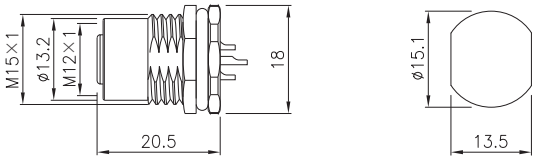
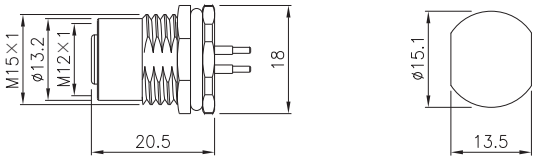
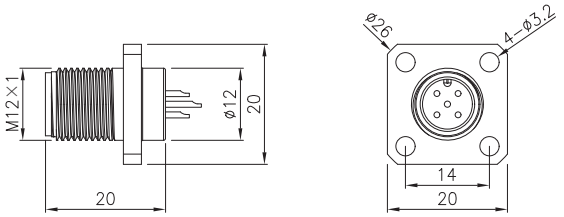
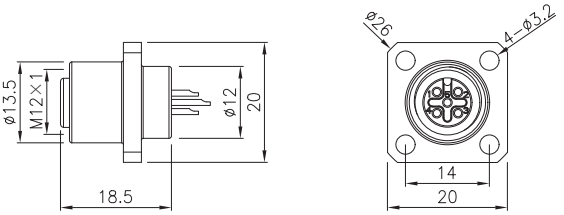
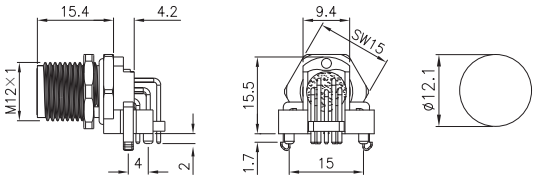
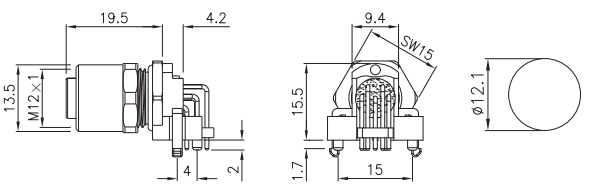
Examples Picture	Drawing NO. and Description	Examples Drawing
Shielded/Unshielded 	C1202S15 M12 Straight Female Overmolded plug	
Shielded/Unshielded 	C1201S16 M12 Straight Male Overmolded plug	
Shielded/Unshielded 	C1202R17 M12 Angled Female Overmolded plug	
Shielded/Unshielded 	C1201R18 M12 Angled Male Overmolded plug	
Shielded/Unshielded 	C1202S19 M12 Straight Female Overmolded plug (with damping)	
Shielded/Unshielded 	C1201S20 M12 Straight Male Overmolded plug (with damping)	
	C1202S21 M12 Straight Female overmolded plug (Plastic nut, Unshielded)	

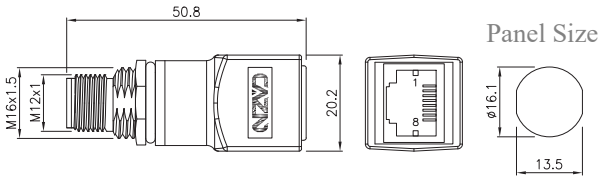
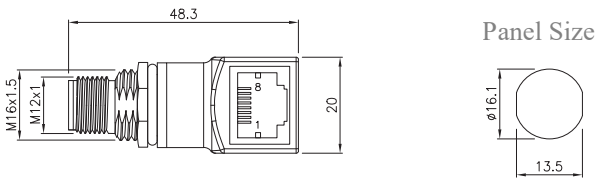
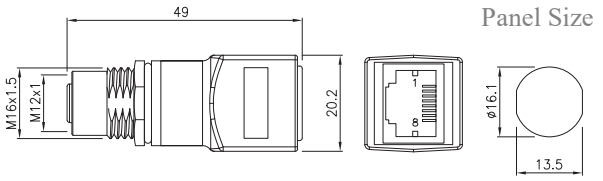
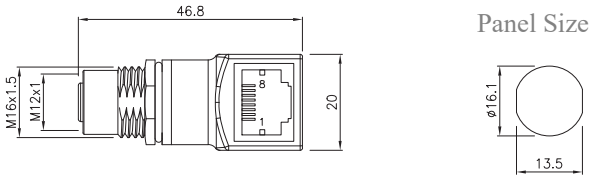
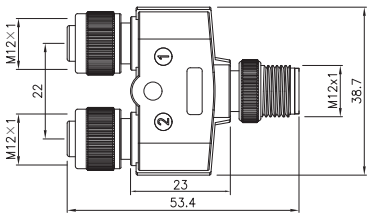
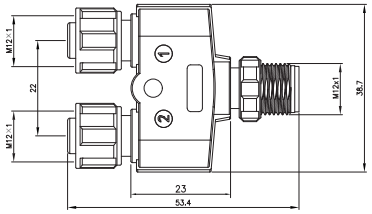
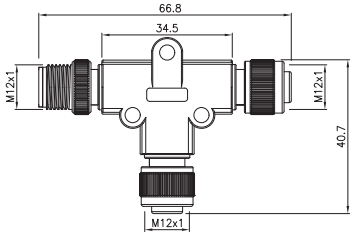
Examples Picture	Drawing NO. and Description	Examples Drawing
	C1201S22 M12 Straight Male overmoled plug (Plastic nut, Unshielded)	
	C1202R23 M12 Angled Female overmolded plug (Plastic nut, Unshielded)	
	C1201R24 M12 Angled Male overmoled plug (Plastic nut, Unshielded)	
	F1202S25 M12 Female 1 to 2 overmolded plug	
	F1201S26 M12 Male 1 to 2 overmolded plug	
Screw M16x1.5 / PG9 	X1201F27 M12 Male Front Mount Socket (Solder)	
	X1201F28 M12 Male Front Mount Socket (Solder, Screw M12*1)	

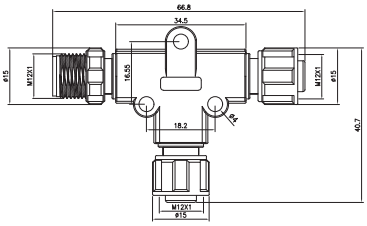
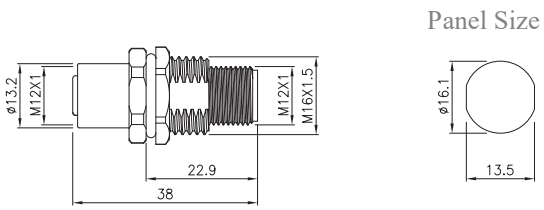
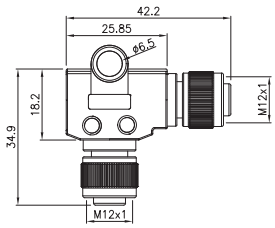
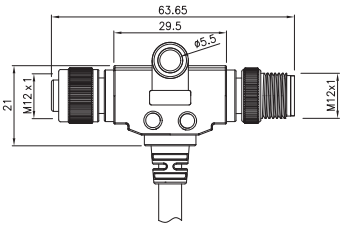
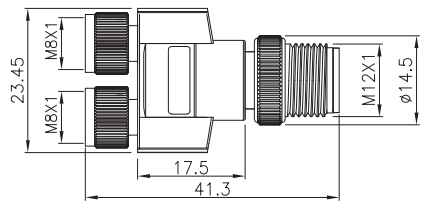
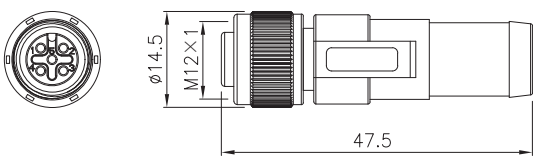
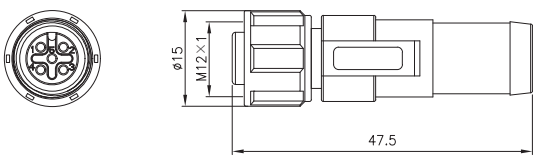
Examples Picture	Drawing NO. and Description	Examples Drawing
Screw M16x1.5 / PG9 	B1201F29 M12 Male Front Mount Socket (PCB)	
	B1201F30 M12 Male Front Mount Socket (PCB, Screw M12*1)	
	X1201F31 M12 Male Front Mount Socket (Solder, Screw M15*1) Plastic type	
Screw M16P1.C / PG9 	X1202F32 M12 Female Front Mount Socket (Solder)	
	X1202F33 M12 Female Front Mount Socket (Solder, Screw M12*1)	
	X1202F34 M12 Female Front Mount Socket (Solder, Screw M15*1) Plastic type	
	B1202F35 M12 Female Front Mount Socket (PCB, Screw M12*1)	

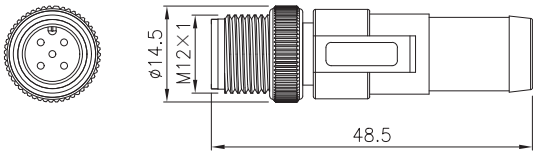
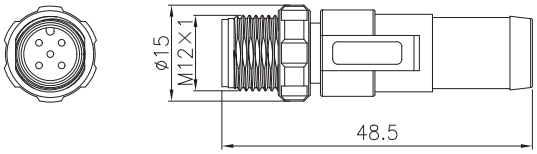
Examples Picture	Drawing NO. and Description	Examples Drawing / Panel Size
Screw M16X1.5 / PG9 	X1201H36 M12 Male Rear Mount Socket (Solder)	
	X1201H37 M12 Male Rear Mount Socket (Solder, Screw M12*1)	
Screw M16X1.5 / PG9 	G1201H38 M12 Male Rear Mount Socket (Solder, Shielded)	
Screw M16X1.5 / PG9 	B1201H39 M12 Male Rear Mount Socket (PCB)	
	B1201H40 M12 Male Rear Mount Socket (PCB, Screw M12*1)	
Screw M16X1.5 / PG9 	B1201H41 M12 Male Rear Mount Socket PCB, Grounded type(Shield)	
	B1201H42 M12 Male Rear Mount Socket PCB, Screw M12*1, Grounded type ((Shield))	

