

掌握核心连接科技

Main Core Connection Technology

**CHOGORI®**  
乔合里

# CT 系列 Series

参考MIL-C-26482系列I设计

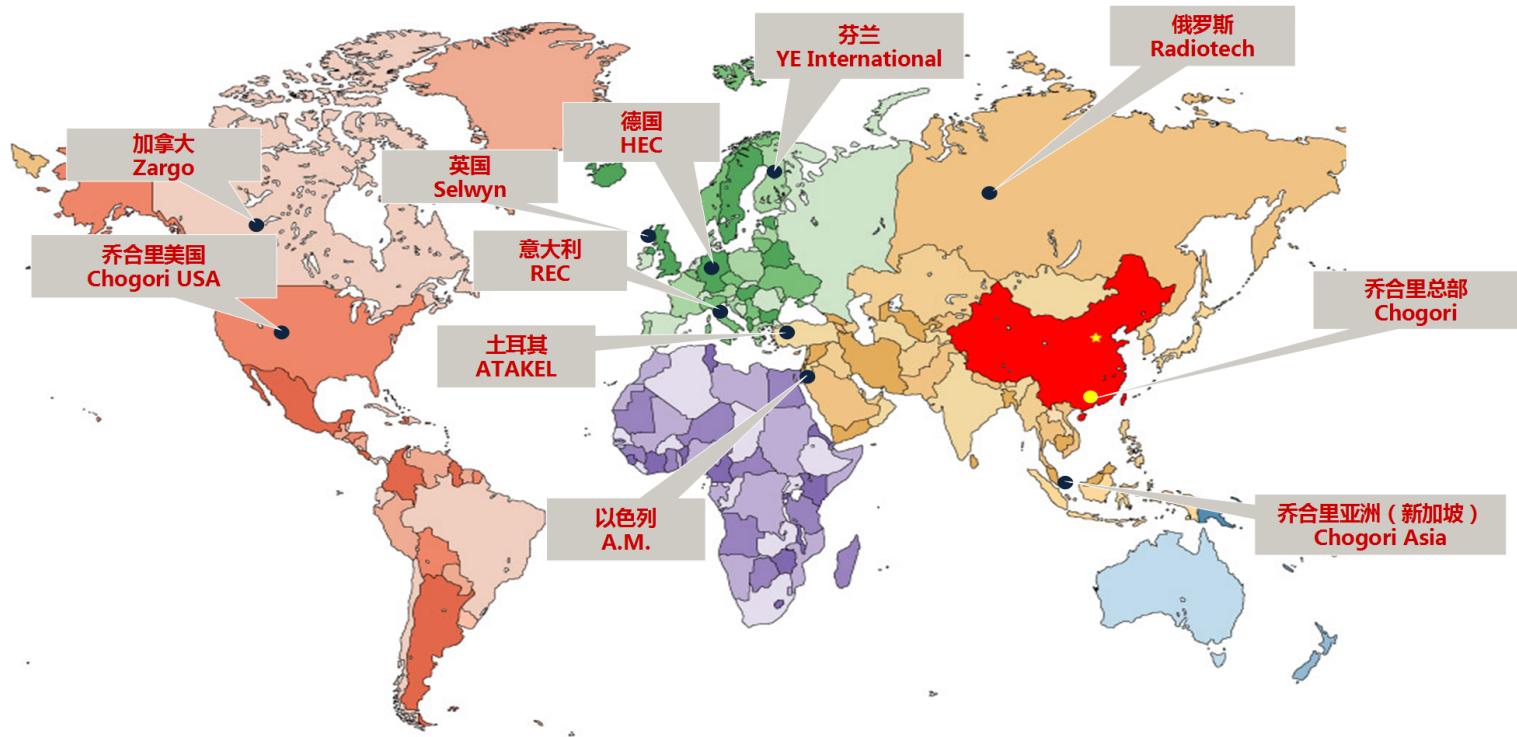
Designed to meet the requirements of  
MIL-C-26482 series I specification



新能源汽车/铁路/焊接设备及其他恶劣环境下广泛使用的连接器

New energy automotive/ Railway/ welding equipment and other demanding interconnect architectures

全球化的乔合里公司  
**CHOGORI Worldwide**



乔合里的全球布局  
Chogori worldwide Layout

## 深圳乔合里科技股份有限公司 **Chogori Technology co.,Ltd**

地址:深圳市龙华新区观澜章阁市场中港星工业区E栋  
Add:Building E, Zhonggangxing Industrial Zone, ZhangGeVillage, Guanlan  
LongHua New District, ShenZhen, China  
电话: +860755-28227766/28227866 传真: +860755-28227566  
Tel: +860755-28227766/28227866 Fax: +860755-28227566

## **Chogori USA., Inc**

Add: 2915 Ogletown, Suite 1833, Newark, Delaware, USA 19713  
Email: gary@chogoriusa.com  
Tel: +1 610 573-1950 Website: www.chogoriusa.com



## **Chogori Asia Pte.Ltd**

Add: Blk 465, North Bridge Road, #02-5061, Singapore 191465  
Tel: Eddie Teo 0065 9644 7891  
Eddie@chogoriasia.com.sg kelvin@chogoriasia.com.sg

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## 乔合里概况

### F 我们的能力

乔合里是一家研发、生产、销售工业连接器的专业公司，主要提供包括防水、大电流工业连接器，客户定制连接器和线材配套加工服务。产品广泛使用在工程机械、铁路、石油、天然气和新能源（电动车，太阳能，风能，生物能）、工业自动化、船用电子、LED应用（路灯、显示屏、亮化）等行业。近300多名研发、制造、销售团队、7千平米的厂房、按行业国际标准建设的实验室、十二年的研发、制造、销售经验，可以为您提供全面完整的解决方案和产品，将您的先进科技连接到世界每一个地方。

### A 我们的优势

乔合里作为国内最早的专业防水连接器和工业连接器公司，已积累了15大系列3000多个标准产品。拥有UL、CCC、CE、TUV等多项认证，我们的直接团队包括来自中国、加拿大、菲律宾、新加坡等20多位行业精英，合作伙伴遍布美国、欧洲、亚洲等工业发达地区，2014年乔合里参与制定了《LED模组路灯接口的国家标准》。我们是奥运会、世博会、亚运会、大运会等工程中显示和亮化连接器指定的产品供应商。

### B 为您做到

乔合里依靠高效的研发团队为您提供性能可靠的产品，我们有新能源&工业、自动化&船用、LED三个事业部针对不同行业客户需求深入研发产品，专门的工业连接器的研发和销售团队，研发体系严格按照APQP管控流程，充分验证失效模式，实现性能卓越的产品表现。我们仔细聆听不同行业客户对市场竞争力的准确要求，竭尽全力控制连接器成本，实现性能与成本结合的有效呈现。

乔合里从2013年开始运用“精益管理哲学”在TS16949管理体系框架下，消除从订单到现金过程中的各种浪费，以人为本，尊重员工的愿望和动力，持续改善经营流程中各个环节，使用标准化、5S、JI培训、A3思维、看板等精益工具来全面提升客户关切的品质保证和交货期服务，我们对重要客户的交货期承诺为7天。对重要产品的寿命承诺超过25年。



## Chogori Summary

### F. Our abilities

Chogori is a professional company specializing in industrial connectors research, development, production and sales, mainly to provide waterproof, high current industrial connectors, customized connectors and cable assembly services. Our products are widely applied in engineering machinery, railway, oil and gas, renewable energy (battery car, solar energy, wind energy, bioenergy), industrial automation, marine electronics, LED (street lighting, display, lighting), etc. Owning nearly 300 people team, including R&D, production, sales, 7000 square meters factory, industry international standard laboratory, and over 12 years experience in R&D, manufacturing, and sales, can provide you with a complete range of solutions and products, and help spread your advanced technology everywhere around the world with our connections.

### A. Our advantages

As one of the earliest professional waterproof and industrial connector companies, Chogori has accumulated 15 series over 3000 standard products with UL, CCC, CE, TUV and other certifications. Our direct team includes more than 20 industry elite from China, Canada, Philippines, Singapore, etc, and we have partners throughout the United States, Europe, Asia and other industrialized areas. In 2014 Chogori participate in the development of “national standard of LED module street lighting interface. “We are the designated display and lighting connector suppliers of the major project of Olympic Games, World Expo, the Asian Games, Shenzhen Universiade and more.

### B. The benefits

Chogori rely on highly efficient research and development team to provide you with reliable products. We have Renewable Energy, Industrial Automation & Marine, and LED, three divisions for in-depth research and development to meet different industries' customer needs. We have specialized industrial connector R&D and sale steam. R&D system strictly follows APQP control processes, fully verifying the failure mode to achieve high performance of products. We listen carefully to the exact requirements of the customers from different industries, make every effort to control the cost of the connectors to achieve an effective rendering that combined performance and cost. Chogori start to use “lean management philosophy” from 2013, a TS16949 management system framework, to eliminate waste from the order-to- cash process, become people-oriented, respect for employees' desire and motivation, continuous improvement in all aspects of the business processes, using standardization, 5S, JI training, A3 thinking, Kanban and other Lean tools to enhance the service quality of quality assurance and delivery which customer concerns most. We promise the delivery for important customer within seven days, and for the life of the important products to reach more than 25 years.



## CT 工业圆形连接器

### CT Industrial circular connectors

CT工业圆形连接器参考美军标MIL-C-26482系列I设计,它完全兼容于其它公司生产的该类型产品。该系列连接器在工业领域内应用非常的广泛,它通常被使用在汽车、机器人、军事、焊接工业和其它要求互联的设备上。我们提供从#10-#20号壳体的孔位排布,各种线号端子可供选择,是性价比极高的解决方案。CT工业圆形连接器有CTO,CTOW,CTHP三种类型。CTO是标准系列连接器,CTOW的胶芯孔位高密度混合排布,可以满足客户不同的要求,CTHP主要是用于混合动力汽车传输大电流,高电压的连接器。

CT industrial circular connectors is designed to meet the requirements of MIL-C-26482 series I military specification. Connectors have been developed to be completely compatible with all other company products. The CT series is a widely used connector series for the automotive, robotics, military, welding industries and other demanding interconnect architectures. CTO are multiway connector available in 6 shell sizes and 22 insert arrangements with a variety of wire gauge options. It is a high-performance, cost-effective solution for you. CT include three kinds of connectors, such as CTO, CTOW and CTHP series. CTO is standard series, CTOW offer high density arrangements from 6-32 contacts to meet customer's different requirements. CTHP series connector to be used within HV&EV where endure big current and high voltage.

