

MA251 (中-英) 操作指导

压接钳 PV-CZM

适用于MC3和MC4 和MC4-EVO 2

MA251 (cn_en)

Operating instructions

Crimping pliers PV-CZM...

for MC3, MC4 and MC4-EVO 2

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PV-CZM...


* UL file E343181


安全说明

该产品应由具有相应资质或经过培训的人员，遵守相关安全应用规范进行安装。
Stäubli不承担由于不遵守这些警告而产生的任何责任。

仅可使用Stäubli指定的零件和工具。对于自行装配，请务必按照本文指出的准备及安装程序，否则Stäubli不能保证产品的安全性以及与技术参数的一致性。对于产品请勿做任何形式的修改。

 本说明中的操作不允许在带电或负载下进行

 终端产品及其用户必须确保防电击保护（即必须正确安装连接器）

 出于安全原因，Stäubli强烈建议不要使用PVC电缆或者H07RN-F型无镀锡电缆。


 更多的技术参数见产品目录


Safety Instructions

The products may be assembled and installed exclusively by suitably qualified and trained specialists duly observing all applicable safety regulations.


Stäubli Electrical Connectors (Stäubli) does not accept any liability in the event of failure to observe these warnings.

Use only the components and tools specified by Stäubli. In case of self-assembly, do not deviate from the preparation and assembly instructions as stated herein, otherwise Stäubli cannot give any guarantee as to safety or conformity with the technical data. Do not modify the product in any way.

 **The work described here must not be carried out on live or load-carrying parts.**


 **Protection from electric shock must be assured by the end product (i.e. by the correctly assembled plug connector) and by its user.**

 **For safety reasons, Stäubli does strongly recommend not to use PVC cables or untinned cables of type H07RN-F.**

 **For further technical data please see the product catalogue.**

符号解释


 危险电压警告

 危险区域警告

 有用的提示

Explanation of the symbols

 **Warning of dangerous voltages**

 **Warning of a hazard area**

 **Useful hint or tip**



工具说明-MC3

(ill. 1)
压接钳 **PV-CZM-16100A**
包括：两个可更换的定位块和两个可更换的嵌块。

Explanation for MC3

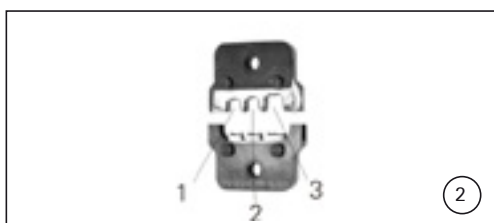
(ill. 1)
Crimping pliers **PV-CZM-16100A**
incl. two interchangeable Locators and two interchangeable crimping inserts

压接范围: 2,5/4/6 mm²
(14/12/10 AWG)
订货号: **32.6020-16100A**

Crimping range: 2,5/4/6 mm²
(14/12/10 AWG)
Order No.: **32.6020-16100A**

单独部件

Individual parts

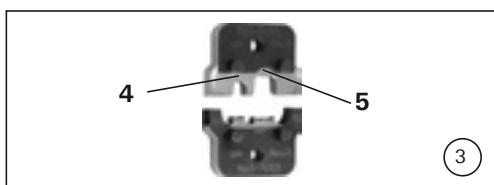


(ill. 2 + 3)
可更换的嵌块

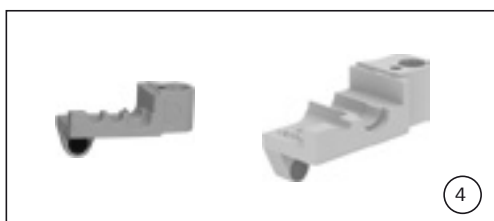
(ill. 2 + 3)
Interchangeable crimping inserts

压接范围 Crimping range		型号 Type	订货号 Order No.
mm ²	AWG		
2,5/4/6	14/12/10	PV-ES-CZM-16100	32.6021-16100
4/10		PV-ES-CZM-17100	32.6021-17100