Examples Picture	Drawing NO. and Description	Examples Drawing / Panel Size
	X1201H43 M12 Male Rear Mount Socket (Solder, Screw M15*1) Plastic type	
	X1201H44 M12 Male Rear Mount Socket (Solder, Screw M12*1) Plastic type	
	B1201H45 M12 Male Rear Mount Socket (PCB, Screw M15*1) Plastic type	
	B1201H46 M12 Male Rear Mount Socket (PCB, Screw M12*1) Plastic type	
Screw M16X1.5 / PG9 	X1202H47 M12 Female Rear Mount Socket (Solder)	
Screw M16X1.5 / PG9 	G1202H48 M12 Female Rear Mount Socket (Solder, Shielded)	
Screw M16X1.5 / PG9 	B1202H49 M12 Female Rear Mount Socket (PCB)	

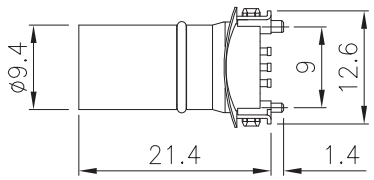
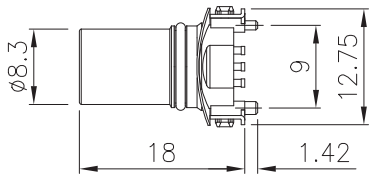
Examples Picture	Drawing NO. and Description	Examples Drawing / Panel Size
Screw M16X1.5 / PG9 	B1202H50 M12 Female Rear Mount Socket PCB, Grounded type(Shield)	
	X1202H51 M12 Female Rear Mount Socket (Solder, Screw M15*1) Plastic type	
	B1202H52 M12 Female Rear Mount Socket (PCB, Screw M15*1) Plastic type	
	X1201C53 M12 Male Square Socket (Solder, 14*14)	
	X1202C54 M12 Female Square Socket (Solder, 14*14)	
Shielded / Unshielded 	B1201R55 M12 Angled Male Rear Mount Socket (PCB, Screw M12*1)	
Shielded / Unshielded 	B1202R56 M12 Angled Female Rear Mount Socket (PCB, Screw M12*1)	

Examples Picture	Drawing NO. and Description	Examples Drawing
	A1201E57 M12 Male to Straight RJ45 Adapter	
	A1201E58 M12 Male to Angled RJ45 Adapter	
	A1202E59 M12 Female to Straight RJ45 Adapter	
	A1202E60 M12 Female to Angled RJ45 Adapter	
	A1201Y61 M12 Y-Type Adapter (PSS)	
	A1201Y62 M12 Y-Type Adapter (Plastic, PSS)	
	A1202T63 M12 T-Type Adapter (PSS)	

Examples Picture	Drawing NO. and Description	Examples Drawing
	A1202T64 M12 T-Type Adapter (Plastic, PSS)	
	A1201I65 M12 I-Type Adapter (PS)	
	A1202L66 M12 L-Type Adapter (SS)	
	A1203T67 M12 T-Type Cable type (PS)	
	A1201Y68 M12 to M8 Y-Type Adapter (PSS)	
	H1202S69 M12 Female Ohm terminal plug 120Ω	
	H1202S70 M12 Female Ohm terminal plug 120Ω (Plastic type)	

Examples Picture	Drawing NO. and Description	Examples Drawing
	H1201S71 M12 Male Ohm terminal plug 120Ω	
	H1201S72 M12 Male Ohm terminal plug 120Ω (Plastic type)	

M12·SMD RECEPTACLE ASSEMBLY

	T1201S73 M12 Male SMD Type Socket	
	T1202S74 M12 Female SMD Type Socket	

				
S1201F01 Front Mount Male Shell (Screw M12*1)	S1202F02 Front Mount Female Shell (Screw M12*1)	S1201H03 Rear Mount Male Shell (Screw M12*1)	S1201H04 Rear Mount Male Shell (Screw M15*1)	S1202H05 Rear Mount Female Shell (Screw M15*1)

M12·DUST COVER

M12 Plastic Dust Cover (Inner screw)	
Ring inner diameter	Drawing NO.
φ 3mm	C1201P01
φ 11.5mm	C1201P02
φ 13mm	C1201P03
φ 15mm	C1201P04

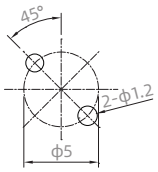
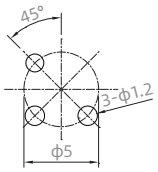
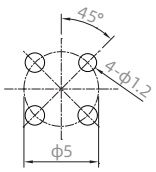
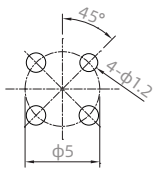
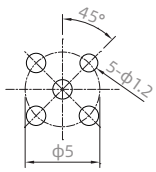
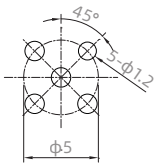
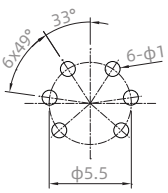
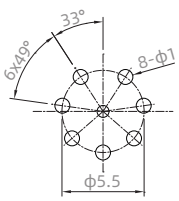
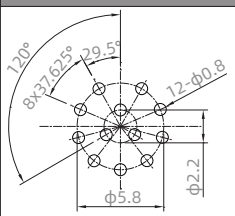
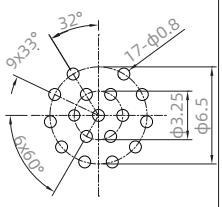
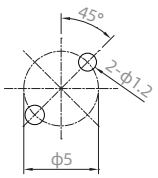
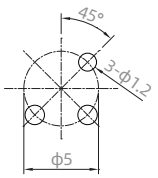
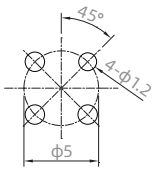
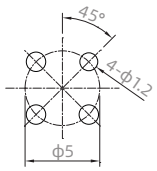
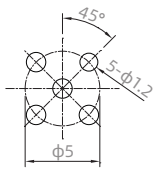
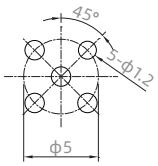
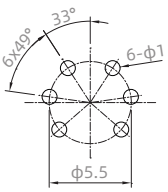
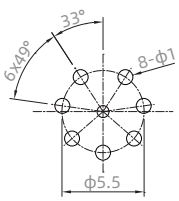
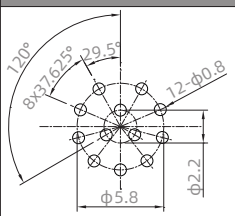
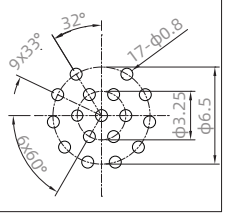
M12 Metal Dust Cover (Inner screw)	
Ring inner diameter	Drawing NO.
φ 3mm	C1201M05
φ 12mm	C1201M06
φ 16mm	C1201M07

M12 Plastic Dust Cover (Outer screw)	
Ring inner diameter	Drawing NO.
φ 3mm	C1202P08
φ 11.5mm	C1202P09
φ 13mm	C1202P10
φ 15mm	C1202P11

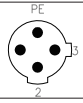
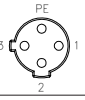
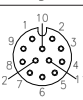
M12 Metal Dust Cover (Outer screw)	
Ring inner diameter	Drawing NO.
φ 3mm	C1202M12
φ 12mm	C1202M13
φ 16mm	C1202M14

M12 Plastic Dust Cover (Outer screw)	
Ring inner diameter	Drawing NO.
φ M12	C1202P15

M12·PCB PINS ARRANGEMENT

Pin	2P A-Code	3P A-Code	4P A-Code	4P D-Code	5P A-Code
Male PCB Pin Arrangement					
5P B-Code	6P A-Code	8P A-Code	12P A-Code	17P A-Code	
					
Pin	2P A-Code	3P A-Code	4P A-Code	4P D-Code	5P A-Code
Female PCB Pins Arrangement					
5P B-Code	6P A-Code	8P A-Code	12P A-Code	17P A-Code	
					

M12·ELECTRICAL PARAMETERS

Pin	Male Code(Orientation)				Rated Current	Rated voltage		Wire Gauge		Female Code(Orientation)			
	A	B	C	D		A/C	D/C	AWG	mm²	A	B	C	D
2					4A	250V	250V	22	0.34				
3					4A	250V	250V	22	0.34				
4					4A	250V	250V	22	0.34				
5					4A: A-Code B-Code 2A: C-Code	60V	60V	22	0.34				
6					2A	30V	30V	24	0.25				
8					2A	30V	30V	24	0.25				
12					1.5A	30V	30V	26	0.14				
17					1.5A	30V	30V	26	0.14				

M12· WIRE DEFINITION

Pins	Wire core color
	2 Pins
1	BN
2	-
3	BU

Pins	Wire core color
	3 Pins
1	BN
2	-
3	BU
4	BK

Pins	Wire core color		
	4 Pins A-Code	4 Pins B-Code	4 Pins D-Code
1	BN	BN	YE
2	WH	WH	WH
3	BU	BU	OG
4	BK	BK	BU