技术参数 TECHNICAL DATA	CTO 系列 CTO Series	CTOW 系列 CTOW Series	CTHP 系列 CTHP Series
温度范围 TEMPERATURE RANGE	-40°C to +105°C or 125°C	-40°C to +105°C or 125°C	-40°C to +125°C
防护等级 PROTECTION	IP67, 可达动态IP68	IP67, 可达动态IP68	IP67, 可达动态IP68
参数依据UL 840 DATA ACCORDING TO UL 840	CTO 系列 CTO Series	CTOW 系列 CTOW Series	CTHP 系列 CTHP Series
防护等级 DEGREE OF PROTECTION	3	3	3
过载电压等级 OVER VOLTAGE CATEGORY	III	III	III
材料 MATERIALS	CTO 系列 CTO Series	CTOW 系列 CTOW Series	CTHP 系列 CTHP Series
壳体 HOUSING BODY	锌合金,压铸件 Zinc alloy, Die-cast	锌合金,压铸件 Zinc alloy, Die-cast	锌合金,压铸件 Zinc alloy, Die-cast
连接螺母 COUPLING NUT	铝合金,镀镍 Alu. alloy, Nickel-plated	铝合金,镀镍 Alu. alloy, Nickel-plated	铝合金,镀镍 Alu. alloy, Nickel-plated
绝缘体 INSULATION INSERTS	热塑性材料 Thermosplastic, UL 94 / V0	热塑性材料 Thermosplastic, UL 94 / V0	热塑性材料 Thermosplastic, UL 94 / V0
端子 CONTACTS	铜合金,镀金 Brass, Gold-plated	铜合金,镀金 Brass, Gold-plated	铜合金,镀银 Brass, Silver-plated
密封件 SEALS	硅橡胶材料 Silicone	硅橡胶材料 Silicone	硅橡胶材料 Silicone
技术参数/ELECTRICAL DATA	CTO 系列 CTO Series	CTOW 系列 CTOW Series	CTHP 系列 CTHP Series
最大工作电流(最大线径) MAX. CURRENT (MAX. WIRE GAUGE)	Max. 40A	Max. 7.5A	Max. 300A
最大工作电压 MAXIMUM VOLTAGE	300V AC/DC	150V AC/DC	630V AC/DC
接触电阻 CONTACT RESISTENCE	< 6 mΩ	< 15 mΩ	< 1 mΩ
测试电压(端子之间) TEST VOLTAGE (BETWEEN CONTACTS)	2000V	1500V	5000V
机械寿命 MINIMUM MATING CYCLES	> 200	> 200	> 200
盐雾等级 SALT SPRAY RESISTANCE	48.96h(可定制到200,500h) 48.96h(customized 200,500h)	48.96h(可定制到200,500h) 48.96h(customized 200,500h)	48.96h(可定制到200,500h) 48.96h(customized 200,500h)
屏蔽 SHIELDED	夹线式尾夹成套 CORD GRIP	夹线式尾夹成套 CORD GRIP	夹线式尾夹成套 CORD GRIP/CLAMP GRIP

## 介绍/Introduction

特征和优点  
Features and Benefits

CTO 系列

1. 有6种壳体尺寸号和14种孔位排布形式;
2. 提供从4-23针标准孔位排布的同时，也提供电源和信号孔位混合排布，可以满足不同客户的要求;
3. 工作电压为300V;
4. 额定电流为13A【信号端子】，40A【电源端子】;
5. 备选键位;
6. 塑料胶芯，热塑性材料，阻燃等级UL94-V0;
7. 符合RoHS环保要求。

CTO Series

1. 6 shell sizes and 14 insert configurations.
2. Offer standard insert arrangements from 4-23 contacts, offer mixed Power and Signal arrangements too, to meet customer requirements.
3. Operating voltage of 300V.
4. Current rating of 13A【signal contacts】, 40A【power contacts】.
5. Alternate keying positions available.
6. Plastic inserts with flammability rating of UL94-V0.
7. RoHS compliant.



CTO系列  
CTO SERIES



CTOW系列  
CTOW SERIES

CTHP 系列

1. 有4种壳体尺寸号和4种孔位排布形式;
2. 单颗端子耐大电流,高电压;
3. 端子尺寸提供3.6mm-10mm选择;
4. 工作电压为630V;
5. 额定电流为:70A-300A【见第6页】;
6. 塑料胶芯,热塑性材料,阻燃等级UL94-V0 ;
7. 符合RoHS环保要求.

CTHP Series

1. 5 shell sizes and 5 insert configurations.
2. Single pole Big current High Power arrangements.
3. 3.6mm-10mm contact sizes.
4. Operating voltage of 630V.
5. Current rating: 70A-300A【See page 6】.
6. Plastic inserts with flammability rating of UL94-V0.
7. RoHS compliant.

CTOW 系列

1. 与MIL-C-26482系列 I 连接器可以互插;
2. 有6种壳体尺寸号和5种孔位排布形式;
3. 提供从6-32针高密度孔位排布;
4. 工作电压为150V;
5. 额定电流为7.5A【机加工端子】,额定电流为5A【冲压端子】;
6. 备选键位;
7. 塑料胶芯,热塑性材料,阻燃等级UL94-V0;
8. 符合RoHS环保要求.

CTOW Series

1. Mating with MIL-C-26482 series connectors.
2. 6 shell sizes and 5 insert configurations.
3. High density arrangements from 6-32 contacts.
4. Operating voltage of 150V.
5. Current rating of 7.5A with machined contacts and 5A with stamped and formed contacts.
6. Alternate keying positions available.
7. Plastic inserts with flammability rating of UL94-V0.
8. RoHS compliant.



CTHP系列  
CTHP SERIES

联系工厂订制其它类型连接器。  
Consult factory to customize additional type connectors.

## CTO/CTOW 系列的机加工端子 - 怎么订购

## CTO/CTOW SERIES MACHINED CONTACTS - How to order



表面处理/Plating

T - 镀锡/Tin

F - 漂金/Gold flash

G10 - 镀金10μm Gold plate [thickness 10"] G4 - 镀金4μm/Gold plate [thickness 4"] N - 镀镍/Nickle

S - 镀银5μm/ Silver plate [5um]

接地端子 Grounding contact

GE1 - 1mm长接地端子/For GND contacts [1mm longer]  
GE7 - 0.6mm短接地端子/ For GND contacts [0.6mm shorter]

设计变更/Design variation

23 - 铆压/Crimp barrel

12E0xx - PCB类型,法兰盘面板插座用, xx表示端子穿过PCB后的长度/PCB tail, for CT00(wall mounting receptacle)xx is outer length of PCB tail

12E7xx - PCB类型,螺帽夹紧插座用, xx表示端子穿过PCB后的长度/PCB tail, for CT07(Jam nut receptacle)xx is outer length of PCB tail

