

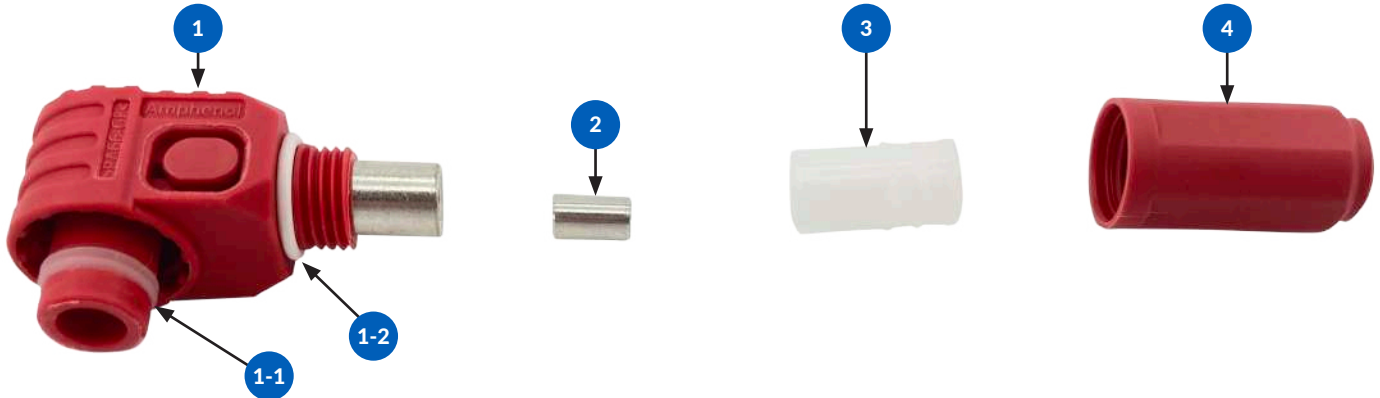
CABLE ASSEMBLY WORK INSTRUCTION

3.6mm SurLok Plus™ Right Angle Plug Connector
3.6mm SurLok+



C10-754726-()

Part 1: Package Contents



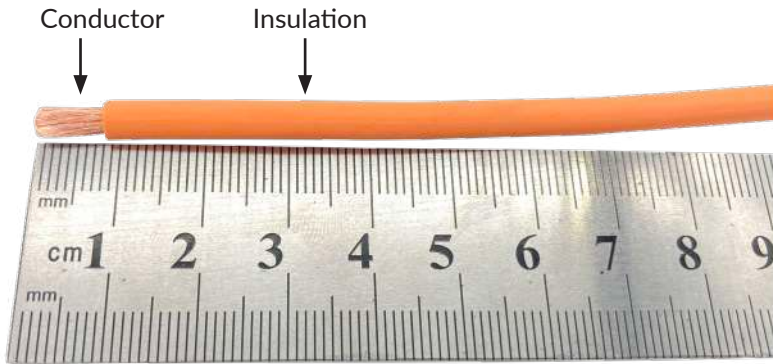
1. Connector Body
1-1: Barrel sealing (not included when there is no sealing requirement)
1-2: O-Ring (not included when there is no sealing requirement)
2. 6mm² Barrel (only provided when the 6mm² option is selected)
3. Grommet (not included with non-sealed option)
4. Backshell

Part 2: Plug Assembly

1. Screw out the rear backshell, then remove the grommet and barrel



2. Cut and strip wire, per illustration below (applies to 10mm² & 6mm² cables)
Strip conductor: 7±0.5mm



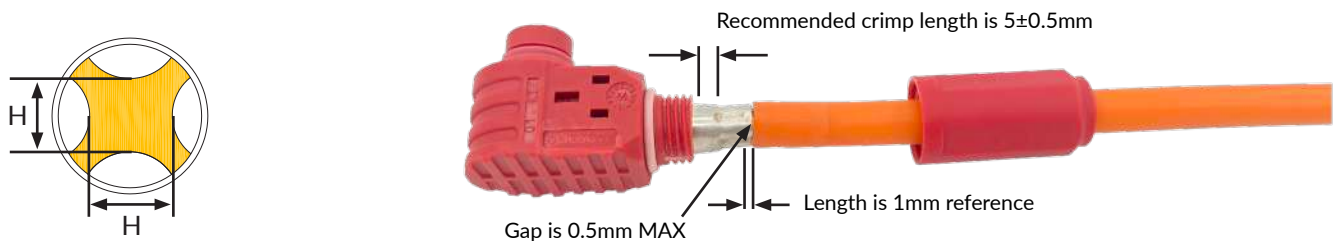
3. As shown below, slide the barrel onto the wire (for the 10mm² option, skip this step). Then install the barrel into the backshell and use the threading fixture to install the grommet into the backshell and thread the wire.