Pins	Wire core color	
	5 Pins A-Code	5 Pins B-Code
1	BN	BN
2	WH	WH
3	BU	BU
4	BK	BK
5	GY	GY

Pins	Wire core color
	12 Pins
1	BN
2	BU
3	WH
4	GN
5	PK
6	YE
7	BK
8	GY
9	RD
10	VT
11	OG
12	LTGN

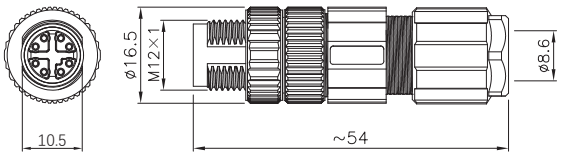
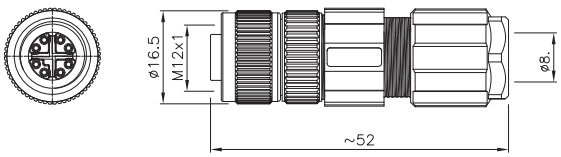
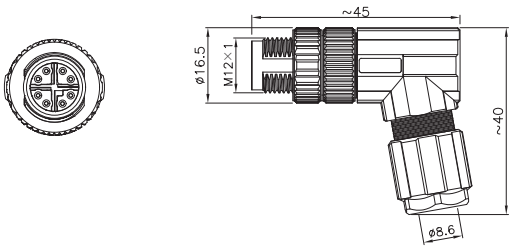
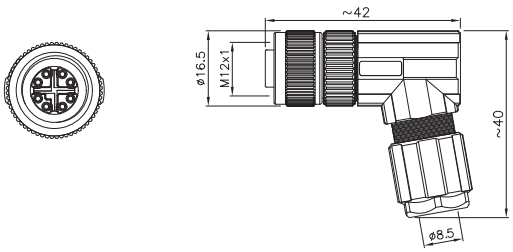
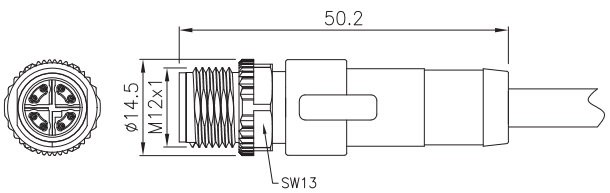
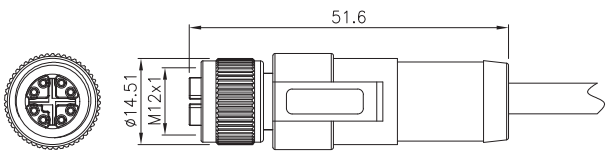
Pins	Wire core color
	17 Pins
1	BN
2	BU
3	WH
4	GN
5	PK
6	YE
7	BK
8	GY
9	RD
10	VT
11	OG
12	LTGN
13	LTBU
14	BKWH
15	BNWH
16	RDWH
17	BUWH

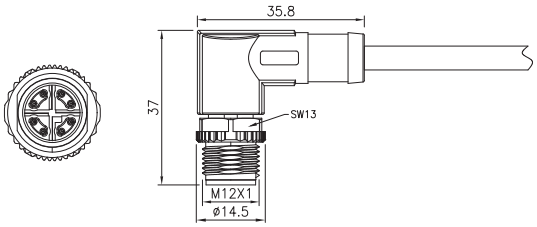
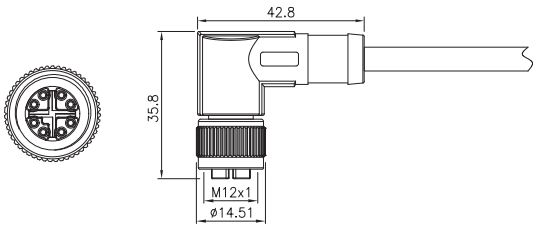
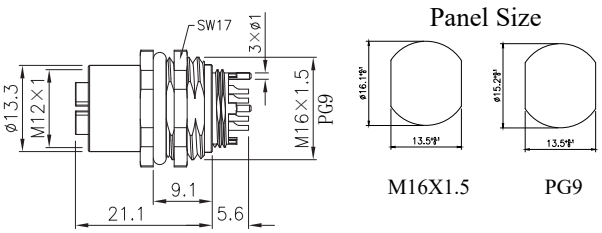
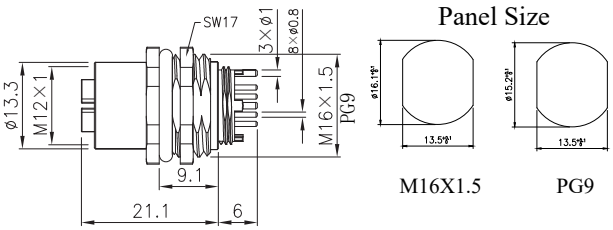
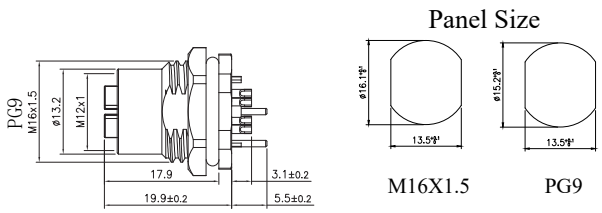
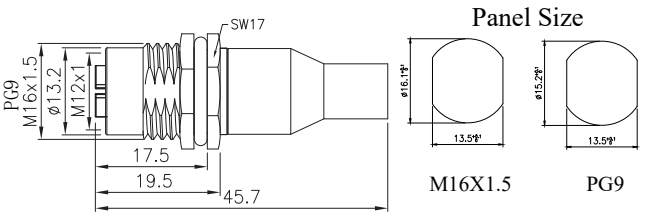
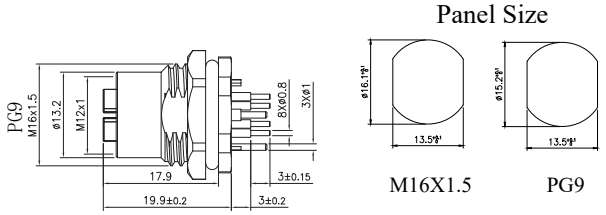
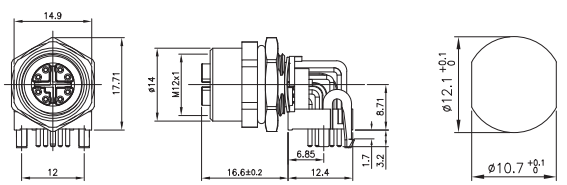
Pins	Wire core color
	6 Pins
1	BN
2	WH
3	BU
4	BK
5	-
6	GY
7	RD

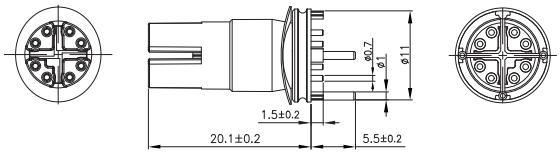
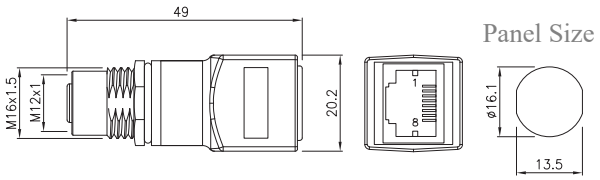
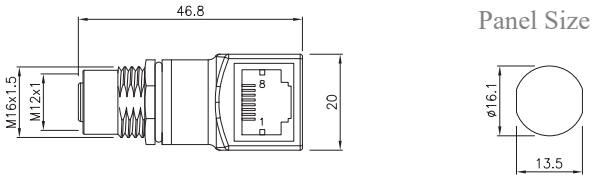
Pins	Wire core color
	8 Pins
1	WH
2	BN
3	GN
4	YE
5	GY
6	PK
7	BU
8	RD

* Wiring definition according to conventional standards,
if according to the agreement or other please contact our sales.

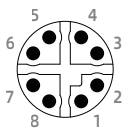
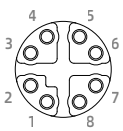
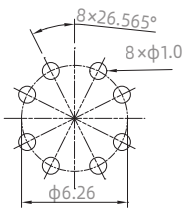
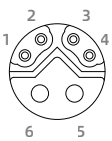
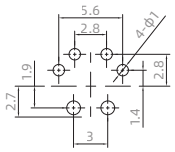
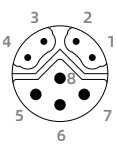
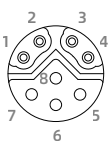
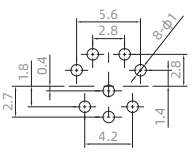
M12 DATA TYPE -- X CODE/Y CODE

Examples Picture	Drawing NO. and Description	Examples Drawing
	Z121DM01 M12 Straight Male Metal Plug (Crimp) PG7 for Data	
	Z122DM02 M12 Straight Female Metal Plug (Crimp, Solder)	
	Z121DR03 M12 Angled Male Metal Plug (Crimp) PG7 for Data	
	Z122DR04 M12 Angled Female Metal Plug (Crimp, Solder)	
	C121DS05 M12 Straight Male overmolded plug (Data Type, Shielded)	
	C122DS06 M12 Straight Female overmoled plug (Data Type, Shielded)	

Examples Picture	Drawing NO. and Description	Examples Drawing
	C121DR07 M12 Angled Male overmolded plug (Data Type, Shielded)	
	C122DR08 M12 Angled Female overmoled plug (Data Type, Shielded)	
	X122DF09 M12 Female Front Mount Socket (Solder, Screw M16*1.5/ PG9)	
	B122DF10 M12 Female Front Mount Socket (PCB, Screw M16*1.5/ PG9)	
	X122DR11 M12 Female Rear Mount Socket (Solder, Screw M16*1.5/ PG9)	
	G122DR12 M12 Female Rear Mount Socket (Solder, Screw M16*1.5/ PG9, Shielded)	
	B122DR13 M12 Female Rear Mount Socket (PCB, Screw M16*1.5/ PG9, Shielded)	
	B122DR14 M12 Angled Female Rear Mount Socket (PCB, Screw M12*1, Shielded)	

