



规格书 Specification

品类/Term: SW-M12 连接器系列-母插头

SW12-M12 connector series-female plug

型号/Model:见下翻详情

Under the double details

承认签章/Admit signature					
供应商确认/supplier			客户公司承认/customer		
工程师 engineer	审核 audit	批 准 approval	工程师 engineer	审核 audit	批 准 approval
LXQ	WXW	CJY			
盖章签署 signature			盖章签署 signature		
日期/date			日期/date		

产品概述:

自 M 系列连接器问世以来, M12 连接器已成长为工业自动化领域的首选互连系统。此类结实耐用的连接器可在最为恶劣的环境中实现可靠连接, 从而为工业自动化领域的连接技术带来一场革新。

M12 连接器为一种带有锁定螺纹的圆形连接器, 一般具有防止液体和固体侵入的 IP 防护等级。M12 连接器为传感器、执行器以及工业以太网和现场总线设备的理想选择, 主要用于工业自动化领域和腐蚀性环境。

除了工厂自动化之外, M12 连接器和 M12 电缆组件还可用于测量和控制、通信、运输、机器人、农业以及替代能源领域。插针数的正确选择取决于具体应用需求——3 针和 4 针型号用于传感器和电源应用; 4 针和 8 针型号用于以太网和 PROFINET; DeviceNet 和 CANbus 一般使用 4 针和 5 针 M12 连接器; 12 针型号通常用于各种信号应用。

Product overview:

Since the advent of the M series connector, the M12 connector has grown into the preferred interconnect system in the field of industrial automation. These robust connectors revolutionize connection technology in industrial automation by providing reliable connections in the toughest environments.

The M12 connector is a circular connector with locking threads and generally has an IP protection rating against liquid and solid intrusion. The M12 connector is ideal for sensors, actuators, and industrial Ethernet and fieldbus equipment used in industrial automation and corrosive environments.

In addition to factory automation, M12 connectors and M12 cable assemblies are used in measurement and control, communications, transportation, robotics, agriculture, and alternative energy. The correct number of pins depends on the application requirements -- 3-pin and 4-pin models are used for sensor and power applications; 4-pin and 8-pin models for Ethernet and PROFINET; DeviceNet and CANbus generally use 4-pin and 5-pin M12 connectors; 12-pin models are commonly used for a variety of signaling applications.

一、产品型号 (Product model)

2pin female plug	3pin female plug	4pin female plug
SW12-2KLT	SW12-3KLT	SW12-4KLT
5pin female plug	6pin female plug	8pin female plug
SW12-5KLT	SW12-6KLT	SW12-8KLT

二、产品图片 (Product Appearance)

SW12-2KLT



SW12-3KLT



SW12-4KLT

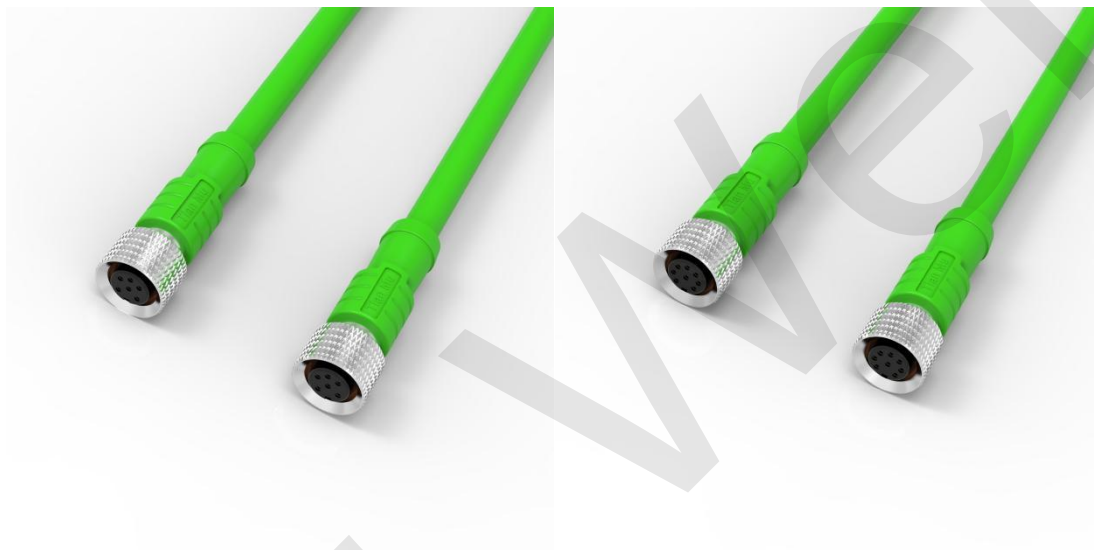


SW12-5KLT



SW12-6KLT

SW12-8KLT



三、产品特性 (Product features)