4. Install the wire into the wire well of the connector body



5. Crimp the wire well as shown



Cable Size	Cable Range	Recommended Crimp Height H	Cable Pullout Force	Apply Current
10mm ²	6.25±0.2 mm	3.6±0.1 mm	450N Min.	70A Max.
6mm ²	4.8±0.2 mm		320N Min.	50A Max.

Notes: The recommended crimp sizes are only for reference. The customer should adjust them according to cable specification and crimp tool. Test results including temperature rise, metallographic analysis, and pullout force.

Recommended crimping tool: Hydraulic press

6. Assemble grommet and backshell



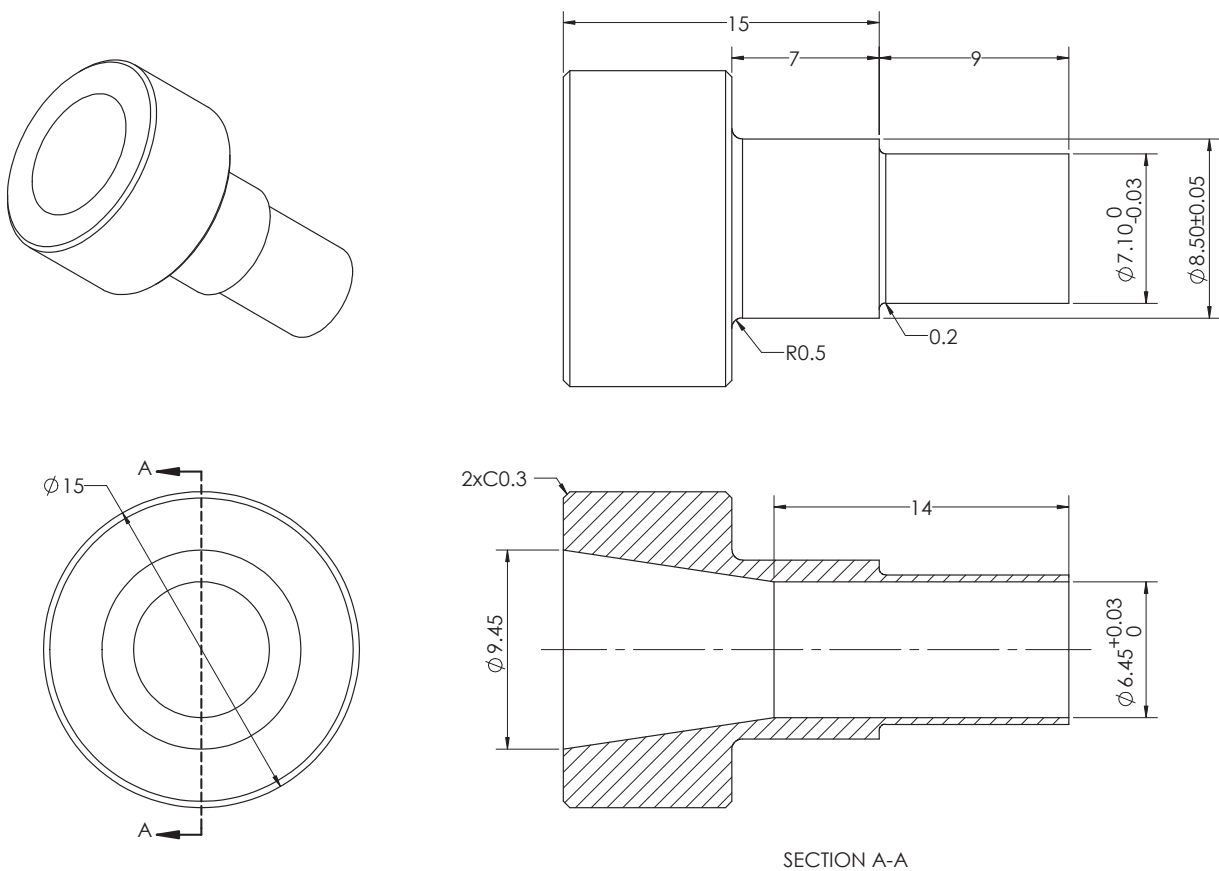
Tighten backshell to the indicated location shown as picture above by hand or tool

The recommended torque as below:

10mm²: 0.5~0.6N.m

6mm²: 0.5~0.6N.m

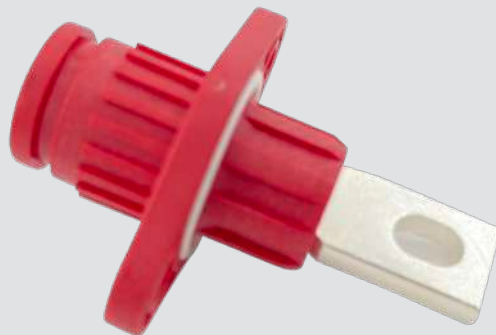
Attachment: Specifications of threading fixture