Examples Picture	Drawing NO. and Description	Examples Drawing
	T122DS15 M12 Female SMD Type Socket	
	A122DE16 M12 Female to Straight RJ45 Adapter 180°	
	A122DE17 M12 Female to Angled RJ45 Adapter 90°	

M12·X-code/Y-code ELECTRICAL PARAMETERS

Pins	Male	Rated Current	Rated voltage		Wire Gauge		Female	PCB Pins Arrangement
			A/C	D/C	AWG	mm²		
8X		0.5A	50V	60V	26~24	0.14~0.25		
6Y		0.5A/12A	30V	30V	2×26AWG+ 4×20AWG	0.14~0.5		
8Y		0.5A/6A	30V	30V	4×26AWG+ 4×20AWG	0.14~0.5		

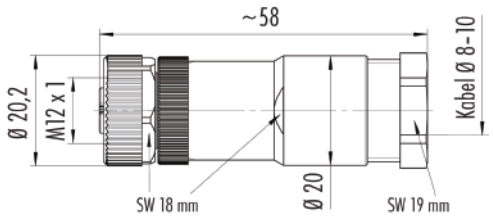
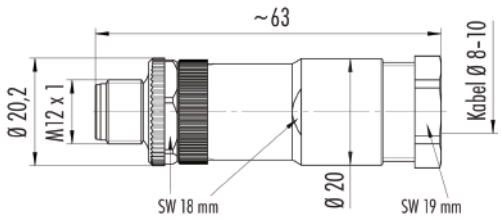
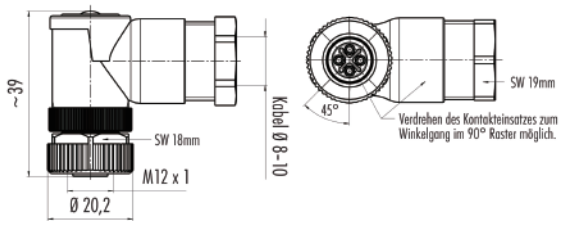
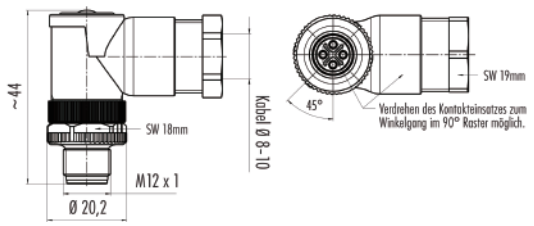
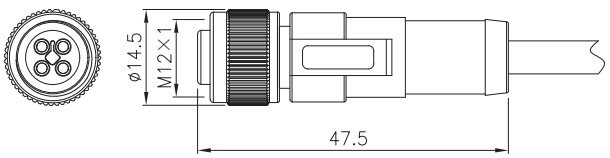
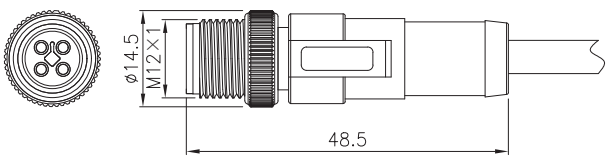
M12·X-code/Y-code WIRE DEFINITION

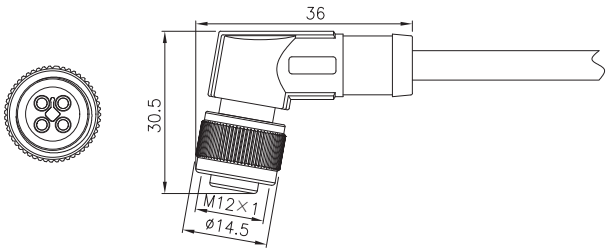
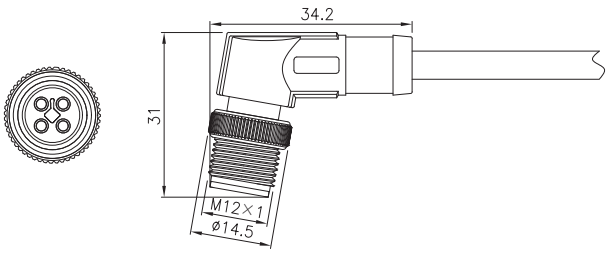
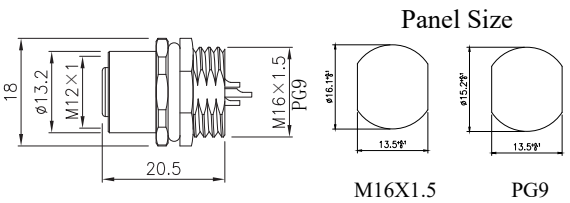
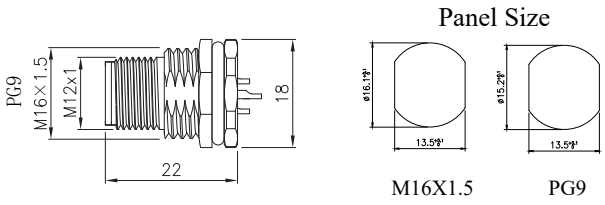
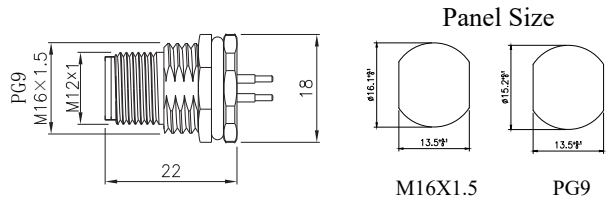
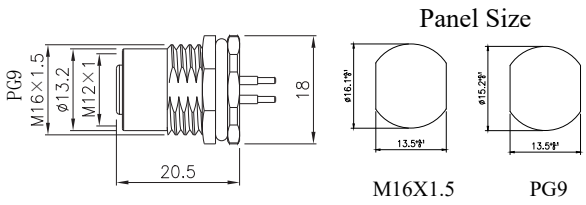
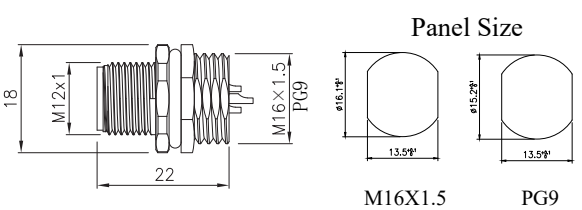
Pins	Wire core color		
	8 Pins X-Code		
1	WHOG		D1+
2	OG		D1-
3	WHGN		D2+
4	GN		D2-
5	WHBN		D4+
6	BN		D4-
7	WHBU		D3-
8	BU		D3+

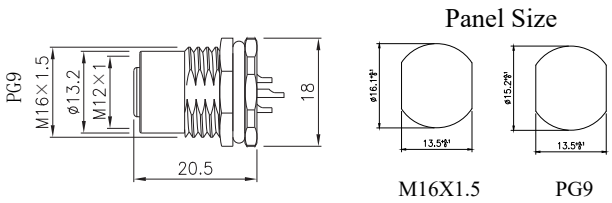
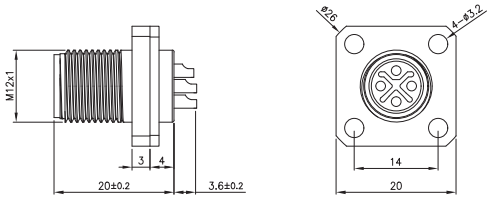
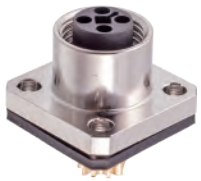
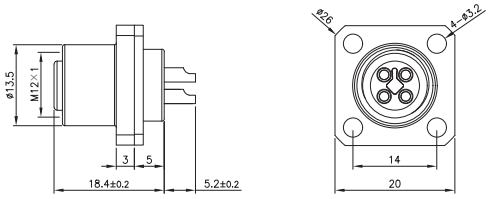
Pins	Wire core color		
	8 Pins Y-Code		
1	WHOG		TD+
2	OG		TD-
3	WHGN		RD+
4	GN		RD-
5	BU		
6	WH		
7	BN		
8	BK		

*
Wiring definition according to conventional standards, if according to the agreement or other please contact our sales.