- ☑快速简单的自锁定系统 (Quick, simple self locking system)
- ☑连接可靠 (Connect reliably)
- ☑产品体积小 (Small size of product)
- ☑多种芯数可选 2,3,4,5,6,8 芯支持多种应用场景
(Multiple cores –2,3,4,5,6,8 pin support multiple application scenarios)
- ☑防护等级 IP67 (waterproof rating IP67)
- ☑屏蔽效果 (With shielding function)
- ☑全金属材质 (All metal material)

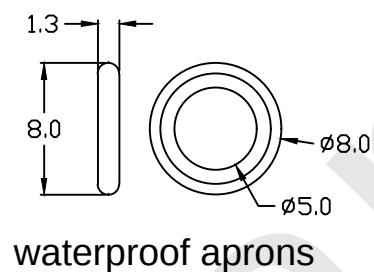
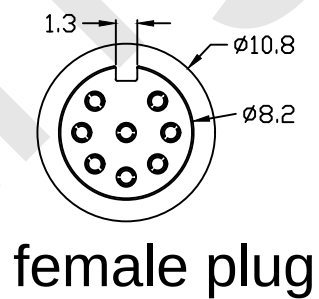
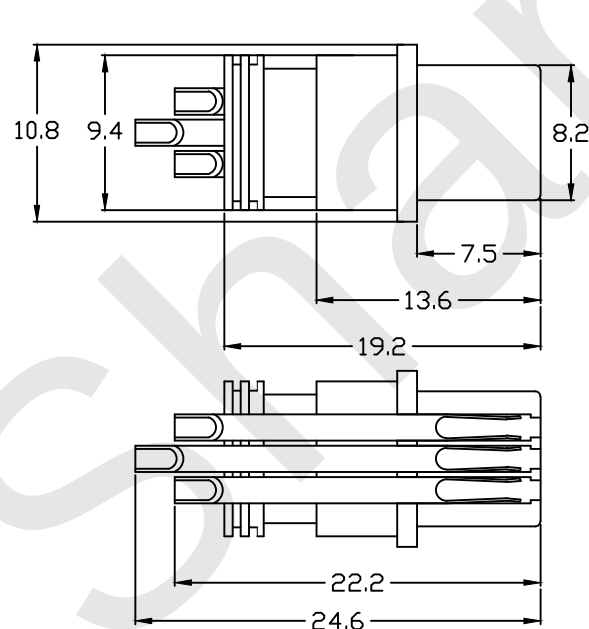
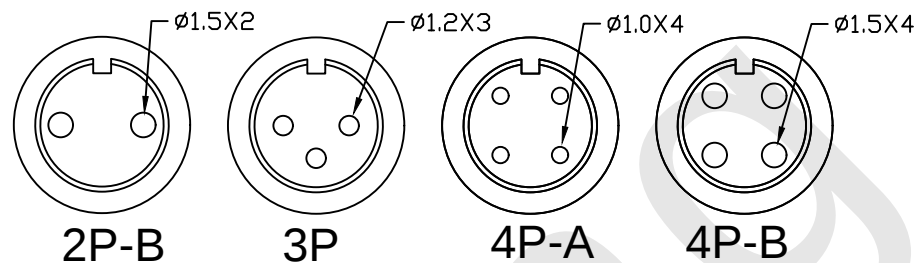
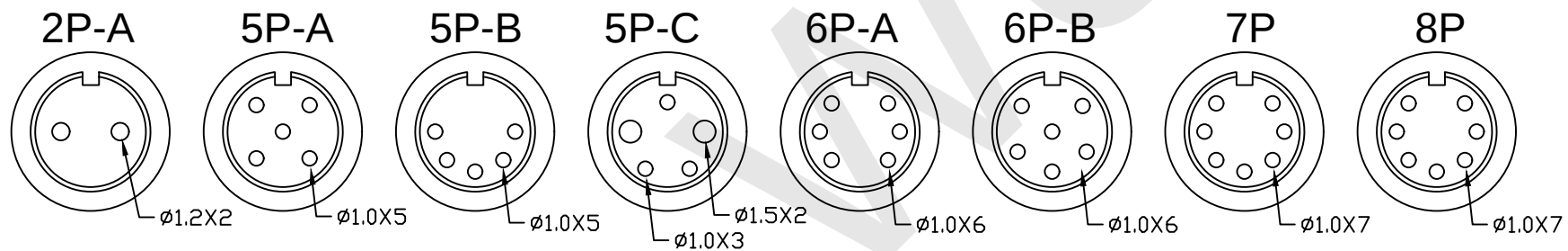
四、技术参数 (Technical parameters)

1.电气参数 (Electrical parameters)

