

C091 Quick Lock 系列连接器

C091 Quick Lock Series connector

C091 Q系列是一款全塑料圆形防水型连接器，适用于户外电源、信号的传输。该款连接器是由中、德两国设计师联合、结合户外应用场景所进行特别设计开发，具备以下一些优点：

1) 弹簧旋钮式快锁系统

- 听觉式锁紧：‘咔嗒’声后，双卡扣点落位锁紧；
- 触觉式解锁：顺时针旋转30°，公、母可轻松拔出解锁；
- 单点防误插键位，100%防止误插操作。

2) 便捷式线束安装系统

- 端子连接：压接、焊接方式可选；
- 线束安装：推入胶芯、嵌入衬套、螺母锁紧。线径范围：4mm-10.5mm。

3) 恶劣环境适应性能：

- 选用杜邦（PBT）、朗盛(PA6)进口塑料材质，兼具抗老化、抗紫外线、阻燃性能；
- IP67/IP68防水性能：互配后，常温下1米水深浸泡至少6小时后，电性能无影响。

C091 Q are series of plastic and circular waterproof connectors, applicable to harsh outdoor fields for power and signal transmission, specially designed by Chinese and Germany engineers and equipped with advantages as below:

1) Locking system of Rotary Knob by Spring

- After sound of 'click', two locking points set to right position for precise locking;
- Let Rotary Knob rotated 30° clockwise by hand, then to unlock female and male connector;
- Avoiding wrong match by introducing one-to-one key on insert.

2) Efficient cable assembly system

- Connection between contacts and cable: Crimping & Welding;
- Connection between cable and connector: Pushing Inserts, inserting sleeve and nut lock. Cable OD: 4mm-10.5mm.

3) Adaptive properties to harsh environment:

- Equipped with anti-UV, anti-aging and flame resistance, adopting PBT(Dupont) and PA6(Lanxess);
- IP67 & IP68: Electrical properties are still ok after soaking in 1m-depth water at room temperature for at least 6 hours once matched.



产品特性表

Product characteristic list

一般特性 General characteristic	标准 Standard	特性 Characteristic											
触针数 Pin		3	4	5	5 Stereo	6	7	7	8	12	14	14	19
针排布图 Face view													
触针布置 Pin arrangement	DIN EN 61076-2-106	03-a √	04-a √	05-a √	05-b √	06-a √	07-a √	07-b √	08-a √	12-a √	14-a √	14-b √	19-a √
电气特性 Electrical specification													
额定电压 Rating voltage	IEC 60664-1	150 V		100 V	32 V	100 V		32 V					
额定冲击耐受电压 rated impulse withstand voltage	IEC 60664-1	1500 V			800 V	1500 V		800 V					
污染程度 ¹⁾ Pollution level	IEC 60664-1	1(3) ¹⁾											
安装类别 Installation category	IEC 60664-1	I											
绝缘组 Resistance	IEC 60664-1	II, 400 ≤ CTI < 600											
额定电流 Rating current	IEC 60512-5-2 UL 1977	10A/+40°C/+104°F			7A/+40°C/+104°F					3A/+40°C/+104°F			
绝缘电阻 Insulation Resistance	IEC 60512-3-1	> 10 ¹⁰ Ω ²⁾											
接触电阻 Contact Resistance	IEC 60512-2-1	< 5 m Ω											
气候特性 Climatic characteristics													
气候类别 Climate type	IEC 60068-1	40 / 100 / 21											
温度范围 Temperature Range	IEC 60068-1	- 40 °C ... + 100 °C / - 40 °F ... + 212 °F											
机械特性 Mechanical properties													
防护等级 IP Rate	IEC 60529	IP 68 (在互配条件下 Matching)											
插入和拔出力 Insertion & withdrawal forces	IEC 60512-13-2	25 N 90.oz	30 N 110.oz	35 N 125.oz		50 N 180.oz	55 N 200.oz		60 N 220.oz	50 N 180.oz		60 N 220.oz	
机械操作 Mechanical operation	IEC 60512-9-1	银 ≥ 500次插拔 金 ≥ 1000次插拔 Silver ≥ 500 insertions and gold ≥ 1000 insertions											
材料 Material													
外壳材料 Housing		塑料 Plastic											
非传导材料 Insulant		热塑性 Thermoplasticity											
触针电镀 Contact plating		镀银/ 镀金 Silver/gold plating											
其他特性													
触针Contact		焊接/ 压接 Welding/Crimping											焊接 Welding
线规 Wire range		焊接Welding: ≤ 0.75 mm ² / 18 AWG 压接Crimping: 2 - 6 pol (不包括 5S): 0.09 - 1.00 mm ² / 28 - 18 AWG 压接Crimping: 5S, 7, 7 and 8-pol.: 0.09 - 0.75 mm ² / 28 - 20 AWG									焊接Welding: ≤ 0.25 mm ² / 24 AWG 压接Crimping: 0.09-0.25mm ² /28 - 24AWG		≤ 0.25mm2 / 24AWG
阻燃性 Fire resistance		UL 94 V-0											
锁紧系统 Locking system		快速锁紧 Quick locking											

注意 Note:
不支持带电插拔。金属外壳需安全安装, 接地保护。Live plugging is not supported. The metal shell must be securely installed and grounded.

¹⁾ 依据污染程度²⁾来设计; 当IEC 60644-1标准满足时, 可以在污染程度³⁾条件下使用。
According to the degree of pollution to design; When the IEC 60644-1 standard is met, it can be used under pollution level ³⁾ conditions.

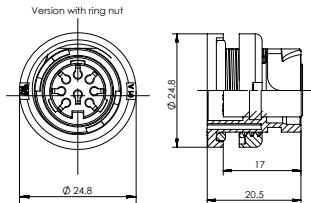
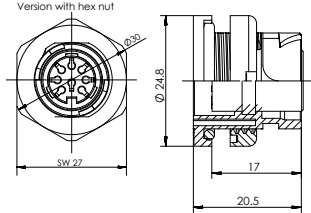
²⁾ 操作条件 >10⁸ Ω。

Operating conditions >10⁸ Ω.