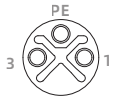
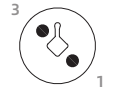
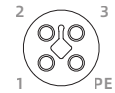
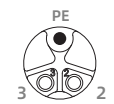
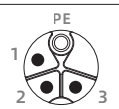
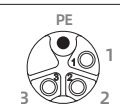
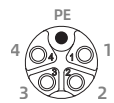
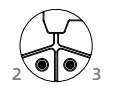
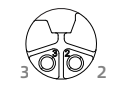
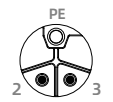
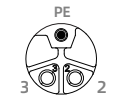
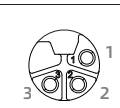
M12 POWER TYPE -- S,T,K,L,M CODE

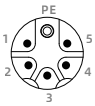
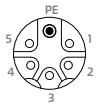
Examples Picture	Drawing NO. and Description	Examples Drawing
	Z122PS18 M12 Straight Female Plastic Plug (Screw) (Power Type)	
	Z121PS19 M12 Straight Male Plastic Plug (Screw) (Power Type)	
	Z122PR20 M12 Angled Female Plastic Plug (Solder) (Power Type) PG9	
	Z121PR21 M12 Angled Male Plastic Plug (Solder) (Power Type) PG9	
Shielded/Unshielded 	C122PP22 M12 Straight Female Plastic Plug (Power Type)	
Shielded/Unshielded 	C121PP23 M12 Straight Male Plastic Plug (Power Type)	

Examples Picture	Drawing NO. and Description	Examples Drawing
Shielded/Unshielded 	C122PR24 M12 Angled Female Overmolded Plug (Power Type)	
Shielded/Unshielded 	C121PR25 M12 Angled Male Overmolded Plug (Power Type)	
	X122MF26 M12 Female Front Mount Socket (Solder, Power Type) (Screw M16*1.5/ PG9)	
	X121MR27 M12 Male Rear Mount Socket (Solder, Power Type) (Screw M16*1.5/ PG9)	
	B121MR28 M12 Male Rear Mount Socket (PCB, Power Type) (Screw M16*1.5/ PG9)	
	B122MR29 M12 Female Rear Mount Socket (PCB, Power Type) (Screw M16*1.5/ PG9)	
	X121MF30 M12 Male Front Mount Socket (Solder, Power Type) (Screw M16*1.5/ PG9)	

Examples Picture	Drawing NO. and Description	Examples Drawing
	X122MR31 M12 Female Rear Mount Socket (Solder, Power Type) (Screw M16*1.5/ PG9)	
	X121SS32 M12 Male Square Socket (Solder, 14*14)	
	X122SS33 M12 Female Square Socket (Solder, 14*14)	

M12· S,T,K,L,M CODE ELECTRICAL PARAMETERS

Code (Orientation)	Pins	Male	Rated Current	Rated voltage		Wire Gauge		Female
				A/C	D/C	AWG	mm²	
S-Code	2		12A	630V	630V	16	1.5	
	2+PE		12A	630V	630V	16	1.5	
	3+PE		12A	630V	630V	16	1.5	
T-Code	2		12A	60V	60V	16	1.5	
	2+PE		12A	60V	60V	16	1.5	
	3+PE		12A	60V	60V	16	1.5	
K-Code	2		16A	800V	800V	16	2.5	
	2+PE		16A	800V	800V	16	2.5	
	3+PE		16A	800V	800V	16	2.5	
	4+PE		16A	800V	800V	16	2.5	
L-Code	2		16A	63V	63V	14	2.5	
	2+PE		16A	63V	63V	14	2.5	
	3		16A	63V	63V	14	2.5	
	3+PE		16A	63V	63V	14	2.5	

Code (Orientation)	Pins	Male	Rated Current	Rated voltage		Wire Gauge		Female
				A/C	D/C	AWG	mm²	
L-Code	4		16A	63V	63V	14	2.5	
	4+PE		16A	63V	63V	14	2.5	
M-Code	2		8A	630V	630V	16	1.5	
	2+PE		8A	630V	630V	16	1.5	
	3+PE		8A	630V	630V	16	1.5	
	4+PE		8A	630V	630V	16	1.5	
	5+PE		8A	630V	630V	16	1.5	

M12·S,T,K,L,M CODE WIRE DEFINITION

Pins	Wire core color
	2+PE,S-Code
1	BK1
2	BK2
PE	GNYE

Pins	Wire core color
	3+PE,S-Code
1	BK1
2	BK2
3	BK3
PE	GNYE

Pins	Wire core color
	4 Pins T-Code
1	BN
2	WH
3	BU
4	BK

Pins	Wire core color
	4/4+PE,L-Code
1	BN
2	WH
3	BU
4	BK
FE*	GY

*Omit 4 pins

Pins	Wire core color
	4+PE,K-Code
1	BK1
2	BK2
3	BK3
4	BK4
PE	GNYE

Pins	Wire core color
	5+PE,M-Code
1	BK1
2	BK2
3	BK3
4	BK4
5	BK5
PE	GNYE

*Wiring definition according to conventional standards,
if according to the agreement or other please contact our sales.

M16 Series

Products comply with IEC 61076-2-106-2012 AISG Standard

Most connectors are excellent for full shielding at 360 degrees

Plug: assembly, overmolded cable type (length can be customized at will)

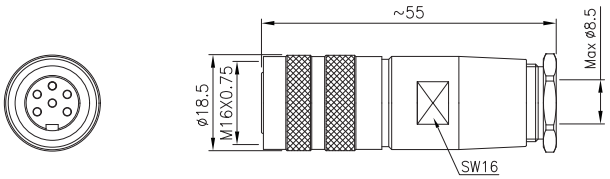
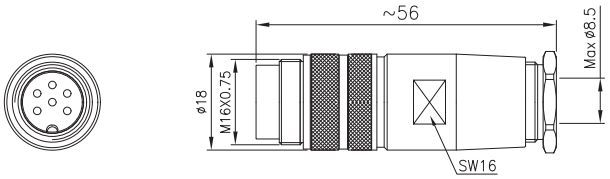
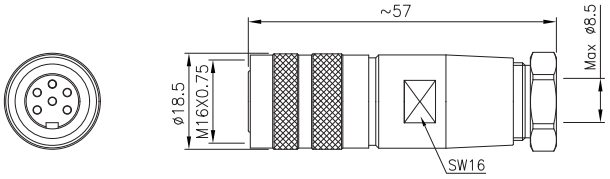
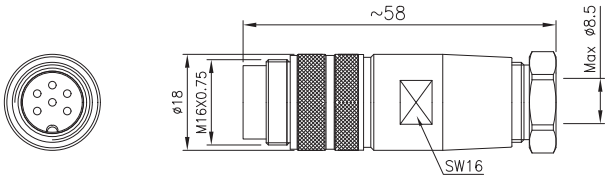
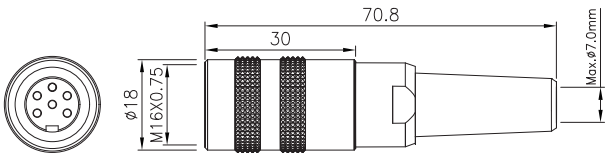
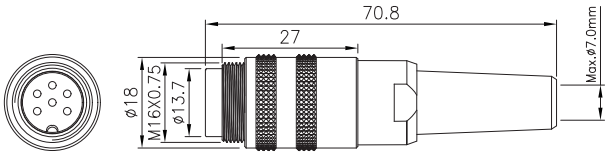
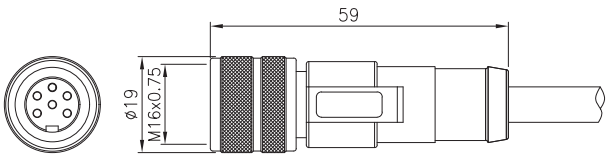
Socket: Front Mount Solder Type, Back Mount Solder Type and PCB board type

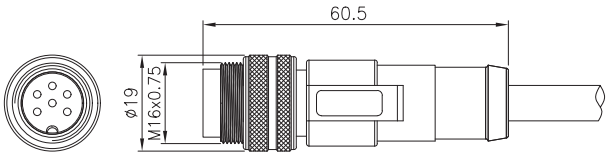
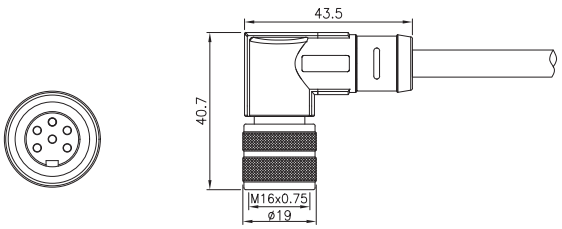
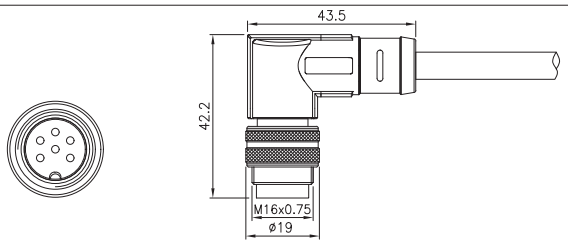
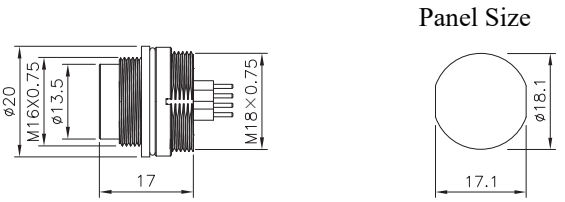
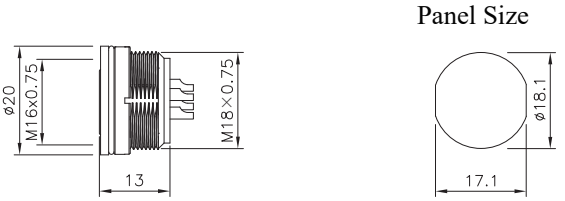
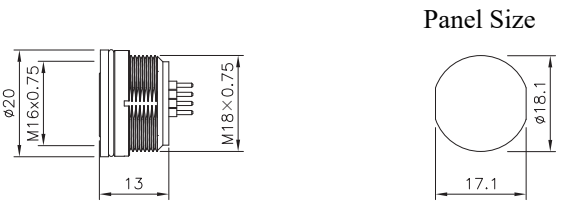
Waterproof grade: IP65 IP67 IP68

