STAUBLI MA416-1 Robots Transform Cheesemaking Instruction Manual

Contents

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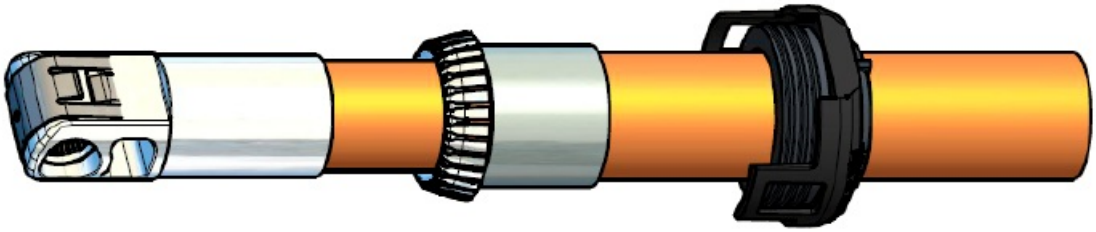
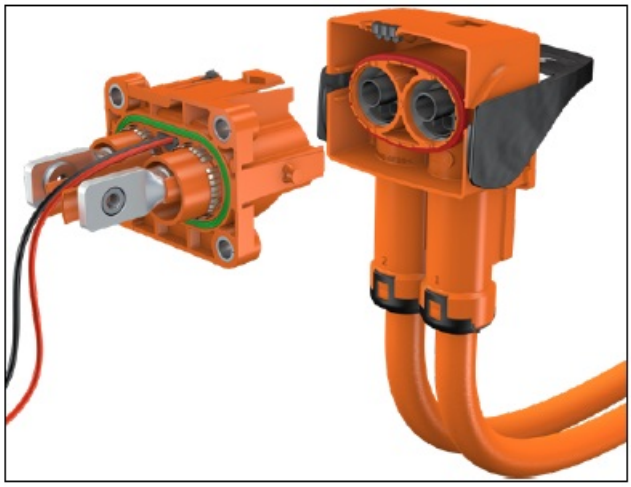
PM-KIT-S10AV-CR…





Safety instructions

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.

Connectors not originally manufactured by Stäubli which can be mated with Stäubli elements and in some cases are even described as ”Stäubli-compatible” by certain manufacturers do not conform to the requirements for safe electrical connection with long-term stability, and for safety reasons must not be plugged together with Stäubli elements. Stäubli therefore does not accept any liability for any damages resulting from mating such connectors (i.e. lacking Stäubli approval) with Stäubli elements.

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

Installation, electro technical expertise
The products may be assembled and installed by electrically skilled or instructed persons duly observing all applicable safety regulations.

Caution, risk of electric shock
Work in a de-energized state
Follow the five safety rules, when working on electrical installations.
After the respective electrical installations have been identified, the following five essential requirements shall be undertaken in the specified order unless there are essential reasons for doing otherwise:

- disconnect completely;
- secure against re-connection;
- verify absence of operating voltage;
- carry out grounding and short-circuiting;
- provide protection against adjacent live parts.

Any person engaged in this work activity shall be electrically skilled or instructed, or shall be supervised by such a person. Source: EN 50110-1:2013
Protection against electric shock shall be checked in the end-use applications too.

Do not disconnect under load
Plugging and unplugging when live is permitted.

Caution
Each time the connector is used, it should previously be inspected for external defects (particularly the insulation). If there are any safety concerns, a specialist must be consulted or the connector must be replaced.

The plug connectors are watertight in accordance with the product specific IP protection class
Unmated plug connectors must be protected from moisture and dirt. The male and female parts must not be plugged together when soiled

Useful hint or tip
For further technical data please see the product catalog.

CRIMP CONNECTION

Required parts:

Kabelquerschnitt Conductor cross section	Pos. 1 Kabel Cable	Pos. 2 Buchse + Clip Socket + clip	Pos. 3 Kabelschirmkontakthülse Cable shield contact sleeve	Pos. 4 Crimphülse Crimping sleeve	Pos. 5 Dichtungsdeckel Sealing cover
					
50 mm²		15.5413 PM-S10AV-CR50	15.5416 PM-KIT-SDD50		15.5410 PM-SEAL50
70 mm²	Bestell-Nr. / Order No. Typ / Type	15.5414 PM-S10AV-CR70	15.5417 PM-KIT-SDD70		15.5411 PM-SEAL70
95 mm²		15.5415 PM-S10AV-CR95	15.5418 PM-KIT-SDD95		15.5412 PM-SEAL95

Assembly, socket side

Attention
The connector illustrated here was developed for series production and installation. Therefore, the positioning and crimping of the power contact and shield connection are designed for a combined tool.