IEC 60 664 = DIN VDE 0110; IEC 60 512-x = DIN EN 60 512-x; IEC 60 130-9 = DIN EN 60 130-9; IEC 61076-2-106 = DIN EN 61076-2-106

C091 Q 母插座/后面安装

C091 Q Female receptacle/rear installation

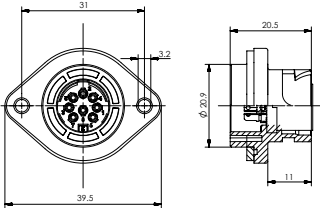
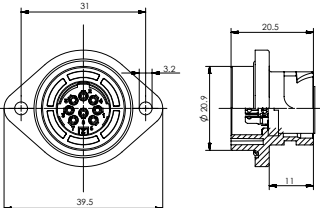
触针数 PIN	焊接型部品号 Welding type P/N		压接型料号 Crimp type P/N	尺寸图 Dimension	产品图 Picture
	镀银 Silver plating	镀金 Gold plating			
(请单独订购压接触针, 参见第16页) (Please order contact pins separately, see page 16)					
3	C091 31G003 Y 140 5 U	C091 31G003 Y 240 5 U	C091 11G003 000 5 U		  圆形螺母 Circular nut
4	C091 31G004 Y 140 5 U	C091 31G004 Y 240 5 U	C091 11G004 000 5 U		
5	C091 31G005 Y 140 5 U	C091 31G005 Y 240 5 U	C091 11G005 000 5 U		
5S	C091 31G105 Y 140 5 U	C091 31G105 Y 240 5 U	C091 11G105 000 5 U		
6	C091 31G006 Y 140 5 U	C091 31G006 Y 240 5 U	C091 11G006 000 5 U		
7a	C091 31G007 Y 140 5 U	C091 31G007 Y 240 5 U	C091 11G007 000 5 U		
7b	C091 31G107 Y 140 5 U	C091 31G107 Y 240 5 U	C091 11G107 000 5 U		
8	C091 31G008 Y 140 5 U	C091 31G008 Y 240 5 U	C091 11G008 000 5 U		
12	C091 31G012 Y 140 5 U	C091 31G012 Y 240 5 U	C091 11G012 000 5 U		  六角螺母 Hex nut
14	C091 31G014 Y 140 5 U	C091 31G014 Y 240 5 U	C091 11G014 000 5 U		
14b	C091 31G114 Y 140 5 U	C091 31G114 Y 240 5 U			
19	C091 31G019 Y 140 5 U	C091 31G019 Y 240 5 U			
3	C091 31G003 Y 149 5 U	C091 31G003 Y 249 5 U	C091 11G003 009 5 U		
4	C091 31G004 Y 149 5 U	C091 31G004 Y 249 5 U	C091 11G004 009 5 U		
5	C091 31G005 Y 149 5 U	C091 31G005 Y 249 5 U	C091 11G005 009 5 U		
5S	C091 31G105 Y 149 5 U	C091 31G105 Y 249 5 U	C091 11G105 009 5 U		
6	C091 31G006 Y 149 5 U	C091 31G006 Y 249 5 U	C091 11G006 009 5 U		
7a	C091 31G007 Y 149 5 U	C091 31G007 Y 249 5 U	C091 11G007 009 5 U		
7b	C091 31G107 Y 149 5 U	C091 31G107 Y 249 5 U	C091 11G107 009 5 U		
8	C091 31G008 Y 149 5 U	C091 31G008 Y 249 5 U	C091 11G008 009 5 U		
12	C091 31G012 Y 149 5 U	C091 31G012 Y 249 5 U	C091 11G012 009 5 U		
14	C091 31G014 Y 149 5 U	C091 31G014 Y 249 5 U	C091 11G014 009 5 U		
14b	C091 31G114 Y 149 5 U	C091 31G114 Y 249 5 U			
19	C091 31G019 Y 149 5 U	C091 31G019 Y 249 5 U			

组装说明 Assembly instruction

焊接型 Welded type	压接型 Crimp type	安装面板简图 Mounting panel drawing
① 3^{+0.5}₀ ② Lötzen anlöten solder wires ③ Insert in flansch huse eindrücken snap insert into ferrule ④ Anzugsdrehmoment tightening torque 3±0.5Nm Für ringmutter werkzeug N 45 091 0002 U benutzen for ring nut use tool N 45 091 0002 U Für sechskantmutter SW 27 benutzen for hex nut use wrench with SW 27	Anzugsdrehmoment tightening torque 3±0.5Nm Für ringmutter werkzeug N 45 091 0002 U benutzen for ring nut use tool N 45 091 0002 U Für sechskantmutter SW 27 benutzen for hex nut use wrench with SW 27	Max.3.5 Max.chamfer 0.1 Max.R2.5 20^{+0.2}₀ 18.3^{+0.2}₀ Recommended roughness sealing surface Rz6.3(Ra0.8)