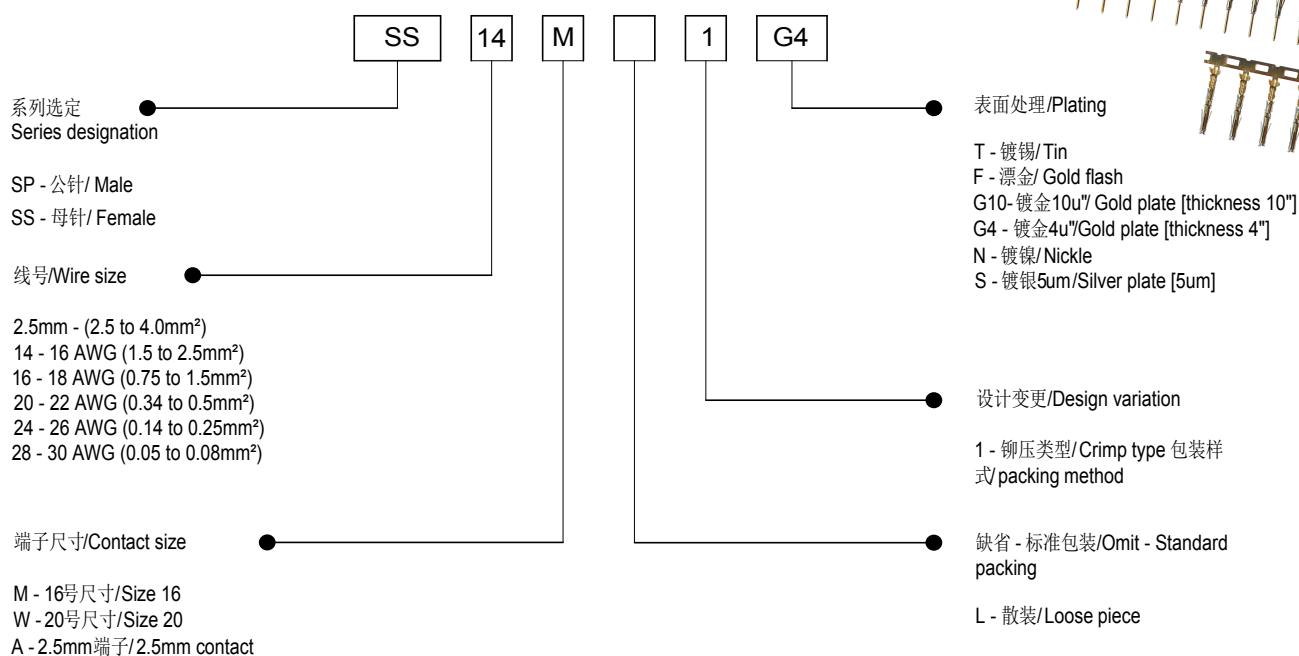
## CTO/CTOW 系列典型机加工端子的号码

## CTO/CTOW SERIES typical machined contacts part number

端子尺寸 Contact Size	线号 Wire Range		表面处理 Plating	公针号码 Male P/N	母针号码 Female P/N
	AWG	mm <sup>2</sup>			
8	10-12	3.0-6.0	镀银/Silver	MP10A23S	MS10A23S
			镀锡/Silver	MP10A23T	MS10A23T
	14	2.0-2.5	镀银/Silver	MP14M23S	MS14M23S
			漂金/Gold Flash	MP14M23F	MS14M23F
			镀金4μm/Gold 4μ"	MP14M23G4	MS14M23G4
			镀金10μm/Gold 10μ"	MP14M23G10	MS14M23G10
	18-16	0.75-1.5	镀银/Silver	MP16M23S	MS16M23S
			漂金/Gold Flash	MP16M23F	MS16M23F
			镀金4μm/Gold 4μ"	MP16M23G4	MS16M23G4
			镀金10μm/Gold 10μ"	MP16M23G10	MS16M23G10
16	22-20	0.34-0.50	镀银/Silver	MP20M23S	MS20M23S
			漂金/Gold Flash	MP20M23F	MS20M23F
			镀金4μm/Gold 4μ"	MP20M23G4	MS20M23G4
			镀金10μm/Gold 10μ"	MP20M23G10	MS20M23G10
	26-24	0.14-0.25	镀银/Silver	MP24M23S	MS24M23S
			漂金/Gold Flash	MP24M23F	MS24M23F
			镀金4μm/Gold 4μ"	MP24M23G4	MS24M23G4
			镀金10μm/Gold 10μ"	MP24M23G10	MS24M23G10
20	22-20	0.34-0.50	镀银/Silver	MP20W23S	MS20W23S
			漂金/Gold Flash	MP20W23F	MS20W23F
			镀金4μm/Gold 4μ"	MP20W23G4	MS20W23G4
			镀金10μm/Gold 10μ"	MP20W23G10	MS20W23G10
	26-24	0.13-0.25	镀银/Silver	MP24W23S	MS24W23S
			漂金/Gold Flash	MP24W23F	MS24W23F
			镀金4μm/Gold 4μ"	MP24W23G4	MS24W23G4
			镀金10μm/Gold 10μ"	MP24W23G10	MS24W23G10
	30-28	0.05-0.08	镀银/Silver	MP28W23S	MS28W23S
			漂金/Gold Flash	MP28W23F	MS28W23F
			镀金4μm/Gold 4μ"	MP28W23G4	MS28W23G4
			镀金10μm/Gold 10μ"	MP28W23G10	MS28W23G10

## CTO/CTOW 系列的冲压端子 - 怎么订购

## CTO/CTOW SERIES STAMPED & FORMED CONTACTS - How to order

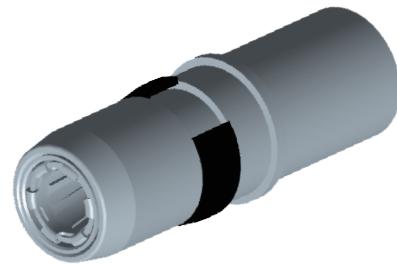


## CTO/CTOW 系列典型冲压端子的号码

## CTO/CTOW SERIES typical stamped & formed contacts part number

端子尺寸 Contact Size	线号 Wire Range		表面处理 Plating	公针号码 Male P/N	母针号码 Female P/N
	AWG	mm <sup>2</sup>			
2.5mm <sup>2</sup>	NA	2.5 - 4.0	镀锡/Tin	SP12A1T	SS12A1T
			镀银/Silver	SP12A1S	SS12A1S
	14	2.5	漂金Gold Flash	SP14M1F	SS14M1F
			镀金4μm/Gold 4μ"	SP14M1G4	SS14M1G4
			镀金10μm/Gold 10μ"	SP14M1G10	SS14M1G10
	18-16	0.75-1.5	漂金Gold Flash	SP16M1F	SS16M1F
			镀金4μm/Gold 4μ"	SP16M1G4	SS16M1G4
			镀金10μm/Gold 10μ"	SP16M1G10	SS16M1G10
	22-20	0.34-0.50	漂金Gold Flash	SP20M1F	SS20M1F
			镀金4μm/Gold 4μ"	SP20M1G4	SS20M1G4
			镀金10μm/Gold 10μ"	SP20M1G10	SS20M1G10
20	22-20	0.34-0.50	漂金Gold Flash	SP24M1F	SS24M1F
			镀金4μm/Gold 4μ"	SP24M1G4	SS24M1G4
			镀金10μm/Gold 10μ"	SP24M1G30	SS24M1G30
	26-24	0.13-0.25	漂金Gold Flash	SP20W1F	SS20W1F
			镀金4μm/Gold 4μ"	SP20W1G4	SS20W1G4
			镀金10μm/Gold 10μ"	SP20W1G10	SS20W1G10
	30-28	0.05-0.08	漂金Gold Flash	SP24W1F	SS24W1F
			镀金4μm/Gold 4μ"	SP24W1G4	SS24W1G4
			镀金10μm/Gold 10μ"	SP24W1G10	SS24W1G10
			漂金Gold Flash	SP28W1F	SS28W1F
			镀金4μm/Gold 4μ"	SP28W1G4	SS28W1G4
			镀金10μm/Gold 10μ"	SP28W1G10	SS28W1G10

所有图纸尺寸是毫米  
 All Dimensions in mm

**NEWSOK® 技术信息**
**NEWSOK®TECHNICAL INFORMATION**


NEWSOK® 端子的最大电流测试满足DINEN60512规格要求。

NEWSOK® Contact max. current carrying capacity meet DINEN60512 specification.

壳体号 Shell size	适用电缆外径DINEN60512 Applicable Cable Dia.	端子表面处理 Contact Plating	额定工作电流 Current Rating
12 (3.6MM)	8 - 16mm <sup>2</sup> (10,16mm <sup>2</sup> )	镀银 Silver Plated	70A
14 (6.0MM)	20 - 30mm <sup>2</sup> (25mm <sup>2</sup> )	镀银 Silver Plated	120A
16 (8.0MM)	30 - 50mm <sup>2</sup> (35, 50mm <sup>2</sup> )	镀银 Silver Plated	200A
20 (10.0MM)	50 - 75mm <sup>2</sup> (50, 75mm <sup>2</sup> )	镀银 Silver Plated	300A

备注: 上面给的是单颗端子的电性参数,如果配上连接器,孔的数量增加或者有其它的修正,电性参数相应的需要调整。

Note: The given electrical values correspond to a single contact. With the addition of a housing, an increased number of poles or other modifications, the values must be adjusted downwards accordingly.

**特征和优点**
**Features and Benefits**

1.全自动成型和全自动组装技术能有效降低成本

Automated molding &amp; assemble technology lower the costs.

2.小尺寸大电流,同样尺寸承载电流增加90%

Small size Newsok contact can carry high current. Compared to the same size similar products, Newsok carry current increase 90%.

3.插拔次数10000次以上

Over 10,000 mating cycles.

4.震动和冲击环境中具有良好的稳定性,媲美线簧孔

The same reliability with wire spring sockets under vibration and shock environment.

5.插针尺寸覆盖0.66mm~14mm,电流高达1000A

The size of Newsok contacts from 0.66mm to 14mm, can achieve 1000A.

6.较低的插拔力,插拔过程中自我清洁(氧化层)

Lower mating force, self-cleaning the oxide layer during the mating process.

7.接触电阻0.5mΩ~5mΩ

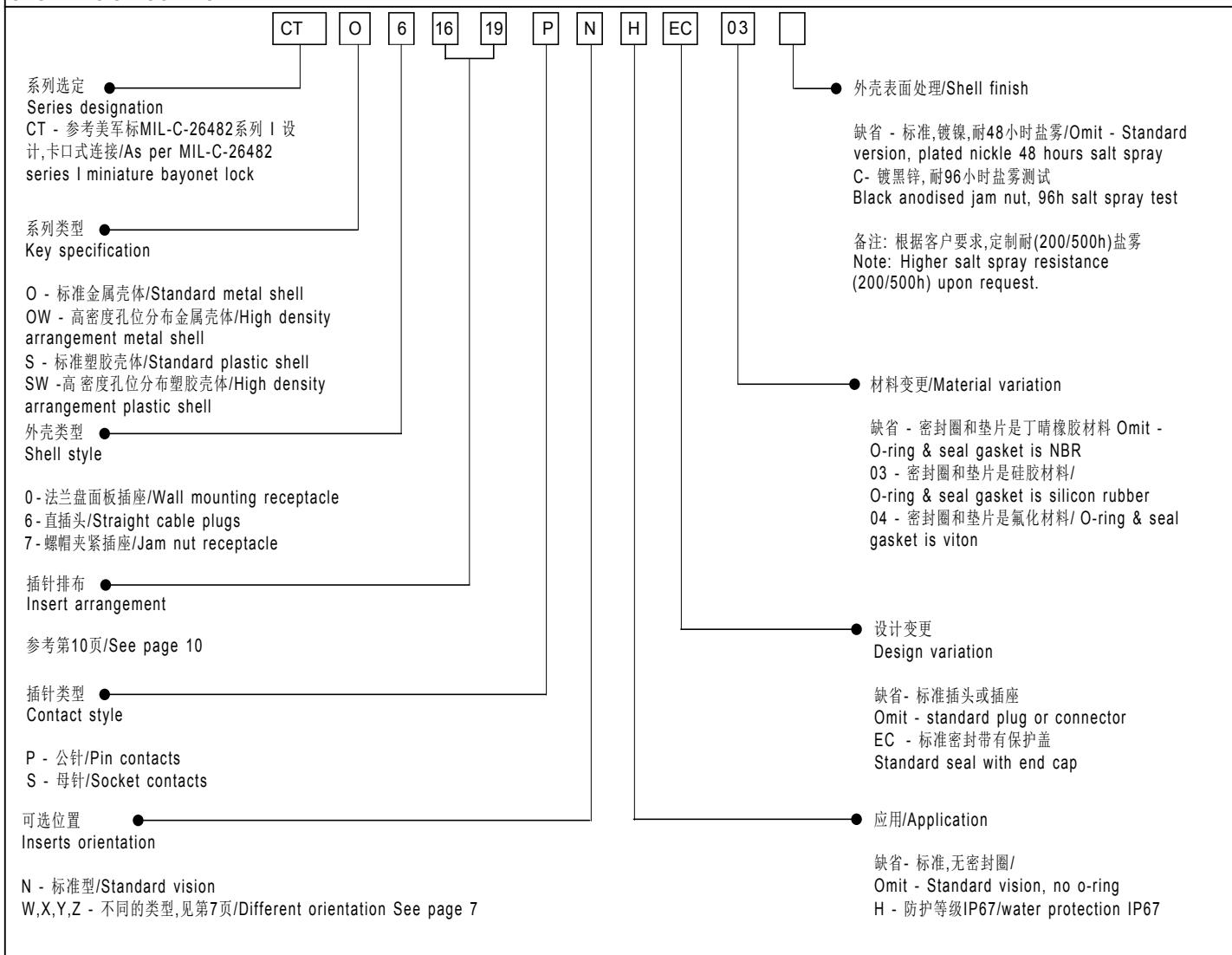
Contact resistance is very low, about 0.5mΩ~ 5mΩ.