Material spec: SKD11

CABLE ASSEMBLY WORK INSTRUCTION

3.6mm SurLok Plus™ Receptacle Connector Busbar Type
3.6mm SurLok+



C10-754727-X1XX

Part 1: Package Contents

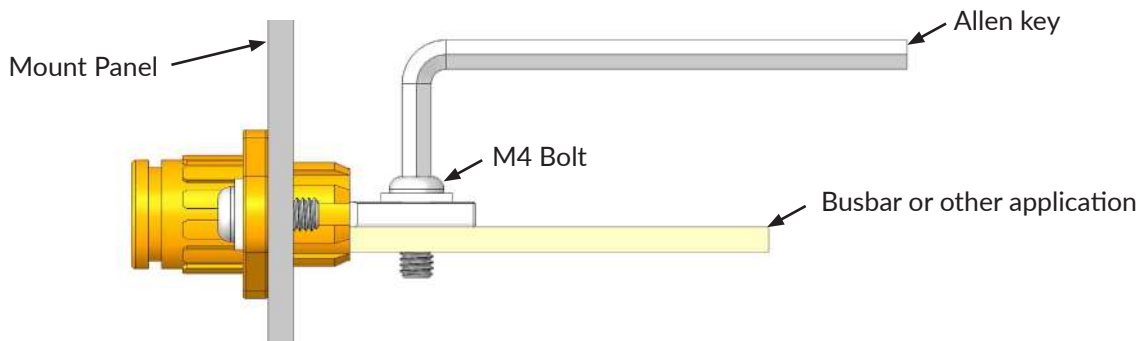


Receptacle connector for busbar type

Note: There will be no gasket provided when there is no sealing requirement

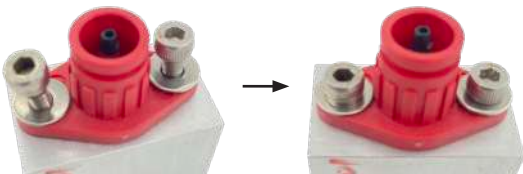
Part 2: Receptacle Assembly

1. Tighten M4 nut onto Busbar (recommended torque is 1.2~1.5N.m)



1. Pass receptacle through the hole of mounting panel
2. Pass M4 bolt through copper busbar, washer and nut in proper order
3. Tighten nut by tool

2. Tighten receptacle onto the panel with M4 bolts (recommended torque is 0.4~0.7N.m)



1. Recommended M4 bolts refer to QB/T70.2-2015
2. Recommended M4 Spring washer refer to BS 4464:1969(2004)

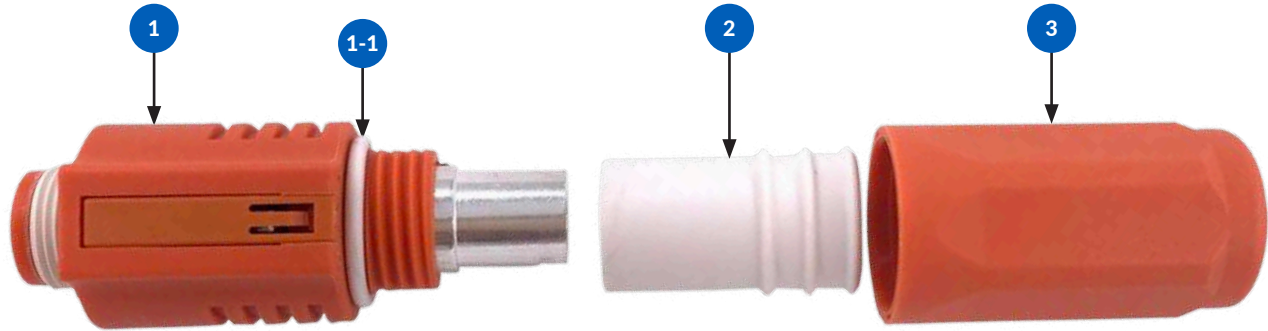
CABLE ASSEMBLY WORK INSTRUCTION

SurLok Plus™ 5.7mm Plug Inline Type
5.7mm SurLok+



C10-762230-XXXX

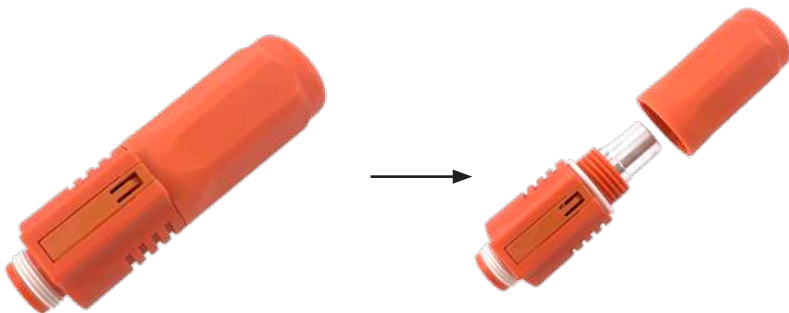
Part 1: Package Contents



1. Connector Body
1-1: O-Ring (not included when there is no sealing requirement)
2. Grommet (not included when there is no sealing requirement)
3. Backshell