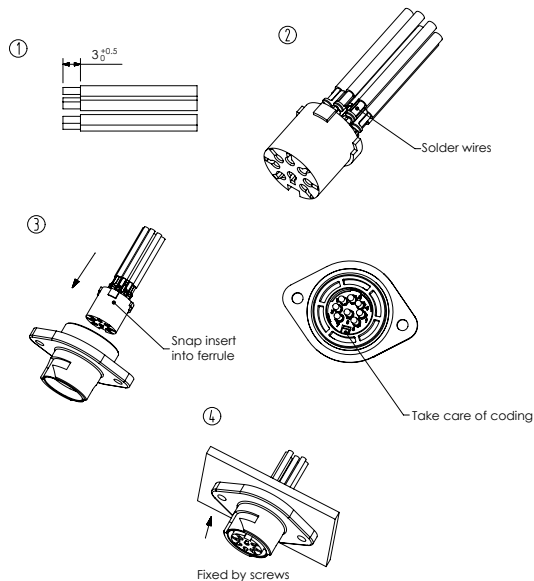
C091 Q 母插座/两孔法兰安装

C091 Q Female receptacle/2pin flange installation

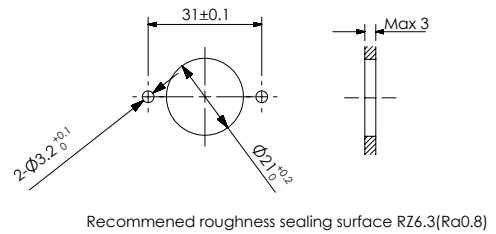
触针数 PIN	焊接型部品号 Welding type P/N		压接型料号 Crimp type P/N	尺寸图 Dimension	产品图 Picture
	镀银 Silver plating	镀金 Gold plating			
(请单独订购压接触针, 参见第16页) (Please order contact pins separately, see page 16)					
3	C091 31T003 Y 146 5 U	C091 31T003 Y 246 5 U	C091 11T003 Y 006 5 U		 平垫圈密封 Plain washer seal
4	C091 31T004 Y 146 5 U	C091 31T004 Y 246 5 U	C091 11T004 Y 006 5 U		
5	C091 31T005 Y 146 5 U	C091 31T005 Y 246 5 U	C091 11T005 Y 006 5 U		
5S	C091 31T105 Y 146 5 U	C091 31T105 Y 246 5 U	C091 11T105 Y 006 5 U		
6	C091 31T006 Y 146 5 U	C091 31T006 Y 246 5 U	C091 11T006 Y 006 5 U		
7a	C091 31T007 Y 146 5 U	C091 31T007 Y 246 5 U	C091 11T007 Y 006 5 U		
7b	C091 31T107 Y 146 5 U	C091 31T107 Y 246 5 U	C091 11T107 Y 006 5 U		
8	C091 31T008 Y 146 5 U	C091 31T008 Y 246 5 U	C091 11T008 Y 006 5 U		
12	C091 31T012 Y 146 5 U	C091 31T012 Y 246 5 U	C091 11T012 Y 006 5 U		
14	C091 31T014 Y 146 5 U	C091 31T014 Y 246 5 U	C091 11T014 Y 006 5 U		 O型圈密封 O-ring seal
14b	C091 31T114 Y 146 5 U	C091 31T114 Y 246 5 U	C091 11T114 Y 006 5 U		
19	C091 31T019 Y 146 5 U	C091 31T019 Y 246 5 U	C091 11T019 Y 006 5 U		
3	C091 31T003 Y 148 5 U	C091 31T003 Y 248 5 U	C091 11T003 Y 008 5 U		
4	C091 31T004 Y 148 5 U	C091 31T004 Y 248 5 U	C091 11T004 Y 008 5 U		
5	C091 31T005 Y 148 5 U	C091 31T005 Y 248 5 U	C091 11T005 Y 008 5 U		
5S	C091 31T105 Y 148 5 U	C091 31T105 Y 248 5 U	C091 11T105 Y 008 5 U		
6	C091 31T006 Y 148 5 U	C091 31T006 Y 248 5 U	C091 11T006 Y 008 5 U		
7a	C091 31T007 Y 148 5 U	C091 31T007 Y 248 5 U	C091 11T007 Y 008 5 U		
7b	C091 31T107 Y 148 5 U	C091 31T107 Y 248 5 U	C091 11T107 Y 008 5 U		
8	C091 31T008 Y 148 5 U	C091 31T008 Y 248 5 U	C091 11T008 Y 008 5 U		
12	C091 31T012 Y 148 5 U	C091 31T012 Y 248 5 U	C091 11T012 Y 008 5 U		
14	C091 31T014 Y 148 5 U	C091 31T014 Y 248 5 U	C091 11T014 Y 008 5 U		
14b	C091 31T114 Y 148 5 U	C091 31T114 Y 248 5 U	C091 11T114 Y 008 5 U		
19	C091 31T019 Y 148 5 U	C091 31T019 Y 248 5 U	C091 11T019 Y 008 5 U		

组装说明 Assembly instruction

焊接型 Welded type

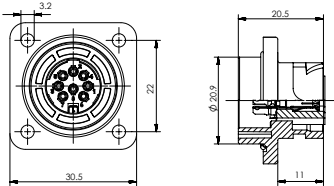
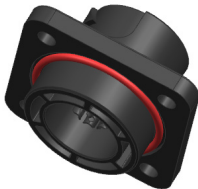
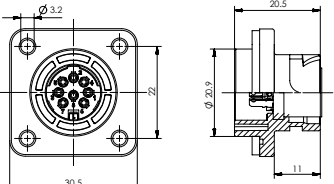