## CTO/CTOW 系列插头和插座 - 怎么订购

### CTO/CTOW SERIES PLUGS & RECEPTACLES - How to order

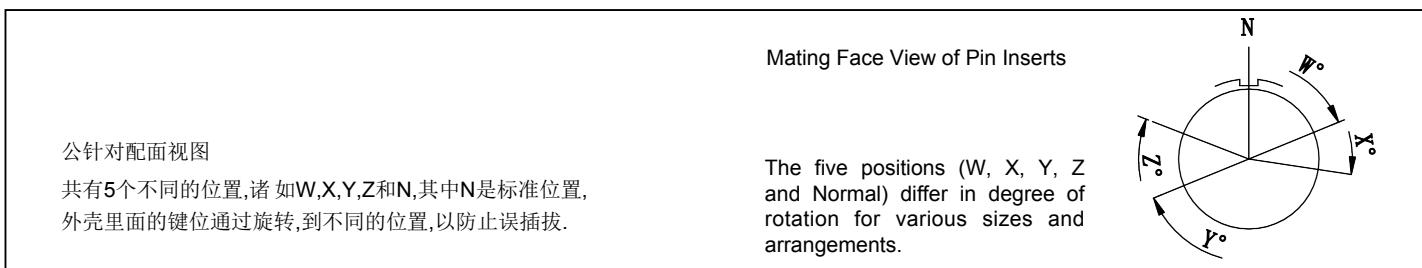
举例: CTO61619PNHEC-03, CTO系列, 直电缆插头, 16号壳体共19个孔位, 接公针, 标准定位类型, 防水等级IP67, 标准密封塞带保护盖, 外壳表面镀镍, 耐48小时盐雾, 密封圈和垫片是硅橡胶材料。

EXAMPLE: CTO61619PNHEC-03, CTO SERIES, STRAIGHT CABLE PLUG, #16 SHELL, 19 POS, PIN, INSERT ORIENTATION IS "N", PROTECTION GRADE IP67, STANDARD SEAL FOR 18-14AWG WITH END CAP, NICKLE PLATED, 48H SALT SPRAY, O-RING & SEAL GASKET IS SILICON RUBBER.



## 可选位置

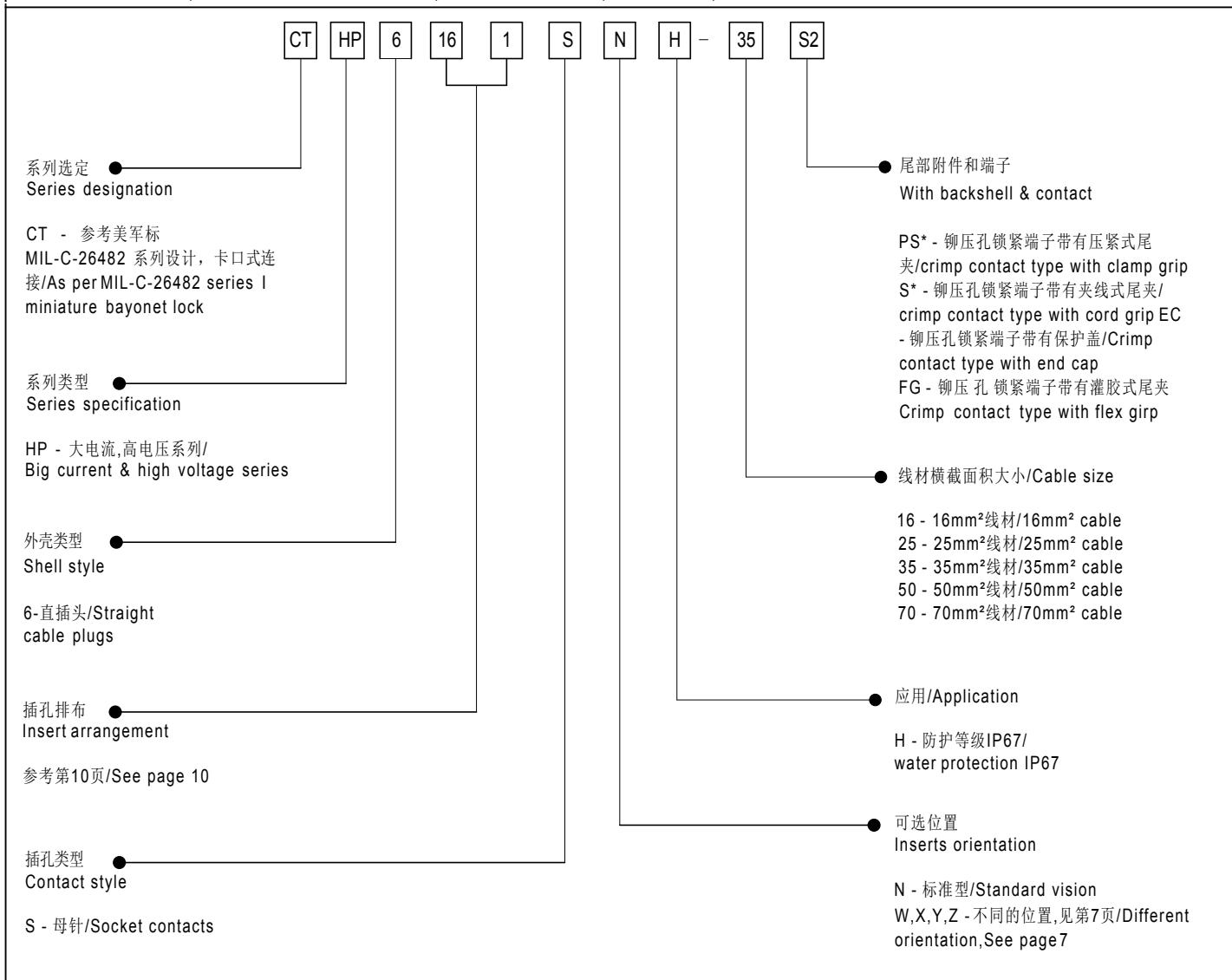
### INSERTS ORIENTATION



**CTHP 系列插头 - 怎么订购**
**CTHP SERIES PLUGS - How to order**

举例: CTHP6161SNH-35S2, CTHP系列, 直电缆插头, 16号壳体, 带8MM的NEWSOK®母针, 标准定位类型, 防水等级IP67, 带夹线式尾夹成套, 屏蔽, 压电缆35mm<sup>2</sup>.

EXAMPLE: CTHP6161SNH-35S2, CTHP SERIES, STRAIGHT CABLE PLUG, #16 SHELL, 8MM SIGNAL NEWSOK® CONTACT, INSERT ORIENTATION IS "N", PROTECTION GRADE IP67, WITH CORD GRIP, SHIELDING, CABLE OD 35mm<sup>2</sup>.