Recommended tools

(ill. 16)
Example Crimping station ELPRESS CS2500

Note:
Follow manufacturer operating instructions.

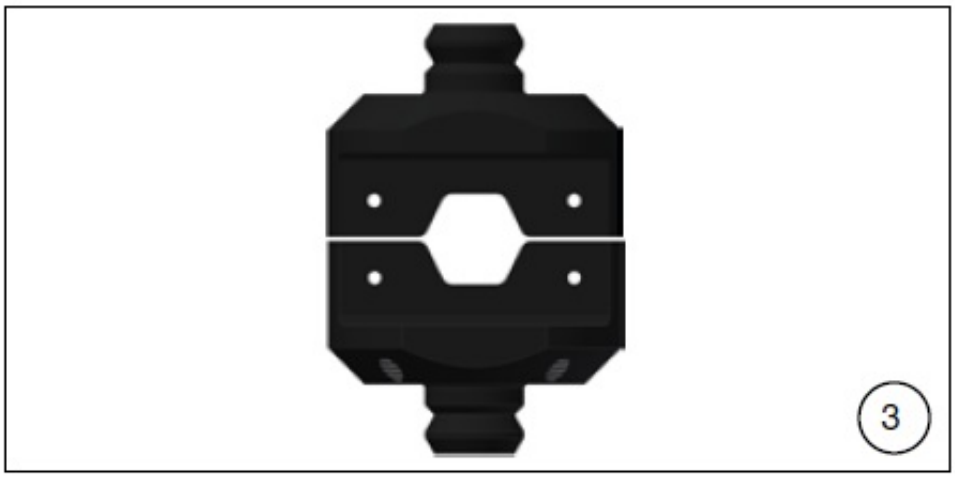
(ill. 2)
Crimping die (ELPRESS) for socket.

Tab. 1

Conductor cross section (mm 2)	Crimping die for socket
50	13DCB14,5
70	13DCB17
95	13DCB20

(ill. 3)
Crimping die (ELPRESS) for cable shield contact sleeve.

(ill. 4)
Stripping tool for shielded 50 mm2, 70 mm2 and 95 mm2 cable according to LV-216

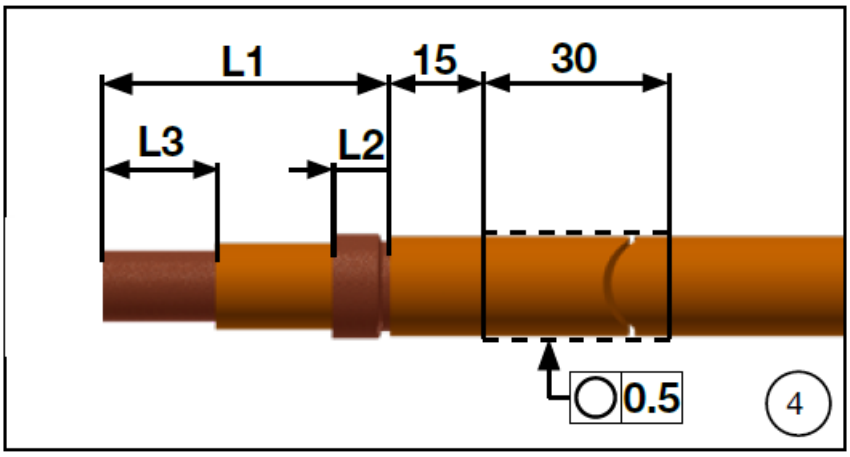


Tab. 2

Conductor cross section (m m2)	Crimping die for cable shield contact sleeve
50	5303-560245
70	5303-560250
95	5303-560254

Cable preparation

(ill. 4)
Strip cable, which complies to LV-216, to length L1. Shorten cable shield braid to length L2. Strip inner insulation to length L3. See Tab. 3



Tab. 3

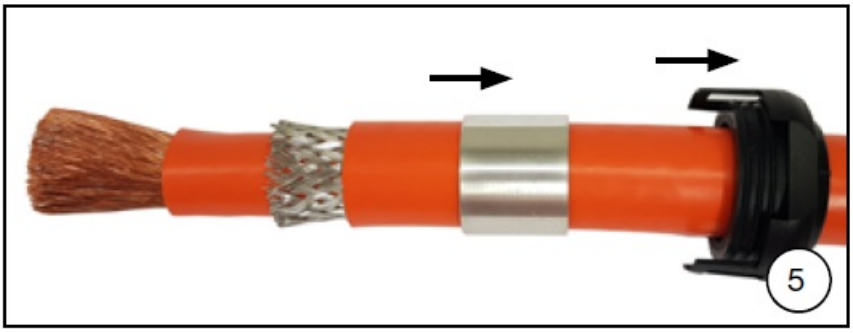
Conductor cross section (mm2)	L1 +/-0.5 mm	L2 +/-0.5 mm	L3 +/-0.5 mm
50	61 mm	14 mm	23 mm
70			23 mm
95			25 mm