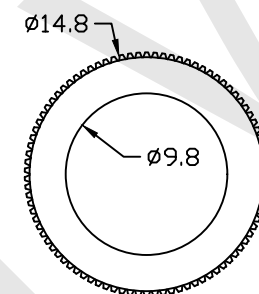
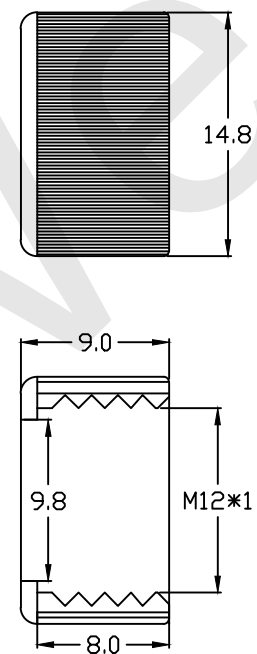
芯数 Contacts No.	二芯 2pin	三芯 3pin	四芯 4pin	五芯 5pin	六芯 6pin	八芯 8pin
插针直径 Contact diameter(mm)	1.2	1.0	1.0	1.0	0.8	0.8
额定电流 Rated current	8A	5A	5A	5A	3A	3A
额定电压 Rated voltage	220V	220V	220V	220V	220V	220V
耐电压 Withstand voltage (AC.V 60S)	1500V	1500V	1500V	1000V	1000V	1000V
绝缘电阻 Insulation resistance	> 200M Ω					
线径范围 Wire(mm)	0~8.0					

2.材料和环境 (Material and environmental parameters)

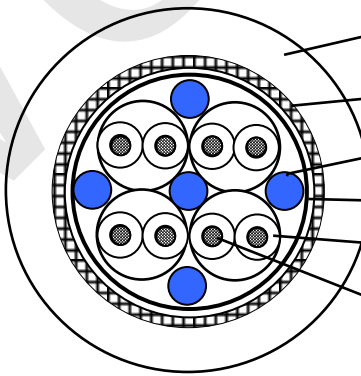
外壳 (Shell)	铜/copper
胶芯 (Rubber core)	PA66 加纤 15%/ PA66 plus fiber 15%.
触点 (Contacts)	铜镀金/Gold-plated copper
屏蔽壳(Shielding shell)	Copper nickel plating
螺丝 (Screw)	铝/aluminum
表面处理 (Surface treatment)	整体镀 Ni:80-120u"(Min) 公端母端镀金普通 U./Overall Ni plating: 80-120U "(Min) Male end and female end are plated with ordinary U.
防护等级 (Protection degree)	IP67
工作温度 (Working temperature)	-25 ~ +85C °



Screw



Shenzhen Shangwen Electronics			
Trem	M12 waterproof female plug	No.	SW1202
Drawing	Cavon	Audit	Denis

SPECIFICATION:		4P*26AWG+FILLER+NON-WOVEN+BRAID /CAT.6		CONTRUCTIONE D.W.G	
I T E M		SPECIFICATION			
CONDUCTOR	AWG	26AWG			
	MATERIAL	BARE COPPER			
	COND.SIZE	30/0.08±0.008MM			
INSULATION	MIN.AVG.THICK	0.18MM			
	MATERIAL	HD-PE			
	O D	0.95±0.05MM			
	N O	4P			
NON-WOVEN	COVERAGE	100%			
	OVERLAP	25% MIN			
BRAID COPPER	MATERIAL	TINNED COPPER			
	SIZE	16*11/0.08±0.008MM			
	COVERAGE	85% MIN			
NON-WOVEN	COVERAGE	/		COLOR CODE	
	OVERLAP	/			
JACKET	MIN.AVG.THICK	0.76MM		1. BLUE*WHITE/BLUE 2. ORANGE *WHITE/ORANGE 3. GREEN* WHITE/GREEN 4. BROWN*WHITE/BROWN	
	MATERIAL	MIXING PVC			
	COLOUR	GREEN			
	O . D	7.50±0.20MM			
				MARKING	
				E188601-U (UL) TYPE CM 26AWG/4PRS CAT.6 FLEXIBLE CABLE	
ELECTRICAL CHARACTERISTICS		PHYSICAL PROPERTIES		RE MARK	
1. Rating TEMP : 75℃ 2. Conductor Resistance: at 20℃max 26AWG: 140Ω/km		Drag chain test : a. Test bending radius : ≤10*OD b. Test speed : 1m/s c. Test travel : 1m e. Test cycles : min. 5 million times			
				Shenzhen Shangwen Electronics	
				PART NO.	
				APPROVED	CUSTOMER
				CHECKED	REV A / 0
				DRAWING	ZHANG DATE 2021/12/20

成品图展示/Finished drawing reference:



产品测试规范:

- 1.允许毛边最大为 0.05mm.
- 2.外观不允许有压伤,脏污,模痕等不良现象.
- 3.拱形:5mm/1000mm 最大,扭曲:45 ° /1000mm 最大.
- 4.盐雾测试 12 小时以上.
- 5.电镀表面不得有氧化、发黄、发黑、脏污、烧焦等不良现象;
- 6.外壳来回弯折 90 度电镀表面不得有脱皮现象

Product test specification:

1. The maximum allowed burr edge is 0.05mm.
2. The appearance is not allowed to have damage, dirt, mold marks and other undesirable phenomena.
3. Arch :5mm/1000mm maximum, twist :45°/1000mm maximum.
4. Salt spray test more than 12 hours.
5. The electroplating surface shall not have oxidation, yellow, black, dirty, scorching and other adverse phenomena;
6. The shell bends back and forth 90 degrees on the electroplated surface without peeling phenomenon