安装面板图 Mounting panel drawing



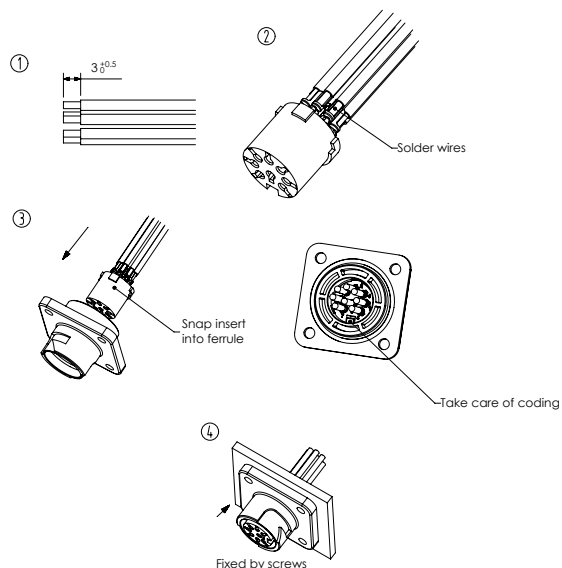
C091 Q 母插座/四孔法兰安装

C091 Q Female receptacle/4pin flange installation

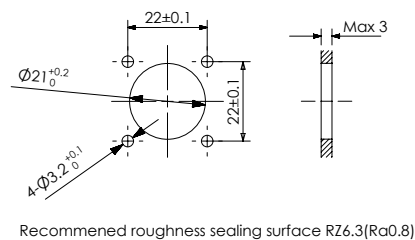
触针数 PIN	焊接型部品号 Welding type P/N		压接型料号 Crimp type P/N	尺寸图 Dimension	产品图 Picture
	镀银 Silver plating	镀金 Gold plating			
(请单独订购压接触针, 参见第16页) (Please order contact pins separately, see page 16)					
3	C091 31T003 Y 140 5 U	C091 31T003 Y 240 5 U	C091 11T003 Y 000 5 U		 O型圈密封 O-ring seal
4	C091 31T004 Y 140 5 U	C091 31T004 Y 240 5 U	C091 11T004 Y 000 5 U		
5	C091 31T005 Y 140 5 U	C091 31T005 Y 240 5 U	C091 11T005 Y 000 5 U		
5S	C091 31T105 Y 140 5 U	C091 31T105 Y 240 5 U	C091 11T105 Y 000 5 U		
6	C091 31T006 Y 140 5 U	C091 31T006 Y 240 5 U	C091 11T006 Y 000 5 U		
7a	C091 31T007 Y 140 5 U	C091 31T007 Y 240 5 U	C091 11T007 Y 000 5 U		
7b	C091 31T107 Y 140 5 U	C091 31T107 Y 240 5 U	C091 11T107 Y 000 5 U		
8	C091 31T008 Y 140 5 U	C091 31T008 Y 240 5 U	C091 11T008 Y 000 5 U		
12	C091 31T012 Y 140 5 U	C091 31T012 Y 240 5 U	C091 11T012 Y 000 5 U		
14	C091 31T014 Y 140 5 U	C091 31T014 Y 240 5 U	C091 11T014 Y 000 5 U		
14b	C091 31T114 Y 140 5 U	C091 31T114 Y 240 5 U			
19	C091 31T019 Y 140 5 U	C091 31T019 Y 240 5 U			
3	C091 31T003 Y 149 5 U	C091 31T003 Y 249 5 U	C091 11T003 Y 009 5 U		 平垫圈密封 Plain washer seal
4	C091 31T004 Y 149 5 U	C091 31T004 Y 249 5 U	C091 11T004 Y 009 5 U		
5	C091 31T005 Y 149 5 U	C091 31T005 Y 249 5 U	C091 11T005 Y 009 5 U		
5S	C091 31T105 Y 149 5 U	C091 31T105 Y 249 5 U	C091 11T105 Y 009 5 U		
6	C091 31T006 Y 149 5 U	C091 31T006 Y 249 5 U	C091 11T006 Y 009 5 U		
7a	C091 31T007 Y 149 5 U	C091 31T007 Y 249 5 U	C091 11T007 Y 009 5 U		
7b	C091 31T107 Y 149 5 U	C091 31T107 Y 249 5 U	C091 11T107 Y 009 5 U		
8	C091 31T008 Y 149 5 U	C091 31T008 Y 249 5 U	C091 11T008 Y 009 5 U		
12	C091 31T012 Y 149 5 U	C091 31T012 Y 249 5 U	C091 11T012 Y 009 5 U		
14	C091 31T014 Y 149 5 U	C091 31T014 Y 249 5 U	C091 11T014 Y 009 5 U		
14b	C091 31T114 Y 149 5 U	C091 31T114 Y 249 5 U			
19	C091 31T019 Y 149 5 U	C091 31T019 Y 249 5 U			

组装说明 Assembly instruction

焊接型 Welded type

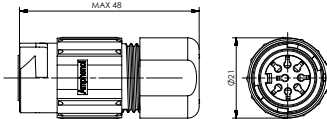
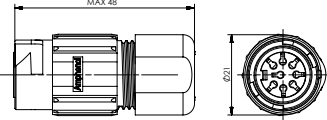