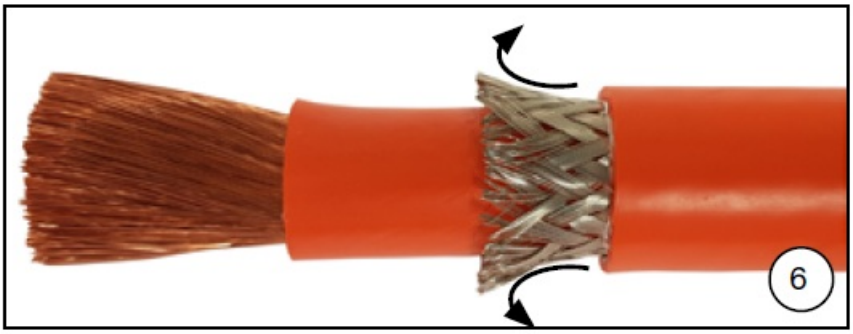
Assembly single parts

(ill. 5)
Push seal cover and crimping sleeve onto outer insulation.

Note:
Do not allow strands to damage seal lip.

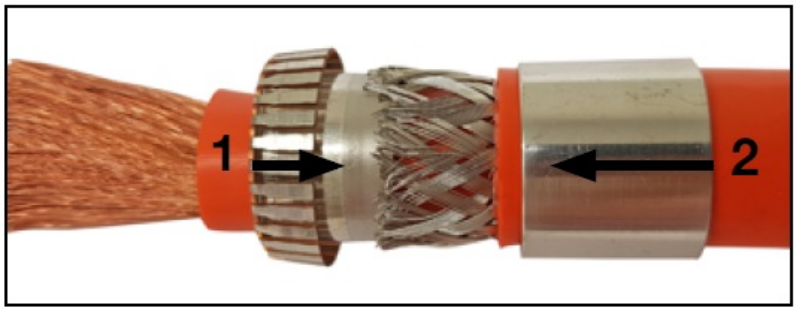
(ill. 6)
Spread shielding so it flares outwards.

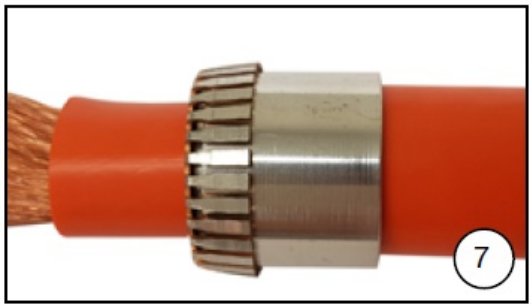




(ill. 7)
Push the cable shield contact sleeve onto the inner insulation and under the shielding

Attention Make sure that all strands of the shielding are over the cable shield contact sleeve!
Push the crimping sleeve over the shielding so the braided shield-ing is covered from both sides