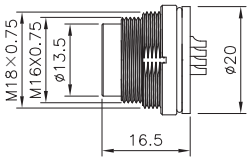
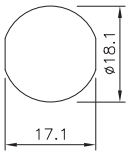
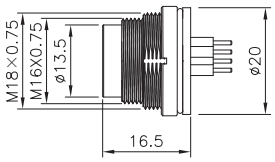
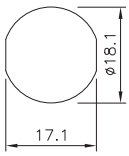
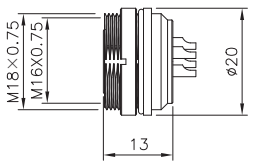
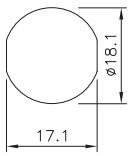
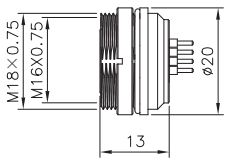
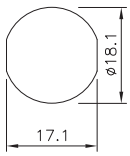
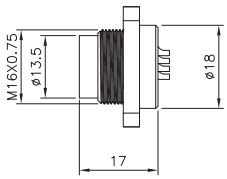
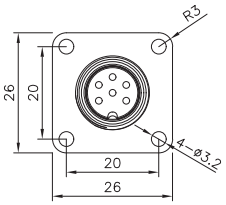
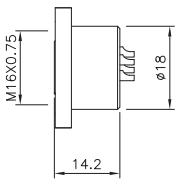
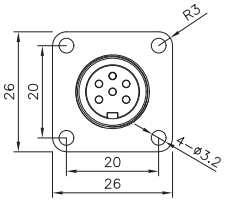
Pins Number: 2-24 pins

PRODUCT PARAMETERS

Shell material: Brass/Zinc alloy nickel/Brass nickel plated	Contact impedance: ≤5mΩ
Sealing material: Epoxy resin/Rubber	Durability: ≥500 Cycles
Contact material: Brass/Phosphorus copper gold-plated	Wiring range: PG7:4~6mm; PG9:6~8mm
Insulator material: PBT/PA66	Temperature: -40℃ ~ +85℃
Molding material: TPU/PVC	

Examples Picture	Drawing NO. and Description	Examples Drawing
	Z162MS01 M16 Straight Female Metal Plug (Solder)	
	Z161MS02 M16 Straight Male Metal Plug (Solder)	
	Z162MY03 M16 Straight Female Metal Plug (Crimp)	
	Z161MY04 M16 Straight Male Metal Plug (Crimp)	
	G162PS05 M16 Straight Female Plug (Solder, Plastic tube)	
	G161PS06 M16 Straight Male Plug (Solder, Plastic tube)	
Shielded/Unshielded 	C162MS07 M16 Straight Female Overmolded plug	

Examples Picture	Drawing NO. and Description	Examples Drawing
Shielded/Unshielded 	C161MS08 M16 Straight Male Overmoled plug	
Shielded/Unshielded 	C162MR09 M16 Angled Female Overmolded plug	
Shielded/Unshielded 	C161MR10 M16 Angled Male Overmoled plug	
	X161MF11 M16 Male Front Mount Socket (Solder, Screw M18*0.75)	
	B161MF12 M16 Male Front Mount Socket (PCB, Screw M18*0.75)	
	X162MF13 M16 Male Front Mount Socket (PCB, Screw M18*0.75)	
	B162MF14 M16 Female Front Mount Socket (PCB, Screw M18*0.75)	

Examples Picture	Drawing NO. and Description	Examples Drawing
	X161MR15 M16 Male Rear Mount Socket (Solder, Screw M18*0.75)	 Panel Size 
	B161MR16 M16 Male Rear Mount Socket (PCB, Screw M18*0.75)	 Panel Size 
	X162MR17 M16 Female Rear Mount Socket (Solder, Screw M18*0.75)	 Panel Size 
	B162MR18 M16 Female Rear Mount Socket (PCB, Screw M18*0.75)	 Panel Size 
	X161SS19 M16 Male Square Socket (Solder type) 20*20	 
	X162SS20 M16 Female Square Socket (Solder type) 20*20	 

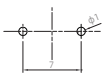
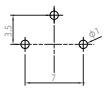
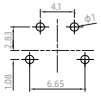
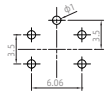
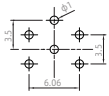
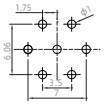
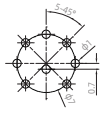
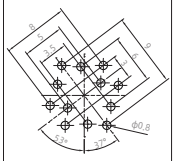
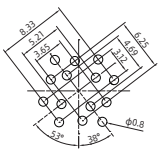
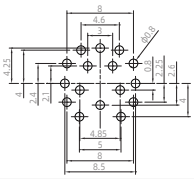
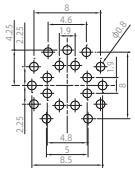
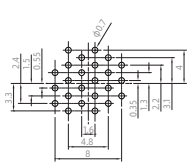
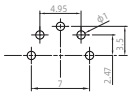
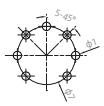
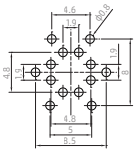
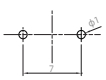
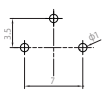
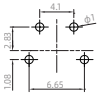
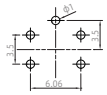
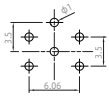
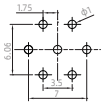
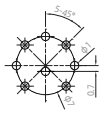
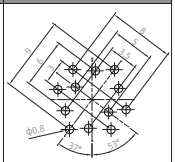
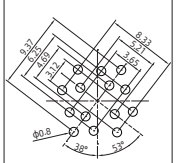
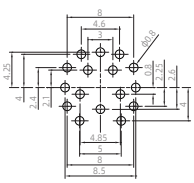
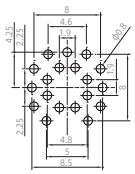
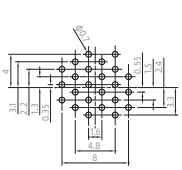
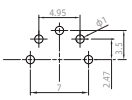
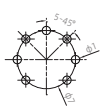
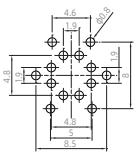
M16·DUST COVER

M16 Plastic Dust Cover (Inner screw)		M16 Metal Dust Cover (Inner screw)	
	Ring inner diameter Drawing NO. φ 3mm C1601P01 φ 18mm C1601P02		Ring inner diameter Drawing NO. φ 3mm C1601M03 φ 18mm C1601M04
M16 Plastic Dust Cover (Outer screw)		**M16 Metal Dust Cover (Outer screw)**	
	Ring inner diameter Drawing NO. φ 3mm C1602P05 φ 18mm C1602P06		Ring inner diameter Drawing NO. φ 3mm C1602M07 φ 18mm C1602M08

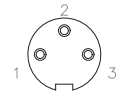
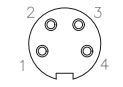
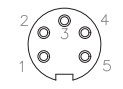
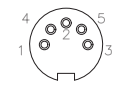
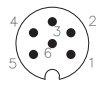
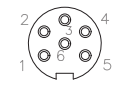
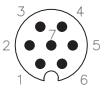
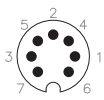
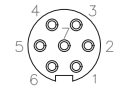
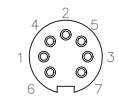
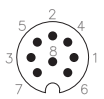
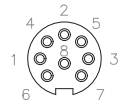
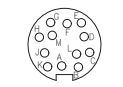
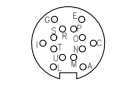
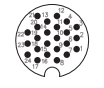
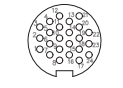
M16·ACCESSORIES

M16 Nut wrench		
 Semicircle Drawing NO. J166BY01	 Round style Drawing NO. J166YY02	 Slice type Drawing NO. J166ST03

M16·PCB PINS ARRANGEMENT

Pins	2P	3P	4P	5P	6P	7P	8P	12P
Male								
	14P	16P	19P	24P	5P B	7P B	14P B	
								
Pins	2P	3P	4P	5P	6P	7P	8P	12P
Female								
	14P	16P	19P	24P	5P B	7P B	14P B	
								

M16·ELECTRICAL PARAMETERS

Pins	Male		Rated Current	Rated voltage		Wire Gauge		Female	
	A-code	B Type		A/C	D/C	AWG	mm²	A-code	B Type
2			7A	250V	32V	20	0.75		
3			7A	250V	32V	20	0.75		
4			6A	250V	32V	20	0.75		
5			6A	250V	32V	20	0.75		
6			5A	250V	32V	20	0.75		
7			5A	125V	32V	20	0.75		
8			5A	60V	32V	20	0.75		
12			3A	60V	32V	24	0.25		
14			3A	60V	32V	24	0.25		
16			3A	60V	32V	24	0.25		
19			3A	60V	32V	24	0.25		
24			1A	60V	32V	26	0.14		