安装面板图 Mounting panel drawing



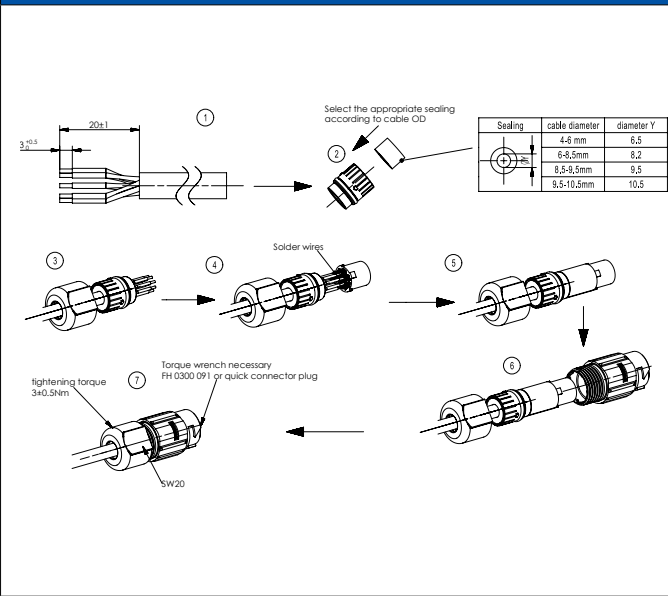
C091 Q 母插头

C091 Q female plug

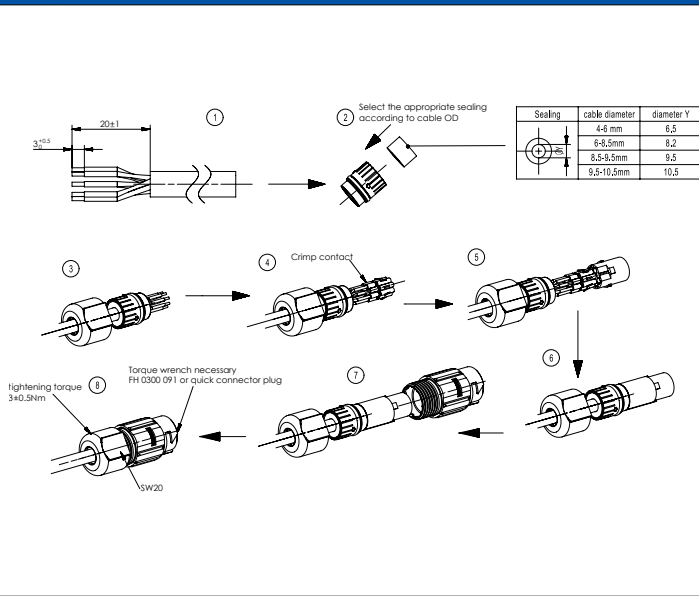
触针数 PIN	焊接型部品号 Welding type P/N		压接型料号 Crimp type P/N	尺寸图 Dimension	产品图 Picture
	镀银 Silver plating	镀金 Gold plating			
(请单独订购压接触针, 参见第16页) (Please order contact pins separately, see page 16)					
3	C091 31D003 Y 140 5 U	C091 31D003 Y 240 5 U	C091 11D003 Y 000 5 U		
4	C091 31D004 Y 140 5 U	C091 31D004 Y 240 5 U	C091 11D004 Y 000 5 U		
5	C091 31D005 Y 140 5 U	C091 31D005 Y 240 5 U	C091 11D005 Y 000 5 U		
5S	C091 31D105 Y 140 5 U	C091 31D105 Y 240 5 U	C091 11D105 Y 000 5 U		
6	C091 31D006 Y 140 5 U	C091 31D006 Y 240 5 U	C091 11D006 Y 000 5 U		
7a	C091 31D007 Y 140 5 U	C091 31D007 Y 240 5 U	C091 11D007 Y 000 5 U		
7b	C091 31D107 Y 140 5 U	C091 31D107 Y 240 5 U	C091 111007 Y 000 5 U		
8	C091 31D008 Y 140 5 U	C091 31D008 Y 240 5 U	C091 11D008 Y 000 5 U		
12	C091 31D012 Y 140 5 U	C091 31D012 Y 240 5 U	C091 11D012 Y 000 5 U		
14	C091 31D014 Y 140 5 U	C091 31D014 Y 240 5 U	C091 11D014 Y 000 5 U	电缆直径Cable diameter: 4-8.5mm	
14b	C091 31D114 Y 140 5 U	C091 31D114 Y 240 5 U			
19	C091 31D119 Y 140 5 U	C091 31D119 Y 240 5 U			
3	C091 31D003 Y 142 5 U	C091 31D003 Y 242 5 U	C091 11D003 Y 002 5 U		
4	C091 31D004 Y 142 5 U	C091 31D004 Y 242 5 U	C091 11D004 Y 002 5 U		
5	C091 31D005 Y 142 5 U	C091 31D005 Y 242 5 U	C091 11D005 Y 002 5 U		
5S	C091 31D105 Y 142 5 U	C091 31D105 Y 242 5 U	C091 11D105 Y 002 5 U		
6	C091 31D006 Y 142 5 U	C091 31D006 Y 242 5 U	C091 11D006 Y 002 5 U		
7a	C091 31D007 Y 142 5 U	C091 31D007 Y 242 5 U	C091 11D007 Y 002 5 U		
7b	C091 31D107 Y 142 5 U	C091 31D107 Y 242 5 U	C091 111007 Y 002 5 U		
8	C091 31D008 Y 142 5 U	C091 31D008 Y 242 5 U	C091 11D008 Y 002 5 U		
12	C091 31D012 Y 142 5 U	C091 31D012 Y 242 5 U	C091 11D012 Y 002 5 U		
14	C091 31D014 Y 142 5 U	C091 31D014 Y 242 5 U	C091 11D014 Y 002 5 U	电缆直径Cable diameter: 8.5-10.5mm	
14b	C091 31D114 Y 142 5 U	C091 31D114 Y 242 5 U			
19	C091 31D119 Y 142 5 U	C091 31D119 Y 242 5 U			

组装说明 Assembly instruction

焊接型 Welded type

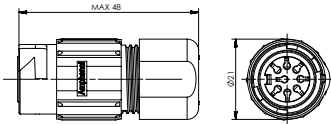


安装面板图 Mounting panel drawing

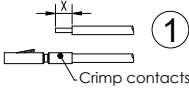


C091 Q 母插头-电子线

C091 Q female plug-Wire

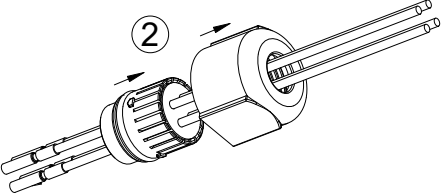
触针数 PIN	焊接型部品号 Welding type P/N		压接型料号 Crimp type P/N	尺寸图 Dimension	产品图 Picture
	镀银 Silver plating	镀金 Gold plating			
(请单独订购压接触针, 参见第16页) (Please order contact pins separately, see page 16)					
3	N/A	N/A	C091 11D003 Y 00E 5 U		
4	N/A	N/A	C091 11D004 Y 00E 5 U		
5	N/A	N/A	C091 11D005 Y 00E 5 U		
6	N/A	N/A	C091 11D006 Y 00E 5 U		
7	N/A	N/A	C091 11D007 Y 00E 5 U		
8	N/A	N/A	C091 11D008 Y 00E 5 U		
				适配线规: 26-20AWG Suitable for wire: 26-20AWG 最大线径: 1.9mm Wire OD Max. 1.9mm	

组装说明 Assembly instruction

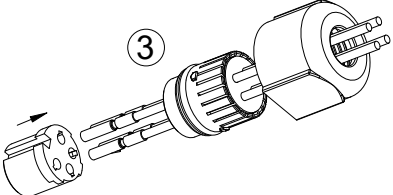


① Crimp contacts

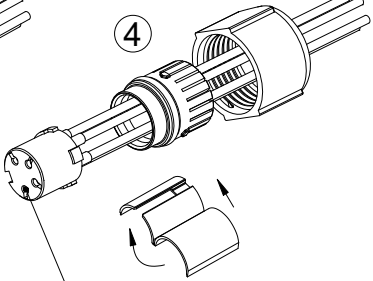
Contacts	Dim. X
crimp 0.09 ~ 0.25mm ²	3 ¹⁶ / ₆₄
crimp 0.35 ~ 0.5mm ²	3 ¹⁶ / ₆₄
crimp 0.75 ~ 1.0mm ²	3.5 ¹⁶ / ₆₄