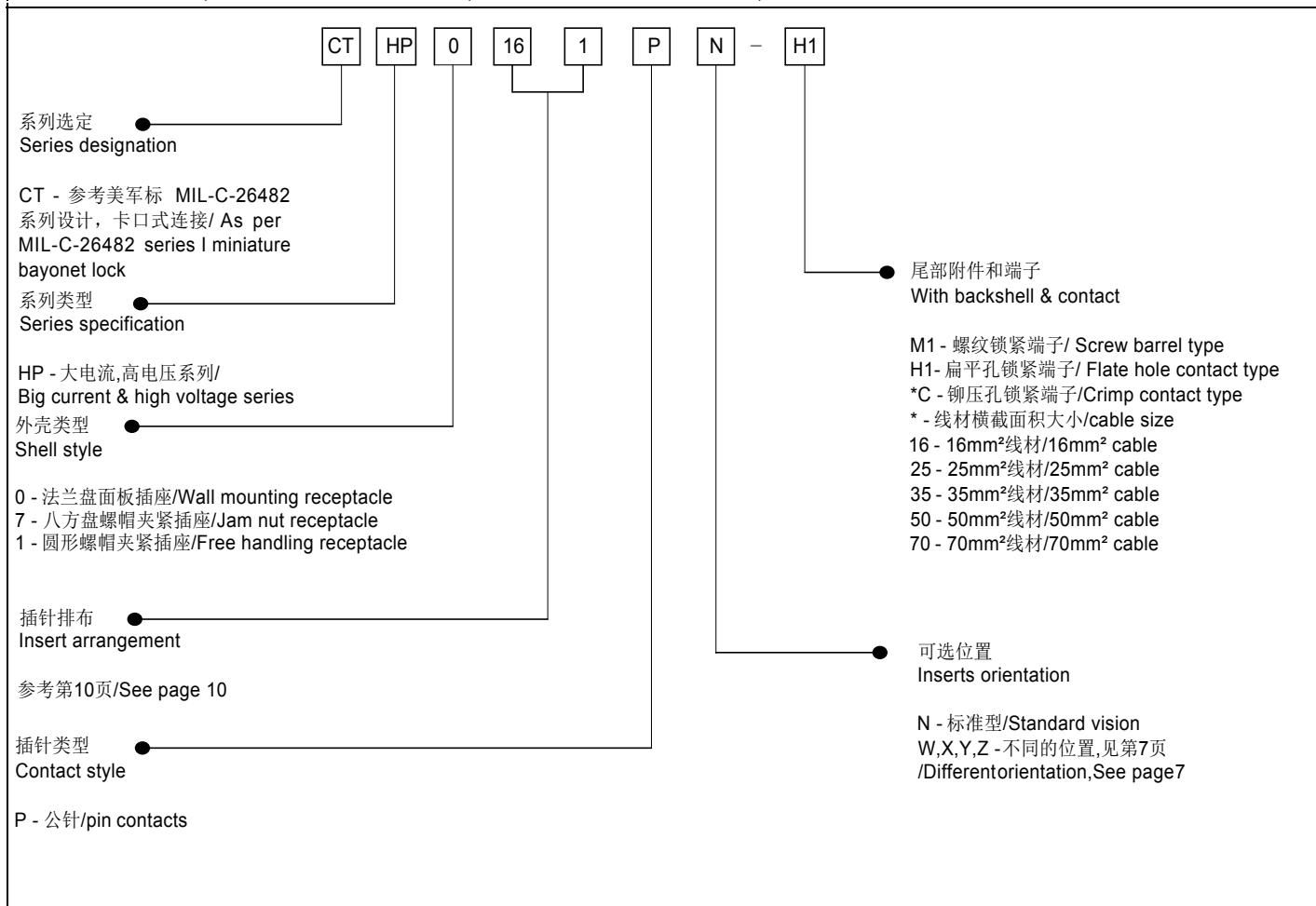


## CTHP 系列插座 - 怎么订购

### CTHP SERIES RECEPTACLES - How to order

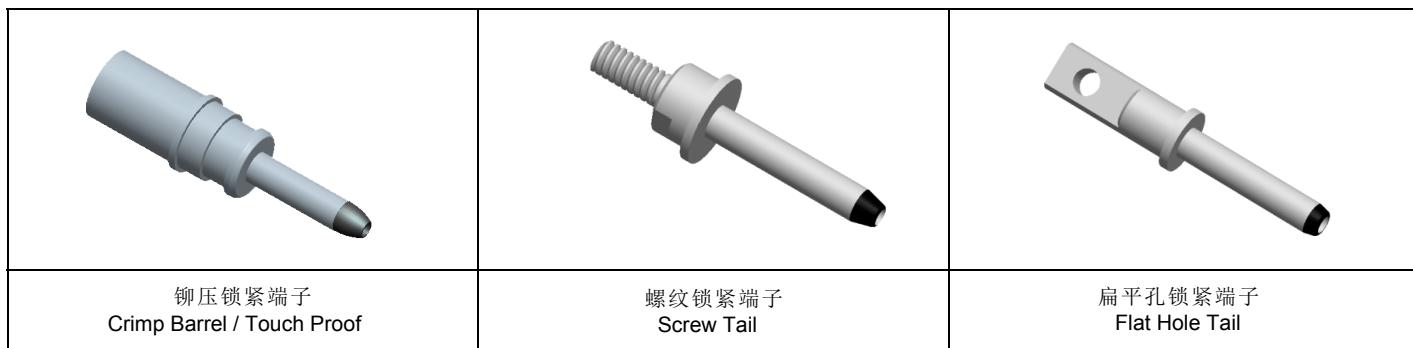
举例: CTHP0161PN-H1, CTHP 系列, 法兰盘电缆插座, 16号壳体, 带8MM的NEWSOK®公针, 标准定位类型, 防水等级IP67, 带扁平孔锁紧端子, 屏蔽

EXAMPLE: CTHP0161PN-H1, CTHP SERIES, WALL MOUNTING CABLE RECEPTACLE, #16 SHELL, 8MM SIGNAL PIN CONTACT, INSERT ORIENTATION IS "N", PROTECTION GRADE IP67, WITH FLATE HOLE CONTACT, SHIELDING.



## CTHP 系列典型端子图片

### CTHP SERIES TYPICAL CONTACTS PICTURES



联系工厂订购其它类型的端子。  
Consult factory for additional type contacts.

**Insert arrangements** Front face of pin insert or rear of socket insert illustrated

插针排布 公针胶芯的正面或者母针胶芯的背面视图

描述 DESCRIPTION	CTO系列 CTO series			CTOW 系列 CTOW series	CTHP 系列 CTHP series
	标准版本,#16号端子 (1.6MM),13A/250V Standard version, #16AWG contacts(1.6MM), 13A/250V	VDE版本,电源与 信号端子混合分布 VDE Versions, Mixed power and signal insert arrangements	2.5MM端子,25A Contacts 2.5MM, 25A	#20号端子(1.0MM) #20AWG, (1.0MM)	单颗电源端子 Signal pin power contacts
<b>Insert arrangements</b> Front face of pin insert or rear of socket insert illustrated					
插针排布/Insert arrangement 端子数量/Number of contacts 端子尺寸/Contact size 产品系列/Series number	10-4 4 16 CTO	10-2 2 2 16 20 CTO	10-6 6 20 CTOW		
插针排布/Insert arrangement 端子数量/Number of contacts 端子尺寸/Contact size 产品系列/Series number	12-3 3 16 CTO	12-8 8 16 CTO	12-2 2 2 2.5MM 20 CTO	12-10 10 20 CTOW	12-1 1 3.6MM CTHP
插针排布/Insert arrangement 端子数量/Number of contacts 端子尺寸/Contact size 产品系列/Series number	14-12 12 16 CTO	14-8 8 16 CTO	14-2 2 2 2.5MM 16 CTO	14-4 4 2.5MM CTO	14-19 19 20 CTOW
插针排布/Insert arrangement 端子数量/Number of contacts 端子尺寸/Contact size 产品系列/Series number	16-19 19 16 CTO	16-9 4 5 2.5MM 16 CTO	16-4 4 8 CTO	16-26 26 20 CTOW	16-1 1 8.0MM CTHP
插针排布/Insert arrangement 端子数量/Number of contacts 端子尺寸/Contact size 产品系列/Series number	18-23 23 16 CTO		18-8 8 2.5MM CTO	18-32 32 20 CTOW	20-1 1 10.0MM CTHP

所有图纸尺寸是毫米  
All Dimensions in mm

插座选型方案---CTO/CTOW系列  
Receptacle solutions---CTO/CTOW series

法兰盘面板插座配公和母端子  
Wall mounting receptacle for pin & socket contact



	A	B	C	D	E	F	G(MAX.)	G + End Cap Male	G + End Cap Female
10号壳体 Shell 10	3.20	18.30	23.80	15.00	11.30	1.80	32.5	40.65(Ref.)	32.70(Ref.)
12号壳体 Shell 12	3.20	21.00	26.80	19.00	11.30	1.80	32.5		
14号壳体 Shell 14	3.20	23.00	28.60	22.20	11.30	1.80	32.5		
16号壳体 Shell 16	3.20	24.60	31.00	25.30	11.30	1.80	32.5		
18号壳体 Shell 18	3.20	26.95	33.30	28.55	11.30	1.80	32.5		
20号壳体 Shell 20	3.20	29.40	36.50	31.70	14.55	2.40	33.7		

插头选型方案---CTO/CTOW系列  
Plug solutions---CTO/CTOW series

线缆插头配公和母端子  
Cable plugs for pin & socket contact



	A	B	C	D	E(MAX.)	G + End Cap Male	G + End Cap Female
10号壳体 Shell 10	21.8	20.00	25.0	10.40	32.5	41.1(Ref.)	33.1(Ref.)
12号壳体 Shell 12	26.1	23.60	25.0	13.45	32.5		
14号壳体 Shell 14	29.3	26.80	25.0	16.65	32.5		
16号壳体 Shell 16	32.5	30.00	25.0	19.50	32.5		
18号壳体 Shell 18	35.3	33.30	25.0	21.90	32.5		
20号壳体 Shell 20	38.6	36.60	27.0	24.90	32.5		

联系工厂订购其它类型的解决方案。  
Consult factory for additional type solutions.

插座选型方案---CTO/CTOW系列  
 Receptacle solutions---CTO/CTOW series  
 螺帽夹紧插座配公和母端子  
 Jam nut receptacles for pin & socket contact

所有图纸尺寸是毫米  
 All Dimensions in mm

	A	B	C	D	E	F	G	G + End Cap Male	G + End Cap Female
10号壳体 Shell 10	22.2	27.00	16.23	15.00	21.1	19.30	33.00	41.1(Ref.)	
12号壳体 Shell 12	27.0	31.75	20.50	19.00	21.1	19.30	33.00		
14号壳体 Shell 14	30.2	34.90	23.60	22.20	21.1	19.30	33.00		
16号壳体 Shell 16	33.3	38.10	26.85	25.30	21.1	19.30	33.30		
18号壳体 Shell 18	36.5	41.30	29.86	28.55	21.1	19.30	33.00		
20号壳体 Shell 20	39.7	46.10	33.10	31.70	26.7	24.70	38.60		

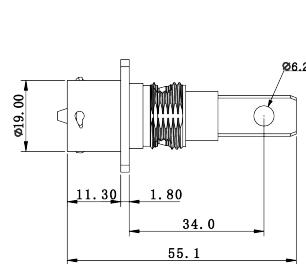
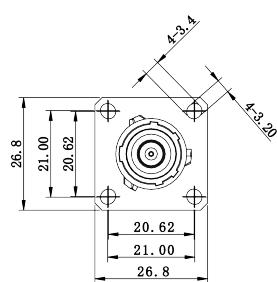
联系工厂订购其它类型的解决方案。  
 Consult factory for additional type solutions.