Pos.	电缆截面积 Cable cross section		适用零件 suitable for
	mm ²	AWG	
1	2,5	14	PV-SP3/4 PV-BP3/4
2	4	12	PV-SP3/4 PV-BP3/4
3	6		PV-SP3/6 PV-BP3/6



Pos.	电缆截面积 Cable cross section		适用零件 suitable for
	mm ²	AWG	
4	4	10	PV-SP3/4 PV-BP3/4
5	10		PV-SP4/10 PV-BP4/10



(ill. 4)
可更换的定位块

(ill. 4)
Interchangeable locators

压接范围 Crimping range		型号 Type	订货号 Order No.
mm ²	AWG		
2,5/4/6	12/10	PV-LOC-A	32.6039
4/10		PV-LOC-A10	32.6049

以上定位块仅适用于直径3mm的连接系统 This locator types are for Ø 3 mm only

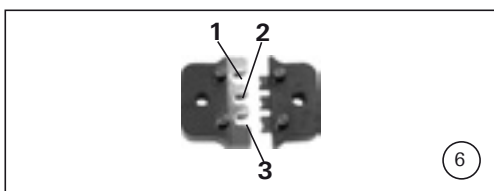


工具说明-MC4

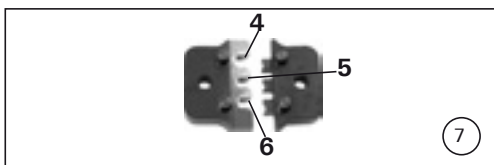
(ill. 5)
压接钳包括定位块PV-LOC和嵌块

Explanation for MC4

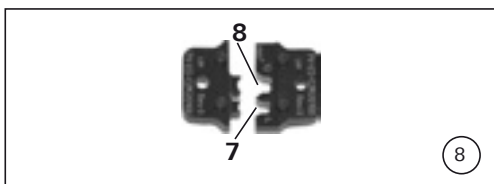
(ill. 5)
Crimping pliers incl. locator PV-LOC and built-in crimping insert



Pos.	电缆截面积 Cable cross section		适用零件 suitable for
	mm ²	AWG	
1	1,5	14	PV-SP4/2.5 PV-BP4/2.5
2	2,5		PV-SP4/2.5 PV-BP4/2.5
3	4	12	PV-SP4/6 PV-BP4/6



Pos.	电缆截面积 Cable cross section		适用零件 suitable for
	mm ²	AWG	
4	2,5		PV-SP4/2.5 PV-BP4/2.5
5	4	12	PV-SP4/6 PV-BP4/6
6	6	10	PV-SP4/6 PV-BP4/6



Pos.	电缆截面积 Cable cross section		适用零件 suitable for
	mm ²		
7	4		PV-SP4/6 PV-BP4/6
8	10		PV-SP4/10 PV-BP4/10

压接范围:	1,5/2,5/4 mm ² (14/12 AWG)
型号:	PV-CZM-18100
订货号:	32.6020-18100

压接范围:	2,5/4/6 mm ² (12/10 AWG)
型号:	PV-CZM-19100
订货号:	32.6020-19100

压接范围:	4/10 mm ²
型号:	PV-CZM-20100
订货号:	32.6020-20100

压接范围:	6/10 mm ²
型号:	PV-CZM-21100
订货号:	32.6020-21100

压接范围:	8/12/10 AWG
型号:	PV-CZM-22100
订货号:	32.6020.22100

Crimping range:	1,5/2,5/4 mm ² (14/12 AWG)
Type:	PV-CZM-18100
Order No.:	32.6020-18100

Crimping range:	2,5/4/6 mm ² (12/10 AWG)
Type:	PV-CZM-19100
Order No.:	32.6020-19100