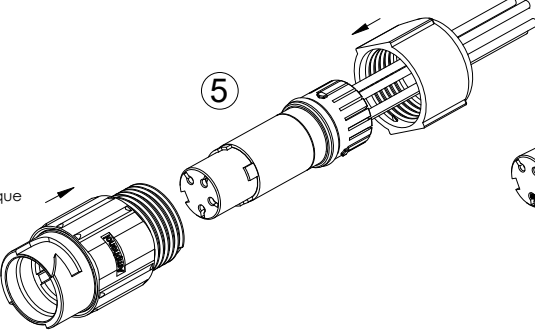
②



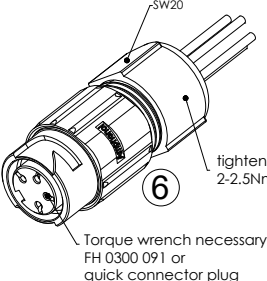
③



④ Snap in contacts



⑤



⑥

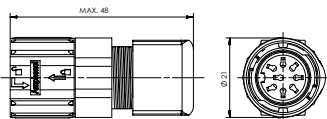
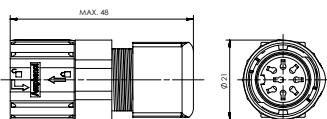
SW20

tightening torque 2-2.5Nm

Torque wrench necessary FH 0300 091 or quick connector plug

C091 Q 公插头

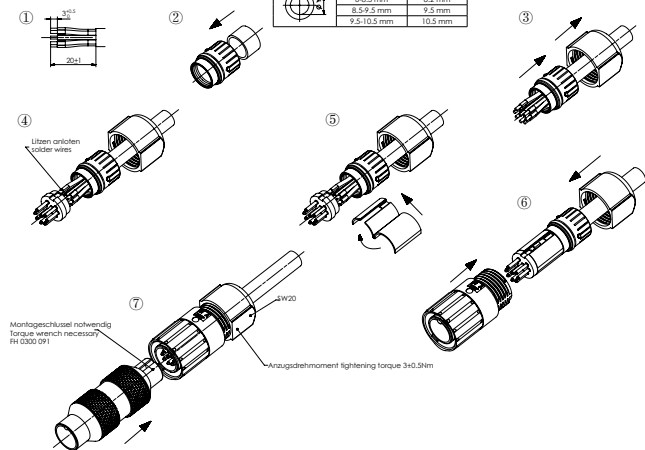
C091 Q Male plug

触针数 PIN	焊接型部品号 Welding type P/N		压接型料号 Crimp type P/N	尺寸图 Dimension	产品图 Picture
	镀银 Silver plating	镀金 Gold plating			
(请单独订购压接触针, 参见第16页) (Please order contact pins separately, see page 16)					
3	C091 31H003 Y 140 5 U	C091 31H003 Y 240 5 U	C091 11H003 000 5 U	 电缆直径Cable diameter: 4-8.5mm	
4	C091 31H004 Y 140 5 U	C091 31H004 Y 240 5 U	C091 11H004 000 5 U		
5	C091 31H005 Y 140 5 U	C091 31H005 Y 240 5 U	C091 11H005 000 5 U		
5S	C091 31H105 Y 140 5 U	C091 31H105 Y 240 5 U	C091 11H105 000 5 U		
6	C091 31H006 Y 140 5 U	C091 31H006 Y 240 5 U	C091 11H006 000 5 U		
7a	C091 31H007 Y 140 5 U	C091 31H007 Y 240 5 U	C091 11H007 000 5 U		
7b	C091 31H107 Y 140 5 U	C091 31H107 Y 240 5 U	C091 11H107 000 5 U		
8	C091 31H008 Y 140 5 U	C091 31H008 Y 240 5 U	C091 11H008 000 5 U		
12	C091 31H012 Y 140 5 U	C091 31H012 Y 240 5 U	C091 11H012 000 5 U		
14	C091 31H014 Y 140 5 U	C091 31H014 Y 240 5 U	C091 11H014 000 5 U		
14b	C091 31H114 Y 140 5 U	C091 31H114 Y 240 5 U			
19	C091 31H119 Y 140 5 U	C091 31H119 Y 240 5 U			
3	C091 31H003 Y 142 5 U	C091 31H003 Y 242 5 U	C091 11H003 002 5 U	 电缆直径Cable diameter: 8.5-10.5mm	
4	C091 31H004 Y 142 5 U	C091 31H004 Y 242 5 U	C091 11H004 002 5 U		
5	C091 31H005 Y 142 5 U	C091 31H005 Y 242 5 U	C091 11H005 002 5 U		
5S	C091 31H105 Y 142 5 U	C091 31H105 Y 242 5 U	C091 11H105 002 5 U		
6	C091 31H006 Y 142 5 U	C091 31H006 Y 242 5 U	C091 11H006 002 5 U		
7a	C091 31H007 Y 142 5 U	C091 31H007 Y 242 5 U	C091 11H007 002 5 U		
7b	C091 31H107 Y 142 5 U	C091 31H107 Y 242 5 U	C091 11H107 002 5 U		
8	C091 31H008 Y 142 5 U	C091 31H008 Y 242 5 U	C091 11H008 002 5 U		
12	C091 31H012 Y 142 5 U	C091 31H012 Y 242 5 U	C091 11H012 002 5 U		
14	C091 31H014 Y 142 5 U	C091 31H014 Y 242 5 U	C091 11H014 002 5 U		
14b	C091 31H114 Y 142 5 U	C091 31H114 Y 242 5 U			
19	C091 31H019 Y 142 5 U	C091 31H019 Y 242 5 U			

组装说明 Assembly instruction

焊接型 Welded type

Dichtung sealing	Kabeldurchmesser cable diameter	Durchmesser Y diameter Y
	4.6 mm	4.5 mm
	6.8 mm	6.2 mm
	8.5/9.5 mm	9.5 mm
	9.5-10.5 mm	10.5 mm



① 剥长 20±1

② 将电缆插入外壳

③ 将接触针插入

④ 插入电缆

⑤ 用扭矩扳手拧紧

⑥ 用扭矩扳手拧紧

⑦ 最终组装

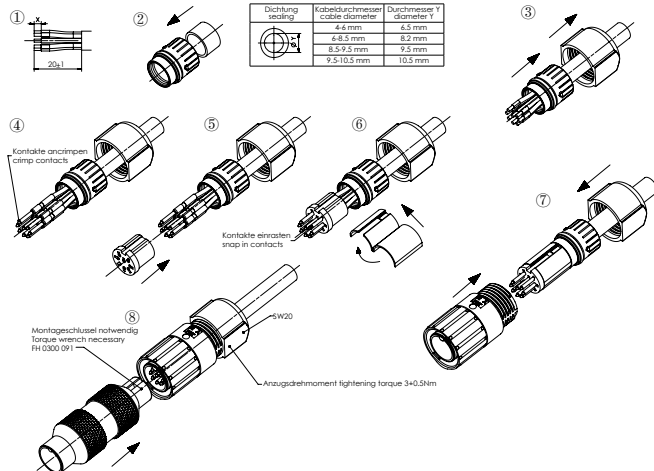
Montageschlüssel notwendig
Torque wrench necessary
FH 0300 091