所有图纸尺寸是毫米  
All Dimensions in mm

**CTHP系列典型插座图片及安装尺寸**  
- 用于混合动力和纯电动汽车传输大电流,高电压

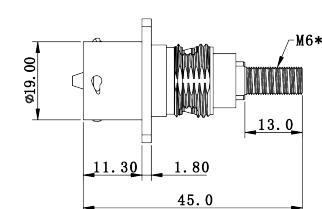
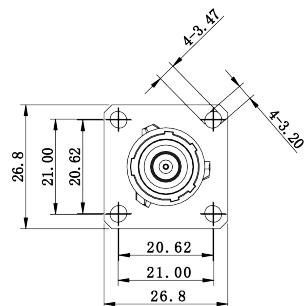
**CTHP Series typical receptacle picture and installation dimension**  
- be used within HV & EV where endure big current and high voltage

料号: CTHP0121PN-H1  
Part number: CTHP0121PN-H1



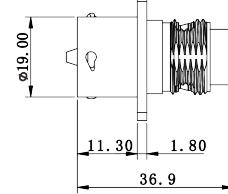
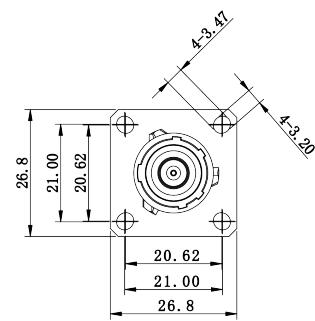
法兰盘插座配扁平锁紧端子  
Wall mounting receptacle for Flat barrel

料号: CTHP0121PN-M1  
Part number: CTHP0121PN-M1

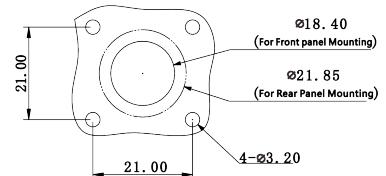


法兰盘插座配螺纹锁紧端子  
Wall mounting receptacle for Screw barrel

料号: CTHP0121PN-16C  
Part number: CTHP0121PN-16C



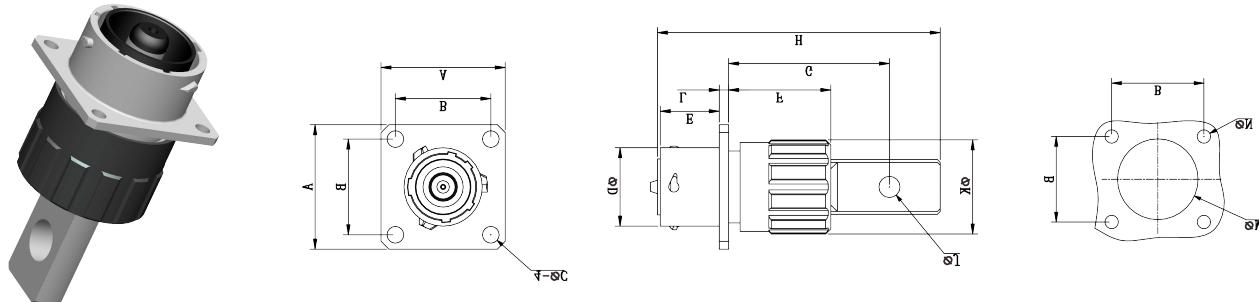
法兰盘插座配铆压锁紧端子  
Wall mounting receptacle for Crimp barrel



联系工厂订购其它类型的解决方案。  
Consult factory for additional type solutions.

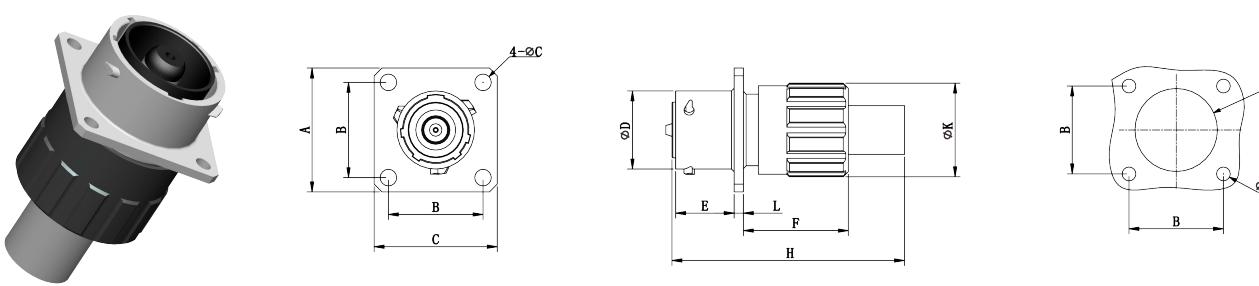
插座选型方案---CTHP系列  
 Receptacle solutions---CTHP series  
 法兰盘插座配扁平锁紧端子  
 Wall mounting receptacle for flat hole tail

所有图纸尺寸是毫米  
 All Dimensions in mm



料号 Part number	壳体号 Shell	A	B	ΦC	ΦD	E	F	G	H	J	K	L	ΦN	ΦM
CTHP0141PN-H1	14	28.6	23.0	3.2	22.2	11.3	17.2	28.5	53.1	6.2	24.1	1.8	3.2	25.0
CTHP0161PN-H1	16	31.0	24.6		25.3		21.5	35.9	61.0	8.5	27.0			28.0
CTHP0201PN-H1	20	36.5	29.4	4.2	31.7	14.55	22.2	40.1	72.1	8.5	34.0	2.4	4.2	35.0

法兰盘插座配铆压锁紧端子  
 Wall mounting receptacle for crimp hole tail

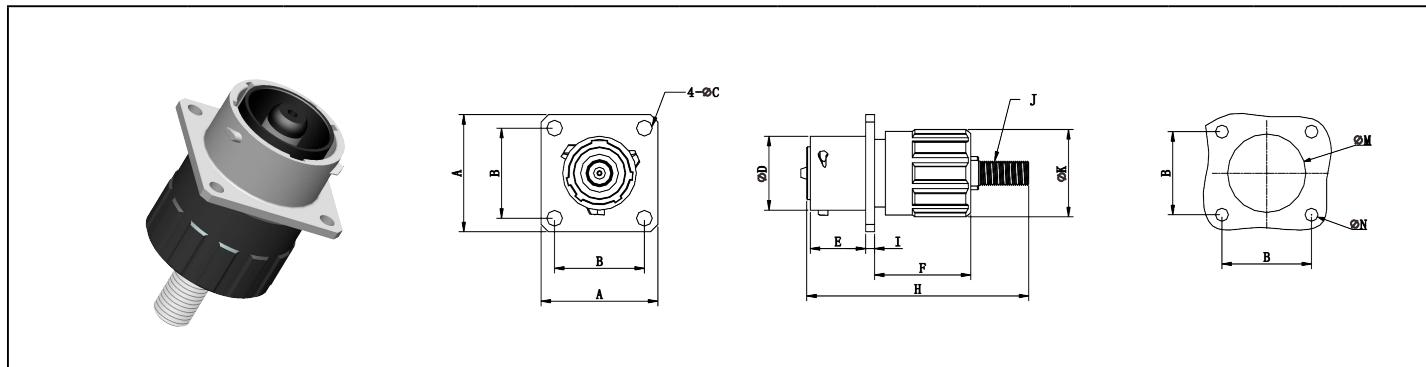


料号 Part number	壳体号 Shell	A	B	ΦC	ΦD	E	F	G	H	K	L	ΦN	ΦM
CTHP0141PN-25C	14	28.6	23.0	3.2	22.2	11.3	17.2	46.2	24.1	1.8	3.2	25.0	28.0
CTHP0161PN-35C	16	31.0	24.6		25.3		21.5	51.5	27				
CTHP0161PN-50C			4.4	31.7	14.55	22.2	54.0	34.0	2.4	4.2	35.0		
CTHP0201PN-50C	20	36.5	29.4	4.4	31.7	14.55	22.2	54.0	34.0	2.4	4.2	35.0	
CTHP0201PN-70C													

联系工厂订购其它类型的解决方案。  
 Consult factory for additional type solutions.

所有图纸尺寸是毫米  
All Dimensions in mm

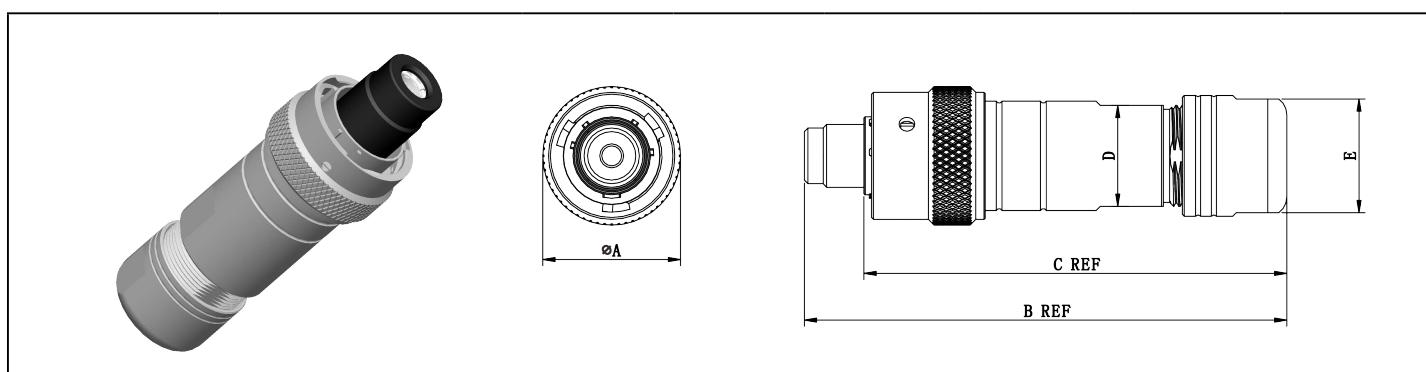
插座选型方案---CTHP系列  
Receptacle solutions---CTHP series  
法兰盘插座配螺纹锁紧端子  
Wall mounting receptacle for screw tail