Crimping range:	4/10 mm ²
Type:	PV-CZM-20100
Order No.:	32.6020-20100

Crimping range:	6/10 mm ²
Type:	PV-CZM-21100
Order No.:	32.6020-21100

Crimping range:	8/12/10 AWG
Type:	PV-CZM-22100
Order No.:	32.6020-22100

单独部件

(ill. 6 + 7 + 8 + 9 + 10)
可更换的嵌块

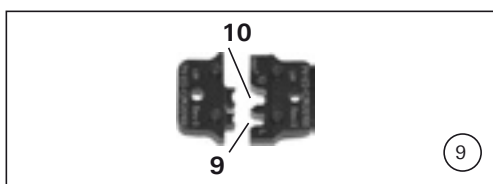
Individual parts

(ill. 6 + 7 + 8 + 9 + 10)
Interchangeable crimping inserts

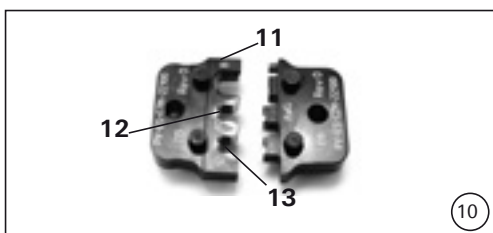
压接范围 Crimping range		型号 Type	订货号 Order No.
mm ²	AWG		
1,5/2,5/4	14/12	PV-ES-CZM-18100	32.6021-18100

压接范围 Crimping range		型号 Type	订货号 Order No.
mm ²	AWG		
2,5/4/6	12/10	PV-ES-CZM-19100	32.6021-19100

压接范围 Crimping range		型号 Type	订货号 Order No.
mm ²	AWG		
4/10		PV-ES-CZM-20100	32.6021-20100



Pos.	电缆截面积 Cable cross section	适用零件 suitable for
	mm ²	
9	6	PV-SP4/6 PV-BP4/6
10	10	PV-SP4/10 PV-BP4/10



Pos.	电缆截面积 Cable cross section	适用零件 suitable for
	AWG	
11	8	PV-SP4/8 PV-BP4/8
12	10	PV-SP4/6 PV-BP4/6
13	12	PV-SP4/6 PV-BP4/6



压接范围 Crimping range	型号 Type	订货号 Order No.
mm ²		
6/10	PV-ES-CZM-21100	32.6021-21100

压接范围 Crimping range	型号 Type	订货号 Order No.
AWG		
8 / 12 / 10	PV-CZM-22100	32.6020.22100

(ill. 11)
定位块 **PV-LOC**
订货号: **32.6040**

定位块 **PV-LOC-B**
订货号: **32.6055**

注意:
当使用压接工具**PV-CZM-22100**时, 请使用定位块**PV-LOC-B**。

(ill. 11)
Locator **PV-LOC**
Order No.: **32.6040**

Locator **PV-LOC-B**
Order No.: **32.6055**

Note:
When using the crimping tool **PV-CZM-22100**, please use the locator **PV-LOC-B**.



工具说明-MC4-EVO 2

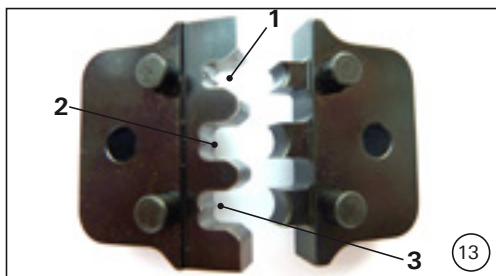
(ill. 12)
压接钳包括定位块和嵌块

压接范围:	1,5/2,5/4 mm ² (14/12 AWG)
型号:	PV-CZM-40100
订货号:	32.6020-40100
压接范围:	2,5/4/6 mm ² (14/12/10 AWG)
型号:	PV-CZM-41100
订货号:	32.6020-41100
压接范围:	4/10 mm ² (12/8 AWG)
型号:	PV-CZM-42100
订货号:	32.6020-42100

Explanation for MC4-EVO 2

(ill. 12)
Crimping pliers incl. Locator and built in crimping insert

Crimping range:	1,5/2,5/4 mm ² (14/12 AWG)
Type:	PV-CZM-40100
Order No.:	32.6020-40100
Crimping range:	2,5/4/6 mm ² (14/12/10 AWG)
Type:	PV-CZM-41100
Order No.:	32.6020-41100
Crimping range:	4/10 mm ² (12/8 AWG)
Type:	PV-CZM-42100
Order No.:	32.6020-42100