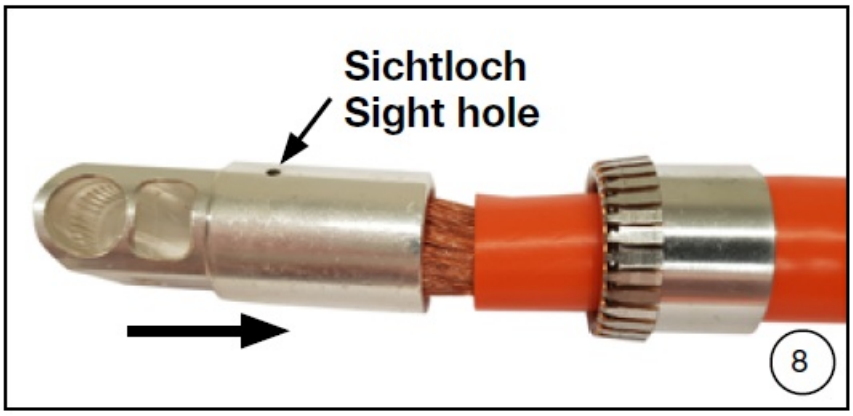


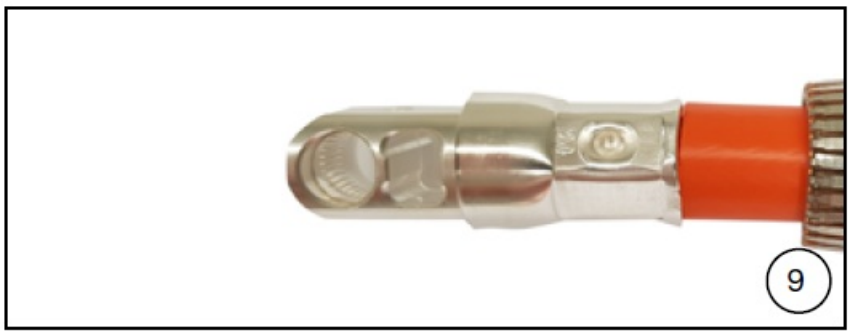


Socket crimping

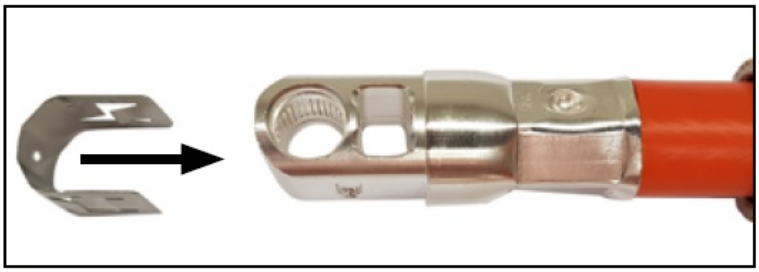
(ill. 8)
Insert the cable with all wires into the crimping sleeve up to the stop. The cable must be visible in the sight hole.

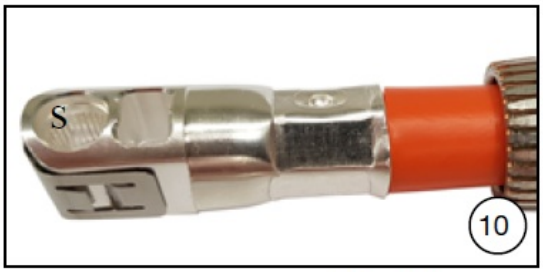
(ill. 9)
Crimp the crimping sleeve with the crimping tool and the corresponding crimping die (see Tab. 1, page 5).