料号 Part number	壳体号 Shell	A	B	ΦC	ΦD	E	F	H	J	K	L	ΦN	ΦM
CTHP0141PN-M1	14	28.6	23.0	3.2	22.2	11.3	17.2	47.3	M6	24.1	1.8	3.2	25.0
CTHP0161PN-M1	16	31.0	24.6		25.3		21.5	51.6	M8	27			28.0
CTHP0201PN-M1	20	36.5	29.4	4.2	31.7	14.55	22.2	55.1	M10	34.0	2.4	4.2	35.0

插头选型方案---CTHP系列  
Plug solutions---CTHP series

线缆插头带有夹线式尾夹成套屏蔽解决方案  
Straight cable plug with cord grip solutions



料号 Part number	壳体号 Shell	ΦA	B	C	D	E	线号 Wire size	电缆最大外径 Cable max.
CTHP6121SNH-16S2	12	26.1	69.3	73.3	19.9	21.9	13-16 mm <sup>2</sup>	12.5 mm
CTHP6141SNH-25S2	14	29.3	86.4	72.3	19.9	21.9	20-25 mm <sup>2</sup>	
CTHP6161SNH-35S2	16	32.5	93.3	76.3	24.9	24.9	30-35 mm <sup>2</sup>	17.5 mm
CTHP6161SNH-50S2							40-50 mm <sup>2</sup>	
CTHP6201SNH-50S2	20	38.3	100.8	80.8	30.5	33.4	45-50 mm <sup>2</sup>	24.0 mm
CTHP6201SNH-70S2							70-75 mm <sup>2</sup>	

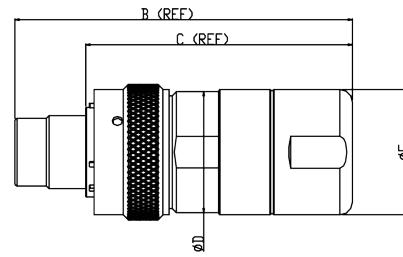
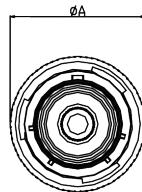
联系工厂订购其它类型的解决方案。  
Consult factory for additional type solutions.

## 插头选型方案---CTHP系列

## Plug solutions---CTHP series

线缆插头带有压线式尾夹成套屏蔽解决方案

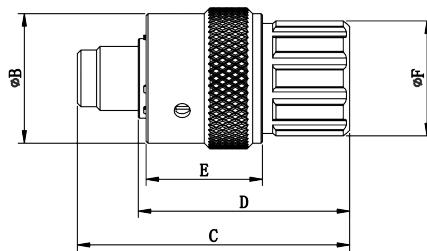
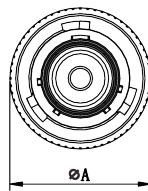
Straight cable plug with cord grip solutions

所有图纸尺寸是毫米  
All Dimensions in mm

料号 Part number	壳体号 Shell	ØA	B	C	ØD	ØE	线号 Wire size	电缆最大外径 Cable max.
CTHP6141SNH-25PS2	14	29.3	77.2	63.1	25.0	26.0	25 mm <sup>2</sup>	14.0 mm
CTHP6161SNH-35PS2	16	32.4	80.1	63.1	29.0	30.0	35 mm <sup>2</sup>	15.0 mm
CTHP6161SNH-50PS2							50 mm <sup>2</sup>	19.0 mm
CTHP6201SNH-50PS2	20	38.3	90.0	70.0	33.0	34.0	50 mm <sup>2</sup>	19.0 mm
CTHP6201SNH-70PS2							70 mm <sup>2</sup>	21.5 mm

线缆插头带有保护盖

Straight cable plug with end cap



料号 Part number	壳体号 Shell	ØA	ØB	C (Ref.)	D (Ref.)	E	ØF	线号 Wire size	电缆最大外径 Cable max.	
CTHP6121SNH-16EC	12	26.1	23.6	39.1	33.1	18.0	21.8	13-16 mm <sup>2</sup>	12.5 mm	
CTHP6141SNH-25EC	14	29.3	26.8	55.2	41.1		25.0	20-25 mm <sup>2</sup>	12.5 mm	
CTHP6161SNH-35EC	16	32.5	30.0	58.1	41.1		27.8	30-35 mm <sup>2</sup>	17.5 mm	
CTHP6161SNH-50EC							45-50 mm <sup>2</sup>			
CTHP6201SNH-50EC	20	38.6	36.6	63.1	43.1	19.0	34.5	45-50 mm <sup>2</sup>	21.5 mm	
CTHP6201SNH-70EC								70-75 mm <sup>2</sup>		

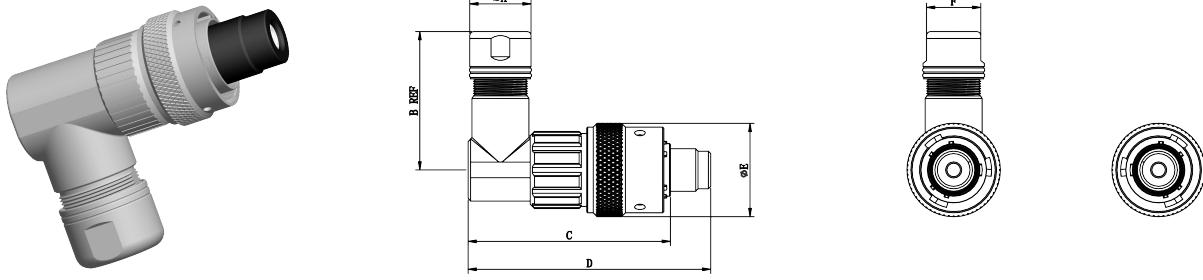
联系工厂订购其它类型的解决方案。

Consult factory for additional type solutions.

所有图纸尺寸是毫米  
All Dimensions in mm

插头选型方案---CTHP系列  
Plug solutions---CTHP series

线缆插头带有 90° 夹线式尾夹成套屏蔽解决方案  
Straight cable plug with 90° cord grip solutions



料号 Part number	壳体号 Shell	ØA	B	C	D	ΦE	F	线号 Wire size	电缆最大外径 Cable max.
CTHP6121SNH-16BS2	12	23.0	43.0	58.7	64.7	26.1	21.9	13-16 mm <sup>2</sup>	12.5 mm
CTHP6141SNH-25BS2	14	26.5	46.0	62.0	76.1	29.3	24.9	20-25 mm <sup>2</sup>	12.5 mm
CTHP6161SNH-35BPS2	16	26.5	46.0	62.0	79.1	30.0	24.9	35 mm <sup>2</sup>	15.0 mm
CTHP6161SNH-50BPS2								50 mm <sup>2</sup>	19.0 mm
CTHP6201SNH-50BPS2	20	34.7	46.0	64.0	84.1	36.6	33.4	50 mm <sup>2</sup>	19.0 mm
CTHP6201SNH-70BPS2								70 mm <sup>2</sup>	21.5 mm

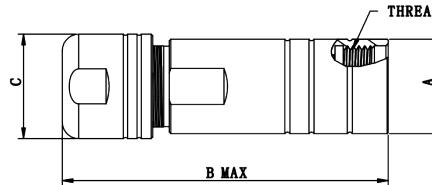
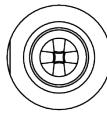
联系工厂订购其它类型的解决方案。  
Consult factory for additional type solutions.

## 尾夹成套选型方案 Cord Grip Solutions

夹线式尾夹成套【直式】 备注: 满足IP67防护要求

Cord Grips - Traditional 【Straight】 Note: Meets IP67 ratings

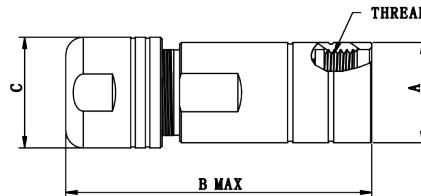
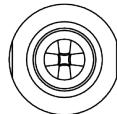
所有图纸尺寸是毫米  
All Dimensions in mm



壳体 Shell	料号 Part number	电缆直径范围 Cable range	【螺纹】 【thread】	ΦA	B	ΦC
10号壳体 Shell 10	CTOL-10CG-S1	3 ~ 6.5	9/16-24 UNEF	17.2	52.5	19.0
	CTOL-10CG-S2	5 ~ 8.5				
12号壳体 Shell 12	CTOL-12CG-S1	6 ~ 10.5	11/16-24 UNEF	21.5	57.0	23.0
	CTOL-12CG-S2	8.5 ~ 12.5				
14号壳体 Shell 14	CTOL-14CG-S1	6 ~ 10.5	13/16-20 UNEF	23.5	57.0	23.0
	CTOL-14CG-S2	8.5 ~ 12.5				
16号壳体 Shell 16	CTOL-16CG-S1	9.0 ~ 14.5	15/16-20 UNEF	26.5	61.0	26.5
	CTOL-16CG-S2	13.5 ~ 17				
18号壳体 Shell 18	CTOL-18CG-S1	9.0 ~ 14.5	1" 1/16-18 UNEF	30.0	61.0	26.5
	CTOL-18CG-S2	13.5 ~ 17				
20号壳体 Shell 20	CTOL-20CG-S1	16.5 ~ 22.0	1" 3/16-18 UNEF	33.0	63.5	34.7
	CTOL-20CG-S2	21.5 ~ 24.0				

夹线式短尾夹成套【直式】 备注: 满足IP67防护要求

Cord Grips - Short Traditional 【Straight】 Note: Meets IP67 ratings



壳体 Shell	料号 Part number	电缆直径范围 Cable range	【螺纹】 【thread】	ΦA	B	ΦC
10号壳体 Shell 10	CTOS-10CG-S1	3 ~ 6.5	9/16-24 UNEF	17.2	42.5	19.0
	CTOS-10CG-S2	5 ~ 8.5				
12号壳体 Shell 12	CTOS-12CG-S1	6 ~ 10.5	11/16-24 UNEF	21.5	47.0	23.0
	CTOS-12CG-S2	8.5 ~ 12.5				
14号壳体 Shell 14	CTOS-14CG-S1	6 ~ 10.5	13/16-20 UNEF	23.5	48.0	23.0
	CTOS-14CG-S2	8.5 ~ 12.5				
16号壳体 Shell 16	CTOS-16CG-S1	9.0 ~ 14.5	15/16-20 UNEF	26.5	52.0	26.5
	CTOS-16CG-S2	13.5 ~ 17				
18号壳体 Shell 18	CTOS-18CG-S1	9.0 ~ 14.5	1" 1/16-18 UNEF	30.0	52.0	26.5
	CTOS-18CG-S2	13.5 ~ 17				
20号壳体 Shell 20	CTOS-20CG-S1	16.5 ~ 22.0	1" 3/16-18 UNEF	33.0	54.5	34.7
	CTOS-20CG-S2	21.5 ~ 24.0				

备注: 如果不需要屏蔽,以上料号末端的S1,S2则改为C1,C2. 例如: CTOL-10CG-C1或CTOS-10CG-C1.