单独部件

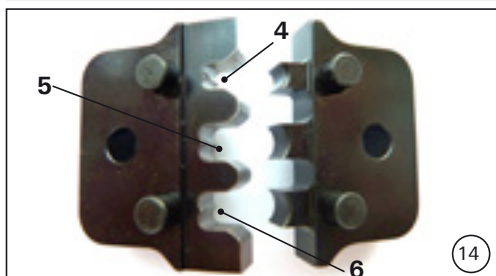
Individual parts

(ill. 13 + 14 + 15)
可更换的嵌块

(ill. 13 + 14 + 15)
Interchangeable crimping inserts

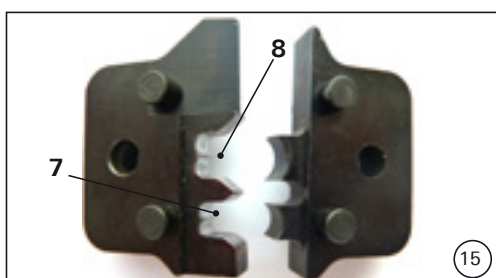
Pos.	电缆截面积 Cable cross section		适用零件 suitable for
	mm ²	AWG	
1	1,5		PV-SP4-EVO 2/2,5 PV-BP4-EVO 2/2,5
2	2,5	14	PV-SP4-EVO 2/2,5 PV-BP4-EVO 2/2,5
3	4	12	PV-SP4-EVO 2/6 PV-BP4-EVO 2/6

压接范围 Crimping range		型号 Type	订货号 Order No.
mm ²	AWG		
1,5/2,5/4	14/12	PV-ES-CZM-40100	32.6021-40100



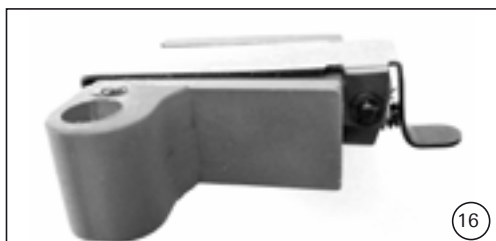
Pos.	电缆截面积 Cable cross section		适用零件 suitable for
	mm ²	AWG	
4	2,5	14	PV-SP4-EVO 2/2,5 PV-BP4-EVO 2/2,5
5	4	12	PV-SP4-EVO 2/6 PV-BP4-EVO 2/6
6	6	10	PV-SP4-EVO 2/6 PV-BP4-EVO 2/6

压接范围 Crimping range		型号 Type	订货号 Order No.
mm ²	AWG		
2,5/4/6	14/12/10	PV-ES-CZM-41100	32.6021-41100



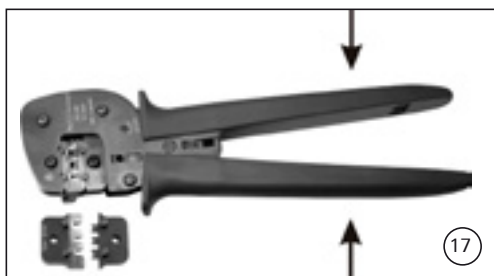
Pos.	电缆截面积 Cable cross section		适用零件 suitable for
	mm ²	AWG	
7	4	12	PV-SP4-EVO 2/6 PV-BP4-EVO 2/6
8	10	8	PV-SP4-EVO 2/10 PV-BP4-EVO 2/10

压接范围 Crimping range		型号 Type	订货号 Order No.
mm ²	AWG		
4/10	12/8	PV-ES-CZM-42100	32.6021-42100