(ill. 10)
Mount clip



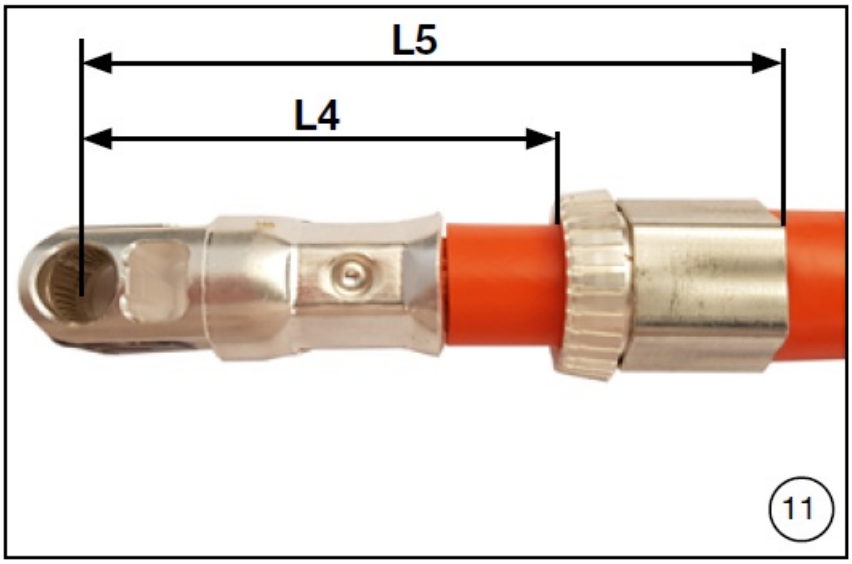


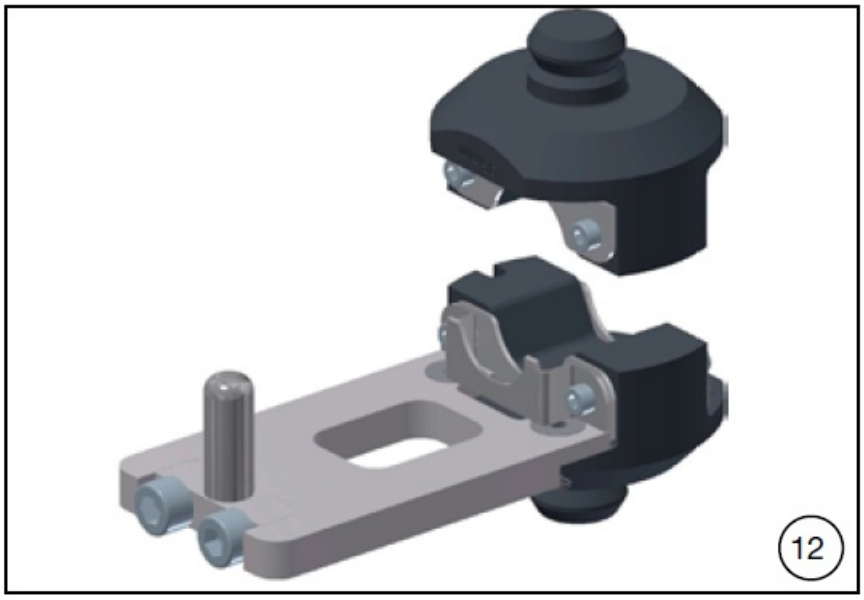
(ill. 10)
Clip montieren.

(ill. 10)
Mount clip.

Cable shield contact sleeve crimping

(ill. 11)
Crimp the cable shield contact sleeve with the crimping tool and the corresponding crimping die (see Tab. 2, page 5).
Check the position of the cable shield contact sleeve; see Tab. 4.



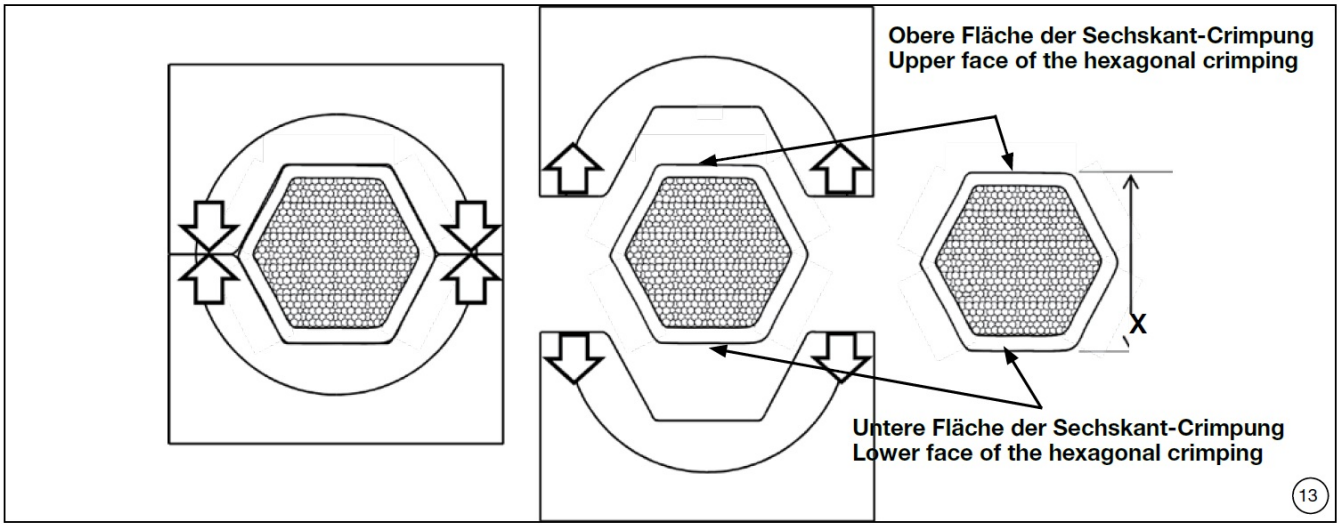


Tab. 4

Conductor cross section (mm2)	L4 ± 1 mm	L5 ± 1 mm
50	63 mm	92 mm
70		
95		

Note (ill. 12):
Stäubli recommends an auxiliary tool (not included) to ensure the correct position.

Control dimension check



(ill. 13)
Check the crimping according to dimension X.
Control dimension socket

Conductor cross section (mm2)	Control dimension X (max.)
50	11.4 mm
70	13.4 mm
95	16.4 mm

Control dimension cable shield contact sleeve

Conductor cross section (mm2)	Control dimension X (max.)
50	15.6 mm
70	17.6 mm
95	20 mm

Note:
Next assembly steps, see MA416, www.staubli.com/electrical

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Documents / Resources

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