Anzugsdrehmoment tightening torque 3x40.5Nm

压接型 Crimp type

Kontakte Contacts	Max X dim X
crimp 0.09-0.25mm ²	3.0"mm
crimp 0.35-0.5mm ²	3.0"mm
crimp 0.75-1.0mm ²	3.0"mm

Dichtung sealing	Kabeldurchmesser cable diameter	Durchmesser Y diameter Y
	4.6 mm	4.5 mm
	6.8 mm	6.2 mm
	8.5/9.5 mm	9.5 mm
	9.5-10.5 mm	10.5 mm



① 剥长 20±1

② 将电缆插入外壳

③ 将接触针插入

④ 插入电缆

⑤ 用扭矩扳手拧紧

⑥ 用扭矩扳手拧紧

⑦ 最终组装

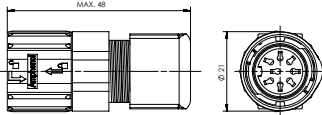
⑧ 最终组装

Montageschlüssel notwendig
Torque wrench necessary
FH 0300 091

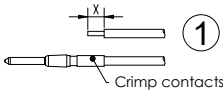
Anzugsdrehmoment tightening torque 3x40.5Nm

C091 Q 公插头-电子线

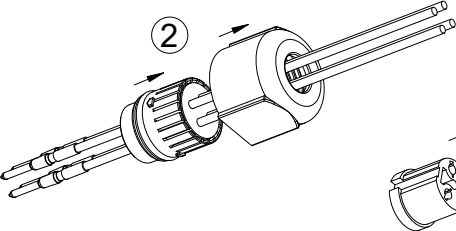
C091 Q Male plug-Wire

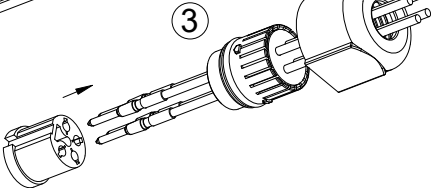
触针数 PIN	焊接型部品号 Welding type P/N		压接型料号 Crimp type P/N	尺寸图 Dimension	产品图 Picture
	镀银 Silver plating	镀金 Gold plating			
(请单独订购压接触针, 参见第16页) (Please order contact pins separately, see page 16)					
3	N/A	N/A	C091 11H003 Y 00E 5 U	 适配线规: 26-20AWG Suitable for wire: 26-20AWG 最大线径: 1.9mm Wire OD Max. 1.9mm	
4	N/A	N/A	C091 11H004 Y 00E 5 U		
5	N/A	N/A	C091 11H005 Y 00E 5 U		
6	N/A	N/A	C091 11H006 Y 00E 5 U		
7	N/A	N/A	C091 11H007 Y 00E 5 U		
8	N/A	N/A	C091 11H008 Y 00E 5 U		

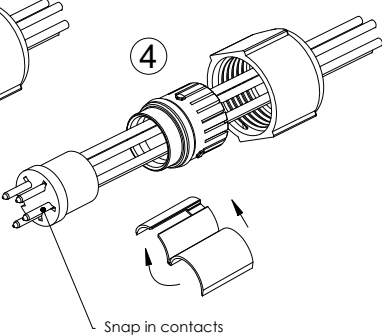
组装说明 Assembly instruction



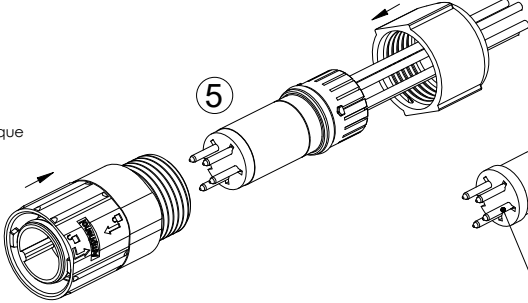
Contacts	Dim. X
crimp 0.09 - 0.25mm ²	3 ⁹ / ₁₆ "
crimp 0.35 - 0.5mm ²	3 ⁹ / ₁₆ "
crimp 0.75 - 1.0mm ²	3.5 ⁹ / ₁₆ "