(ill. 16)
定位块 PV-LOC-C
订货号: 32.6056

(ill. 16)
Locator PV-LOC-C
Order no.: 32.6056



更换嵌块

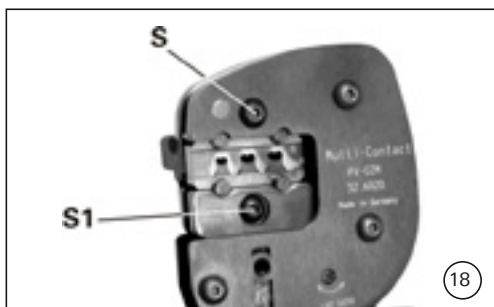
嵌块拆除

(ill. 17)
闭合压接钳

Exchanging the crimping inserts

Removing the crimping insert

(ill. 17)
Close the crimping tool



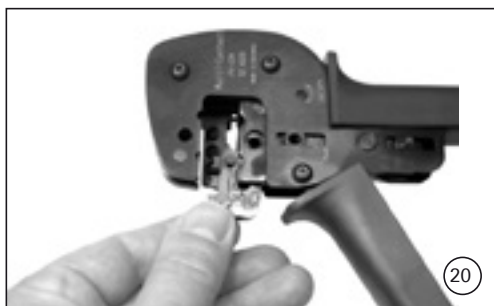
(ill. 18)
卸下螺栓S (长) 和S1 (短), 打开压接钳 (把钳子压到底后松口)

(ill. 18)
Unscrew both the long S and the short S1 screw. Open the crimping tool (press completely together and release).



(ill. 19)
拆除上部嵌块

(ill. 19)
Remove the upper crimping insert.



(ill. 20)
拆除下部嵌块

(ill. 20)
Remove the lower crimping insert.



嵌块安装

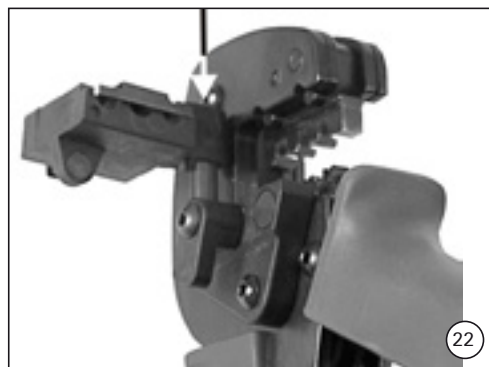
(ill. 21)
打开压接钳 (把钳子压到底后可松开), 把上下两个嵌块装上。嵌块上的印字必须和压接钳的印字在同一侧。闭合压接钳, 拧上螺栓以固定嵌块。

Fitting the crimping insert

(ill. 21)
Open the crimping tool (press completely together and release). Insert both crimping inserts. The markings must be on the same side as the marking on the crimping tool. Close crimping tool and screw both crimping inserts tight.

(ill. 22)
把定位块装到导杆上

(ill. 22)
Insert locator into the guide pin.





(ill. 23)
转动定位块（会被磁铁吸住）

(ill. 23)
Rotate the locator (held magnetically)



(ill. 24)
卡住定位块

(ill. 24)
Lock the locator.

压接

举例 ADBP3/... + ADSP3/...

Crimping

Example for ADBP3/... and ADSP3/...

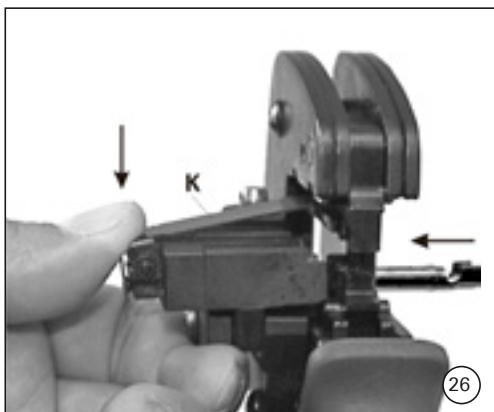


(ill. 25)
拆掉定位块，放入已剥皮的电缆，直到绝缘层碰到嵌块。放入连接器金属端子并将钳子压到底。检查压接效果（见ill.23）

(ill. 25)
Remove the locator. Insert the stripped cable on the left side until the insulation comes into contact with the crimping insert. Close crimping tool completely. Check crimp (see ill. 23).

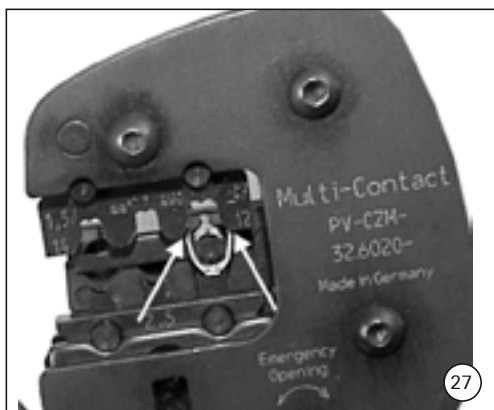
举例 KBT4.../KST4...