M23 Series

Pins Number: Signal 6 7 9 12 17 19 pins; Power 6 8 pins

Two types: Signal and Power

Plug: assembly, cold-pressure construction

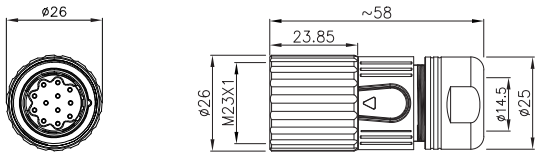
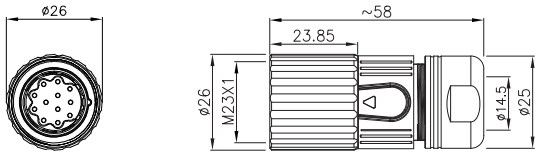
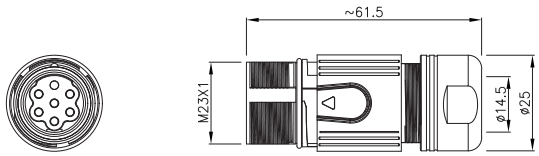
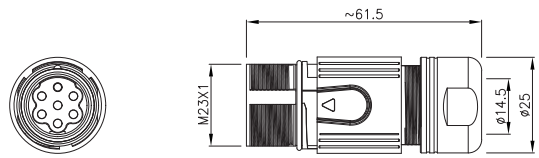
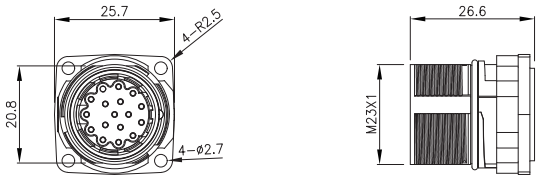
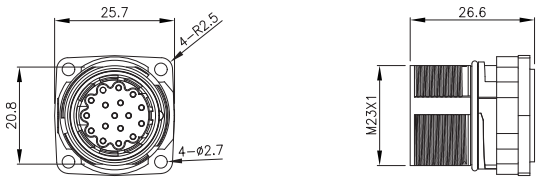
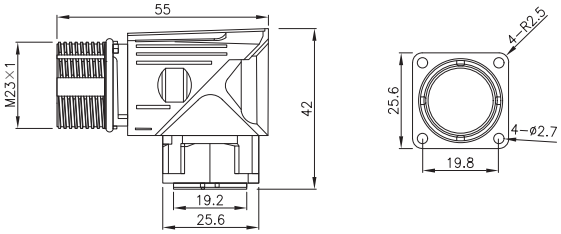
Socket: Straight/Angled cold-pressure construction

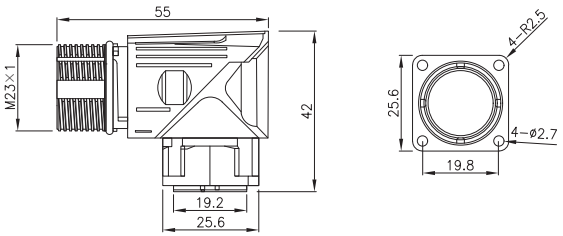
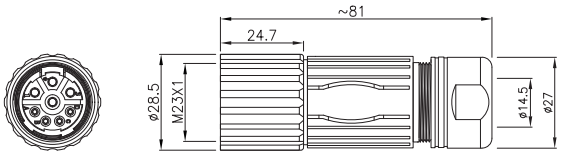
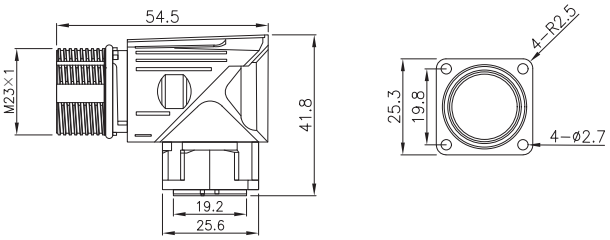
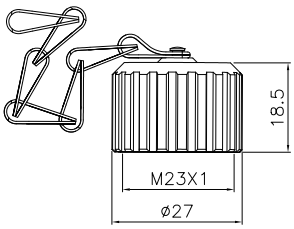
All connectors are excellent for full shielding at 360 degrees

Waterproof grade: IP67 IP68

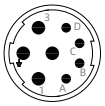
PRODUCT PARAMETERS

Shell material: Brass nickel plated	Contact impedance: ≤5mΩ
Sealing material: Epoxy resin/Rubber	Durability: ≥500 Cycles
Contact material: Brass/Phosphorus copper gold-plated	Wiring range: 6~10mm
Insulator material: PBT/PA66	Temperature: -40℃ ~ +125℃
Molding material: TPU/PVC	

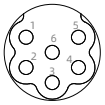
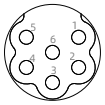
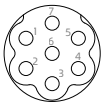
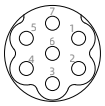
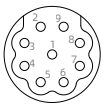
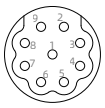
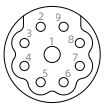
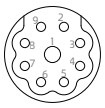
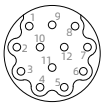
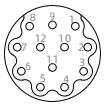
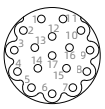
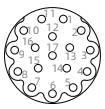
Examples Picture	Drawing NO. and Description	Examples Drawing
	Z232MY01 M623 Signal Straight Female Metal Plug (Crimp)	
	Z231MY02 M623 Signal Male Female Metal Plug (Crimp)	
	Z231DY03 M623 Signal Straight Mating Male Metal Plug (Crimp)	
	Z232DY04 M623 Signal Straight Mating Female Metal Plug (Crimp)	
	Z231SY05 M623 Signal Straight Male Socket (Crimp) Mount hole 19.8*19.8	
	Z232SY06 M623 Signal Straight Female Socket (Crimp) Mount hole 19.8*19.8	
	Z231RY07 Angled M623 Signal Male Square Socket (Crimp) Mount hole 19.8*19.8	

Examples Picture	Drawing NO. and Description	Examples Drawing
	Z232RY08 M623 Signal Female Square Socket (Crimp) Mount hole 19.8*19.8	
	P232SY09 M923 Power Straight Female Metal Plug (Crimp)PG	
	P231RY10 Angled M923 Power Male Square Socket (Crimp) Mount hole 19.8*19.8	
	C2301M01 M623 Metal dust cover (inner screw)	

M23·M923 ELECTRICAL PARAMETERS

Pins	Male	Rated Current	Rated voltage		Wire Gauge		Female
			A/C	D/C	AWG	mm²	
6		30A	630V	630V	14	2.5	
8		9A/20A	250V/630V	250V/630V	18/14	1/2.5	

M23·M623 ELECTRICAL PARAMETERS

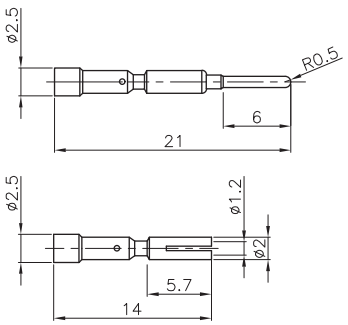
Pins	Male	Rated Current	Rated voltage		Wire Gauge		Female
			A/C	D/C	AWG	mm²	
6		20A	300V	300V	14	2.5	
7		20A	300V	300V	14	2.5	
9		8A	150V	150V	16	1.5	
9P(8+1)		8A/20A	300V	150V	16/14	1.5/2.5	
12		8A	150V	150V	18	1	
17		8A	150V	150V	18	1	

M23·SIGNAL CONTACT PINS PARAMETER TABLE

M923 Riveting pressure pin

Contact diameter: φ1

Material: Brass gold plated



M23 Riveted Male Pin

Wire size		Drawing NO.
0.08-0.5mm²	AWG 28-20	Z231SY01
0.5-1.0mm²	AWG 20-17	Z231SY02
1.0-1.5mm²	AWG 17-16	Z231SY03

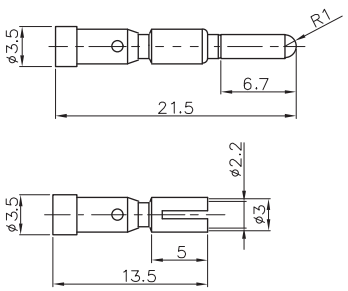
M23 Riveted Female Pin

Wire size		Drawing NO.
0.08-0.5mm²	AWG 28-20	Z232SY04
0.5-1.0mm²	AWG 20-17	Z232SY05
1.0-1.5mm²	AWG 17-16	Z232SY06

M923 Riveting pressure pin

Contact diameter：φ2

Material：Brass gold plated



M23 Riveted Male Pin

Wire size		Drawing NO.
0.75-2.5mm²	AWG 18-13	Z231SE07

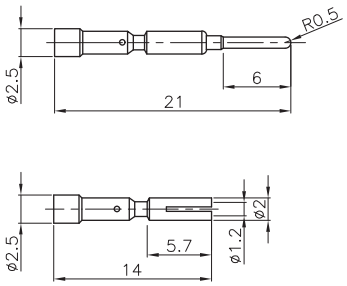
M23 Riveted Female Pin

Wire size		Drawing NO.
0.75-2.5mm²	AWG 18-13	Z232SE08

M23·POWER CONTACT PINS PARAMETER TABLE

M623 Riveting pressure pin

Contact diameter：φ1　　Material：Brass gold plated



M23 Riveted Male Pin

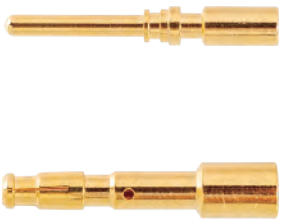
Wire size		Drawing NO.
0.25-1.0mm²	AWG 23-17	Z231PY09

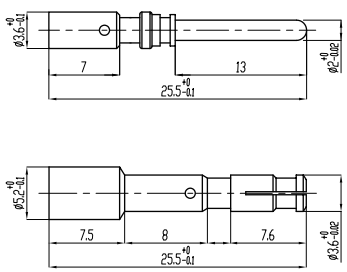
M23 Riveted Female Pin

Wire size		Drawing NO.
0.25-1.0mm²	AWG 23-17	Z232PY10

M623 Riveting pressure pin

Contact diameter：φ2　　Material：Brass gold plated





M23 Riveted Male Pin

Wire size		Drawing NO.
1.0-2.5mm²	AWG 18-13	M231PE11
2.5-4.0mm²	AWG 13-12	M231PE12

M23 Riveted Female Pin

Wire size		Drawing NO.
1.0-2.5mm²	AWG 18-13	M232PE13
2.5-4.0mm²	AWG 13-12	M232PE14

M23·M23 WIRE DEFINITION

Pins	Wire core color	Wire Gauge
	6 Pins	
1	BK U	1.5mm²
2	BN V	1.5mm²
3	GNYE	1.5mm²
4	BK	1.5mm²
5	WH	1.5mm²
6	BN K	1.5mm²

Pins	Wire core color	Wire Gauge
	8 Pins	
1	BK 1	1.5mm²
PE	GNYE	1.5mm²
3	BK 2	1.5mm²
4	BK 3	1.5mm²
A	BK 5	0.75mm²
B	BK 6	0.75mm²
C	BK 7	0.75mm²
D	BK 8	0.75mm²

Pins	Wire core color	Wire Gauge
	12 Pins	
1	PK	0.25mm²
2	RD	0.25mm²
3	BK	0.25mm²
4	BU	0.25mm²
5	BN	0.25mm²
6	GN	0.25mm²
7	VT	0.25mm²
8	GY	0.25mm²
9	Outer sheath	
10	WH	0.5mm²
11	NC	
12	BN	0.5mm²

Pins	Wire core color	Wire Gauge
	17 Pins	
1	YE	0.14mm²
2	GN	0.14mm²
3	RD	0.14mm²
4	NC	
5	BU	0.14mm²
6	NC	
7	BNBU	0.5mm²
8	GNBK	0.22mm²
9	GNRD	0.22mm²
10	BNRD	0.5mm²
11	BK	0.14mm²
12	BN	0.14mm²
13	OG	0.14mm²
14	WHBK	0.14mm²
15	BNGY	0.22mm²
16	BNYE	0.22mm²
17	Inner sheath	

*Wiring definition according to conventional standards,
if according to the agreement or other please contact our sales.