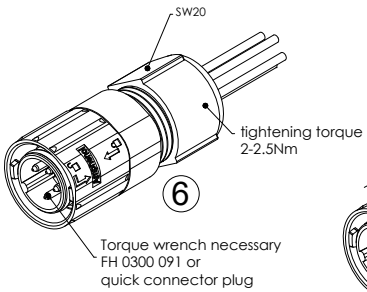






Snap in contacts





SW20

tightening torque 2-2.5Nm

Torque wrench necessary FH 0300 091 or quick connector plug

C091 压接针

C091 crimping pin

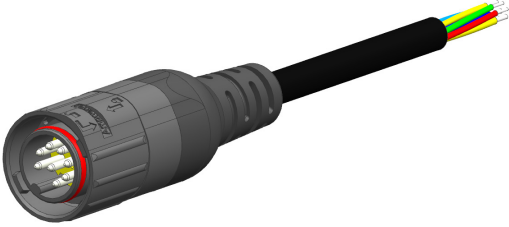
供货状态 State of supply	线规 Wire range	绝缘直径 Insulation diameter Ø mm	件数 QTY	部品号 P/N		图片 picture	
				银 Silver plating	金 Gold plating		
公触针 Male contact; Ø 1.5mm							
单触针 Single contact	0.09-0.25mm ²	0.7 - 1.6	100	VN01 015 0052 (1) U	VN01 015 0052 (2) U		
卷盘上的触针Contact on reel			200	ZN01 015 0052 (1) U	ZN01 015 0052 (2) U		
右 Right			2000	HN01 015 0052 (1) U	HN01 015 0052 (2) U		
左 Left			2000	TN01 015 0052 (1) U	TN01 015 0052 (2) U		
单触针 Single contact	0.35-0.50mm ²	1.0 - 2.0	100	VN01 015 0046 (1) U	VN01 015 0046 (2) U		
卷盘上的触针Contact on reel			200	ZN01 015 0046 (1) U	ZN01 015 0046 (2) U		
右 Right			2000	HN01 015 0046 (1) U	HN01 015 0046 (2) U		
左 Left			2000	TN01 015 0046 (1) U	TN01 015 0046 (2) U		
单触针 Single contact	0.75-1.0mm ²	1.6 - 2.1	100	VN01 015 0047 (1) U	VN01 015 0047 (2) U		
卷盘上的触针Contact on reel			200	ZN01 015 0047 (1) U	ZN01 015 0047 (2) U		
右 Right			2000	HN01 015 0047 (1) U	HN01 015 0047 (2) U		
左 Left			2000	TN01 015 0047 (1) U	TN01 015 0047 (2) U		
公触针 Male contact; Ø 1.0mm							
	0.09-0.25mm ²	1.3	100	VN01 010 0158 (1) U	VN01 010 0158 (2) U		
			2000	HN01 010 0158 (1) U	HN01 010 0158 (2) U		
			2000	TN01 010 0158 (1) U	TN01 010 0158 (2) U		
母触针 Female contact; Ø 1.5mm							
单触针 Single contact	0.09-0.25mm ²	0.7 - 1.6	100	VN02 015 0052 (1) U	VN02 015 0052 (2) U		
卷盘上的触针Contact on reel			200	ZN02 015 0052 (1) U	ZN02 015 0052 (2) U		
右 Right			2000	HN02 015 0052 (1) U	HN02 015 0052 (2) U		
左 Left			2000	TN02 015 0052 (1) U	TN02 015 0052 (2) U		
单触针 Single contact	0.35-0.50mm ²	1.0 - 2.0	100	VN02 015 0046 (1) U	VN02 015 0046 (2) U		
卷盘上的触针Contact on reel			200	ZN02 015 0046 (1) U	ZN02 015 0046 (2) U		
右 Right			2000	HN02 015 0046 (1) U	HN02 015 0046 (2) U		
左 Left			2000	TN02 015 0046 (1) U	TN02 015 0046 (2) U		
单触针 Single contact	0.75-1.0mm ²	1.6 - 2.1	100	VN02 015 0047 (1) U	VN02 015 0047 (2) U		
卷盘上的触针Contact on reel			200	ZN02 015 0047 (1) U	ZN02 015 0047 (2) U		
右 Right			2000	HN02 015 0047 (1) U	HN02 015 0047 (2) U		
左 Left			2000	TN02 015 0047 (1) U	TN02 015 0047 (2) U		
母触针 Female contact; Ø 1.0mm							
	0.09-0.25mm ²	1.3	100	VN02 010 0158 (1) U	VN02 010 0158 (2) U		
			2000	HN02 010 0158 (1) U	HN02 010 0158 (2) U		
			2000	TN02 010 0158 (1) U	TN02 010 0158 (2) U		

连接范围 Connection range	线规 Wire Range		剥离长度 Stripping length	卷边高度(平均值) Flange height (average)	滞留力 Retention force
mm ²	mm ²	AWG	mm	mm	按 DIN EN 60352-2N
0.09-0.25	0.09	28	3.0+0.5	0.85-0.89	11
		26			15
	0.14			0.86-0.90	18
		24			28
	0.25			0.91-0.97	32
0.35-0.50	0.35	22	3.0+0.5	0.90-1.06	40
	0.50	20		0.95-1.11	60
0.75-1.0	0.75		3.5+1.0	1.33-1.50	85
		18			90
	1.0			1.36-1.53	108

这些最小值以铜线的抗拉强度 δB ≈ 230 N/mm² 为据 These minimums are based on the tensile strength of copper wire δB ≈ 230 N/mm²

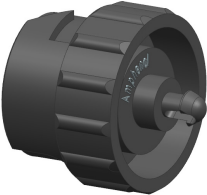
C091 Q 定制注塑电缆组件

Custom injection molded cable assemblies

C091 Q 双头(公)电缆组件 C091 Q Double-ended (male) cable assembly 	C091 Q 双头(公母)电缆组件 C091 Q Double-ended (male&female) cable assembly 
C091 Q 单头(公)电缆组件 C091 Q Single-ended (male) cable assembly 	C091 Q 单头(母)电缆组件 C091 Q Single-ended (female) cable assembly 

可选配保护盖

Optional protection cover

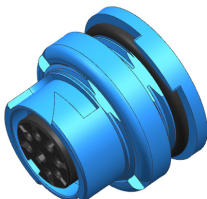
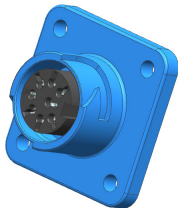
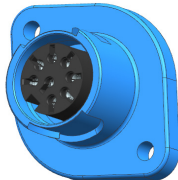
适用于公接头(可选配链条) Suitable for male plug (optional chain) 	适用于母接头、母插座 Suitable for female plug/receptacle	
N 08 016 Y 0014 U	 N 08 016 Y 0013 U	 N 08 016 Y 0012U

可选颜色 Optional color

说明 Explain

在客户端出现多个连接器时，可根据客户需求选择不同颜色外壳防误插，如蓝色在料号5 U前加上对应色标BU，灰色GY或其它定制颜色。

Customers can select colors in connector shell in case mis-plug between different function connectors. For example, adding BU ahead of 5 U represents blue shell.

插头料号 Plug P/N	产品图片 Picture	插座料号 Receptacle P/N	产品图片 Picture
C091 11DXXX Y X0X BU5 U		C091 11GXXX X0X BU5 U	
C091 31DXXX Y X4X BU5 U		C091 31GXXX Y X4X BU5 U	
C091 11HXXX X0X BU5 U		C091 11TXXX Y X00 BU5 U	
C091 31HXXX Y X4X BU5 U		C091 31TXXX Y X40 BU5 U	
		C091 11TXXX Y X09 BU5 U	
		C091 31TXXX Y X49 BU5 U	
	C091 11TXXX Y X06 BU5 U		
C091 31TXXX Y X46 BU5 U			
C091 11TXXX Y X08 BU5 U			
C091 31TXXX Y X48 BU5 U			