Example for KBT4.../KST4...



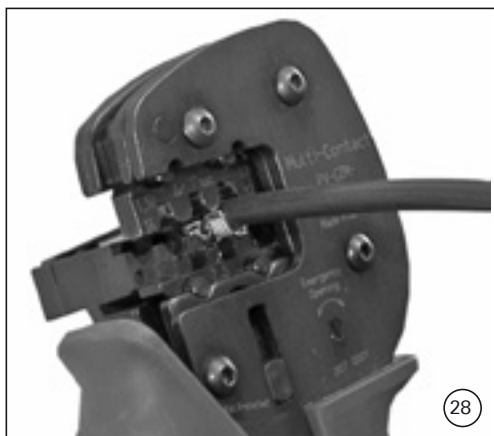
(ill. 26)
打开卡片K并保持住，把连接器金属端子插入对应平方数的压接口。转动金属端子，使开后向上。松开卡片，金属端子就被固定了。

(ill. 26)
Open and hold clamping clip K. Insert contact in the appropriate cross-section range of the crimping tool. Turn contact till crimping tabs face the top. Release clamping clip K. The contact is secured.



(ill. 27)
慢慢闭合压接钳，直到金属端子固定住。

(ill. 27)
Lightly press the pliers together so that the crimping tabs lie securely within the crimping die.



(ill. 28)
插入已剥皮的电缆，直到绝缘层碰到嵌块，然后把钳子压到底。

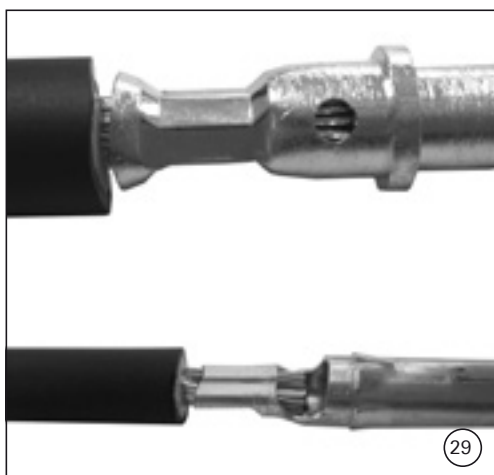
(ill. 28)
Insert the stripped cable until the insulation comes into contact with the crimping insert. Close crimping tool completely.

压接质量

通过压接高度可以评估压接质量。对于电缆FLEX-SOL-XL 和 Studer BETAflam[®]，常见高度值如下表。

Crimping quality

The quality of the crimp can be assessed on the basis of the crimp height. Typical values for the cables FLEX-SOL-XL and Studer BETAflam[®] are shown in the following table.



(ill. 29)
目测压接质量

(ill. 29)
Visually check the crimp.

MC4 / MC4-EVO 2

A	电缆 Cable	压接高度 Crimp height
mm ²		mm
1,5	FLEX-SOL-XL	1,65
	BETAflam [®]	1,65
2,5	FLEX-SOL-XL	1,80
	BETAflam [®]	1,80
4	FLEX-SOL-XL	2,15
	BETAflam [®]	2,15
6	FLEX-SOL-XL	2,40
	BETAflam [®]	2,40
10	FLEX-SOL-XL	3,02

MC3

A	电缆 Cable	压接高度 Crimp height
mm ²		mm
1,5	FLEX-SOL-XL	2,20
	BETAflam [®]	2,20
2,5	FLEX-SOL-XL	2,20
	BETAflam [®]	2,20
4	FLEX-SOL-XL	2,50
	BETAflam [®]	2,50
6	FLEX-SOL-XL	3,12
	BETAflam [®]	3,12
10	FLEX-SOL-XL	4,80

Notes:

Notes:

Notes:

制造商/Producer:
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