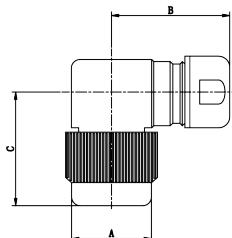
Note: If you don't need shielding, end part number will be changed - C1,C2. example: CTOL-10CG-C1 OR CTOS-10CG-C1.

所有图纸尺寸是毫米  
All Dimensions in mm

尾夹成套选型方案  
Cord Grip Solutions

夹线式尾夹成套【弯角】 备注: 满足 IP67防护要求

Cord Grips - Traditional 【90 Degree】 Note: Meets IP67 ratings



屏蔽解决方案  
EMC Grounding Ring included

	料号 Part number	电缆直径范围 Cable range	A【螺纹】 A【thread】	B	C
10号壳体 Shell 10	CTOB-10CG-S1	3 ~ 6.5	9/16-24 UNEF	42.00	30.20
	CTOB-10CG-S2	5 ~ 8.5			
12号壳体 Shell 12	CTOB-12CG-S1	6 ~ 10.5	11/16-24 UNEF	42.00	30.20
	CTOB-12CG-S2	8 ~ 12.5			
14号壳体 Shell 14	CTOB-14CG-S1	6 ~ 10.5	13/16-20 UNEF	42.00	30.20
	CTOB-14CG-S2	8 ~ 12.5			
16号壳体 Shell 16	CTOB-16CG-S1	9.5 ~ 14.5	15/16-20 UNEF	42.00	30.20
	CTOB-16CG-S2	13.5 ~ 17			
18号壳体 Shell 18	CTOB-18CG-S1	9.5 ~ 14.5	1" 1/16-18 UNEF	42.00	30.20
	CTOB-18CG-S2	13.5 ~ 17			

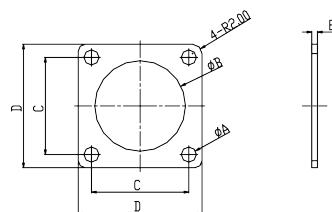
备注: 如果不需要屏蔽,以上的料号就改为-C1,例如: CTOB-10CG-C1.

Note: If you don't need shielding, part number will be changed - C1, example: CTOB-10CG-C1.

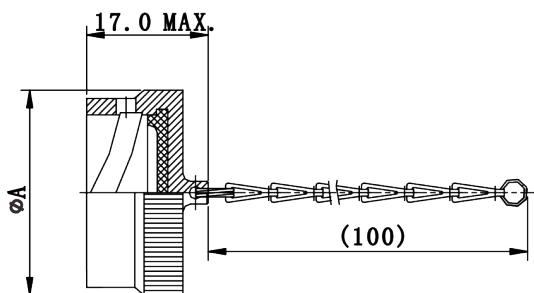
联系工厂订购其它类型的屏蔽解决方案.  
Consult factory for additional type EMC solutions.

附件和工具  
Accessories and Tools

所有图纸尺寸是毫米  
All Dimensions in mm



垫圈 Gaskets	料号 Part number	$\varnothing A \pm 0.1$	$\varnothing B \pm 0.1$	$C \pm 0.25$	$D \pm 0.25$	$E \pm 0.1$
10号壳体 Shell 10	CTFD10B	3.3	15.9	18.3	23.8	1.2
12号壳体 Shell 12	CTFD12B		19.0	20.6	26.2	
14号壳体 Shell 14	CTFD14B		22.2	23.0	28.6	
16号壳体 Shell 16	CTFD16B		25.4	24.6	31.0	
18号壳体 Shell 18	CTFD18B		28.6	27.0	33.3	
20号壳体 Shell 20	CTFD20B		31.8	29.4	36.5	1.5



保护盖 Dustcaps	料号 Part number	$\varnothing A$	备注: 如防尘盖不需要附加链条, 原料号移去字母G即可, 如: CTO10DC* *: 缺省 - 防尘盖为黑色氧化 如: CTO10DCG *: N - 防尘盖为镀镍 如: CTO10DCGN 防水 等级可达IP67
10号壳体 Shell 10	CTO10DCG*	21.8	<b>Remark:</b> If you just need the dustcap without chain, the part no should be without letter 'G'. E.g. CTO10DC*
12号壳体 Shell 12	CTO12DCG*	24.6	*: Omit - Dustcap is plated black Anodizing E.g.CTO10DCG
14号壳体 Shell 14	CTO14DCG*	27.8	*: N - Dustcap is plated Nickle E.g.CTO10DCGN
16号壳体 Shell 16	CTO16DCG*	31.0	Waterproof rate is about IP67
18号壳体 Shell 18	CTO18DCG*	35.3	
20号壳体 Shell 20	CTO20DCG*	38.6	

联系工厂订购其它类型的附件和工具。  
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所有图纸尺寸是毫米  
All Dimensions in mm

## 附件和工具 Accessories and Tools

保护盖 Dust caps	料号 Part number	A	B	C	备注:
10号壳体 Shell 10	CT610DCG*	20.5	21.9 17.5	15.0	如防尘盖不需要附加链条, 原料号移去字母G即可, 如: CT612DC*
12号壳体 Shell 12	CT612DCG*	23.0		19.0	*: 缺省 - 防尘盖为黑色氧化 如: CT612DCG
14号壳体 Shell 14	CT614DCG*	26.0		22.0	*: N - 防尘盖为镀镍 如: CT612DCGN
16号壳体 Shell 16	CT616DCG*	30.0		25.3	防水等级可达IP67
18号壳体 Shell 18	CT618DCG*	33.5		28.55	
20号壳体 Shell 20	CT620DCG*	26.7		31.7	
					<b>Remark:</b> If you just need the dustcap without chain, the part no should be without letter 'G'. E.g. CT612DC*

保护盖 Dust caps	料号 Partnumber	A	ØB	备注:
10号壳体 Shell 10	CTO10RL	12.0	18.2	防尘盖是橡胶材料, 后接尼龙绳索, 仅可防尘
12号壳体 Shell 12	CTO12RL		22.8	如防尘盖不需要附加绳索, 料号可按照表格中壳体大小来变更, 如: CB000119-10, CB000119-12. 其中CB000119为料号, 10和12为壳体号.
14号壳体 Shell 14	CTO14RL		26.0	
16号壳体 Shell 16	CTO16RL		29.0	
18号壳体 Shell 18	CTO18RL		33.0	
20号壳体 Shell 20	CTO20RL		35.4	
				<b>Remark:</b> Dustcap is made of rubber material with Nylon cord, just for dust-protection  If you just need dustcap without Nylon cord, the part no should be changed by shell no in form. E.g.CB000119-10, CB000119-12. ... CB000119 is part no., 10 & 12 is shell no.

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附件和工具  
Accessories and Tools

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All Dimensions in mm



料号: Part number:	ZJ01-00779【3.6mm】适用于CTHP系列(for CTHP series)
	ZJ01-00740【3.6mm】
	ZJ01-00748【2.5mm】
	ZJ01-00741【16AWG】
	ZJ01-00596【20AWG】
描述: Description:	取卸工具 Contact Extraction Tool



料号: Part number:	CA-5D12
描述: Description:	手动铆压工具【车削端子】 Universal Hand Crimp Tool 【for Machined Contacts】



料号: Part number:	MFX-3957
描述: Description:	端子机铆压【冲压端子】 Crimp Die 【for Stamped and Formed Contacts】



料号: Part number:	CA-5E12
描述: Description:	气动铆压工具【车削端子】 Pneumatic Crimp Tool 【for Machined Contacts】



料号: Part number:	MFX-3958
描述: Description:	手动铆压钳【冲压端子】 Stamp Contact Tool 【for Stamped and Formed Contacts】



料号: Part number:	199-00113-00 【20AWG】
描述: Description:	199-00084-00 【16AWG】
描述: Description:	密封塞 Sealing Plugs

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**乔合里科技有限公司**

**Chogori Technology co.,Ltd**

地址:深圳市龙华新区观澜章阁市场中港星工业区E栋  
Add:Building E, Zhonggangxing Industrial Zone, ZhangGeVillage, Guanlan  
LongHua New District, ShenZhen, China  
电话: +860755-28227766/28227866 传真:+860755-28227566  
Tel:+860755-28227766/28227866 Fax:+860755-28227566

**Chogori USA., Inc**

Add: 2915 Ogletown, Suite 1833, Newark, Delaware, USA  
Email: gary@chogoriusa.com  
Tel: +1 (514) 378-2117 Website: www.chogoriusa.com

**Chogori Asia Pte.Ltd**

Add: Blk 465, North Bridge Road, #02-5061, Singapore 191465  
Tel: Eddie Teo 0065 9644 7891  
Eddie@chogoriasia.com.sg kelvin@chogoriasia.com.sg