7/8 Series

Products comply with IEC 61076-2-101 Industry 4.0 Agreement NEMA2000 standard

Plug: assembly, overmolded cable type (length can be customized at will)

Socket: Front Mount Solder Type, Back Mount Solder Type and PCB board type

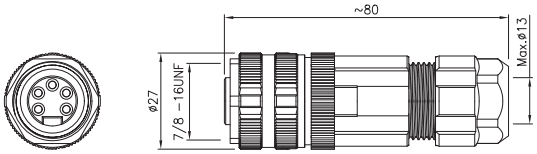
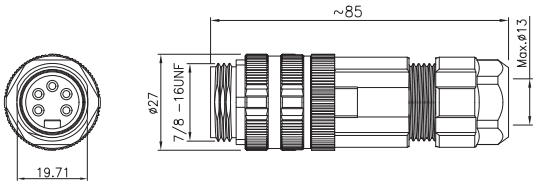
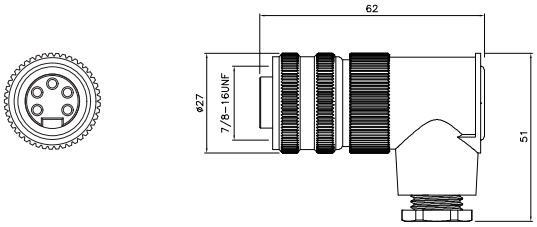
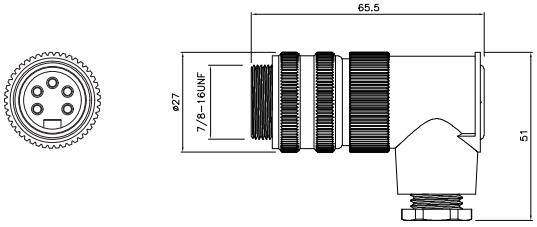
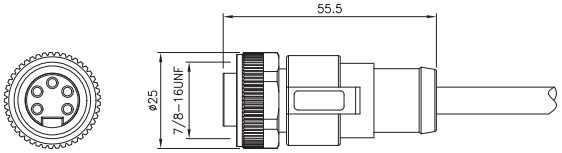
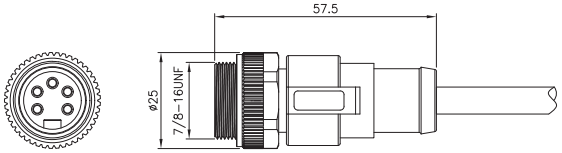
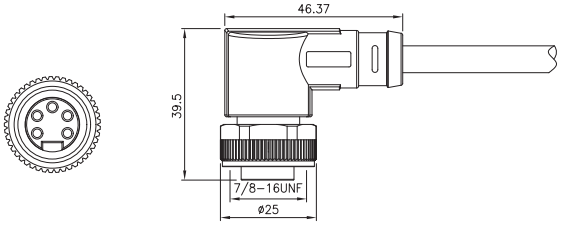
Mainly used in power connectors

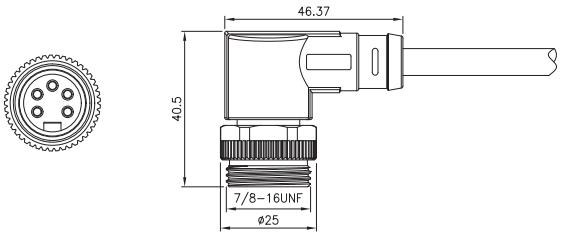
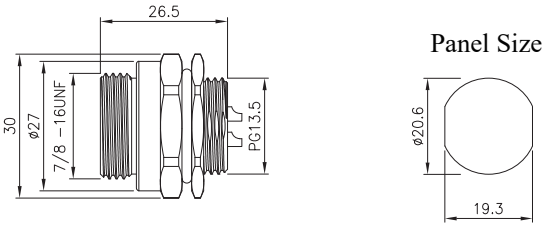
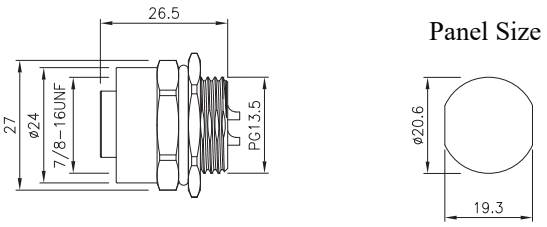
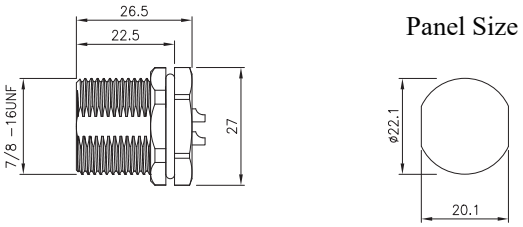
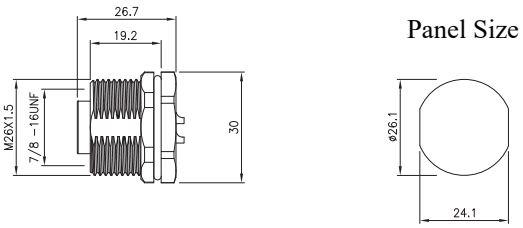
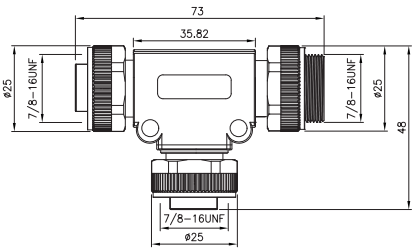
Pins Number: 3-6 pins

Waterproof grade: Ip65 IP67 IP68

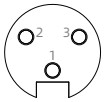
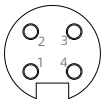
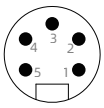
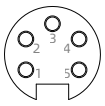
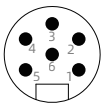
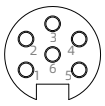
PRODUCT PARAMETERS

Shell material: Brass nickel-plated/Zinc alloy nickel-plated/PA-GF	Contact impedance: ≤5mΩ
Sealing material: Epoxy resin/Rubber	Durability: ≥500 Cycles
Contact material: Brass/Phosphorus copper gold-plated	Insulation impedance: ≥100mΩ
Insulator material: PA+GF/TPU	Temperature: -40℃ ~ +85℃

Examples Picture	Drawing NO. and Description	Examples Drawing
	Z782PS01 7/8 Straight Female Plastic Plug (Screw)	
	Z781PS02 7/8 Straight Male Plastic Plug (Screw)	
	Z782PR03 7/8 Angled Female Plastic Plug (Screw)	
	Z781PR04 7/8 Angled Male Plastic Plug (Screw)	
Shielded/Unshielded 	C782PS05 7/8 Straight Female overmolded plug	
Shielded/Unshielded 	C781PS06 7/8 Straight Male overmolded plug	
Shielded/Unshielded 	C782PR07 7/8 Angled Female overmolded plug	

Examples Picture	Drawing NO. and Description	Examples Drawing
Shielded/Unshielded 	C781PR08 7/8 Angled Male overmolded plug	
	X781MF09 7/8 Male Front Mount Socket (Solder, Screw PG13.5)	
	X782MF10 7/8 Female Front Mount Socket (Solder, Screw PG13.5)	
	X781MR11 7/8 Male Rear Mount Socket (Solder, Screw 7/8-16UHF)	
	X782MR12 7/8 Female Rear Mount Socket (Solder, Screw M26*1.5)	
	A783PR13 7/8 T Type Adapter (PSS)	

7/8·ELECTRICAL PARAMETERS

Pins	Male	Rated Current	Rated voltage		Conductor size		Female
			A/C	D/C	AWG	mm²	
3		13A	300V	300V	18	1	
4		9A	300V	300V	18	1	
5		9A	300V	300V	20	0.5	
6		9A	300V	300V	20	0.5	

7/8·WIRE DEFINITION

Pins	Wire color
	3 Pin
1	BK
2	BN
3	BU
4	-
5	-

Pins	Wire color
	4 Pin
1	BK
2	BU
3	BN
4	WH
5	-

Pins	Wire color
	5 Pin
1	BK
2	BU
3	GNYE
4	BN
5	WH

*Wiring definition according to conventional standards,
if according to the agreement or other please contact our sales.

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