Part 2: Plug Assembly

1. Unscrew the backshell (grommet should remain within the backshell)

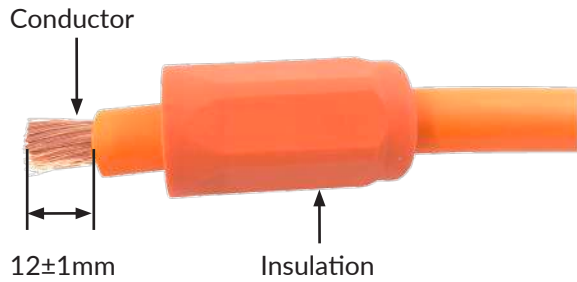


2. Slide the grommet/backshell onto the cable as shown

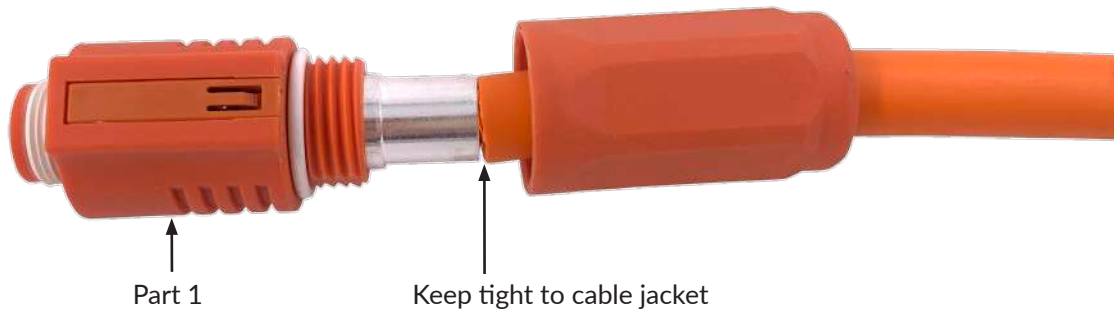


3. Wire cutting and stripping (applies to 16mm² & 25mm² cables).

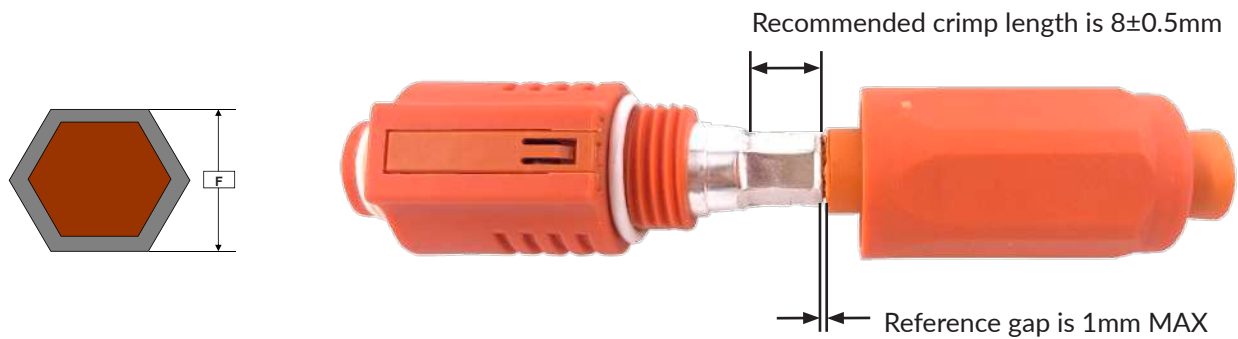
Strip conductor: 12±1mm



4. Install the cable conductor into the connector body lug



5. Crimp wire well as shown below



Cable Size	Cable Range	Recommended crimp dist across Flats F	Cable Pullout Force	Applicable Current
25 mm ²	10.20±0.20 mm	7.5±0.1mm	1900N Min.	120A Max.
16 mm ²	8.10±0.20 mm	TBD	1500N Min.	100A Max.

Notes: The recommended crimp sizes are only for reference. The customer should adjust them according to cable specification and crimp tool and test results including temperature rise and metallographic analysis and pullout force.

Recommended crimping tool: Manual hydraulic crimper

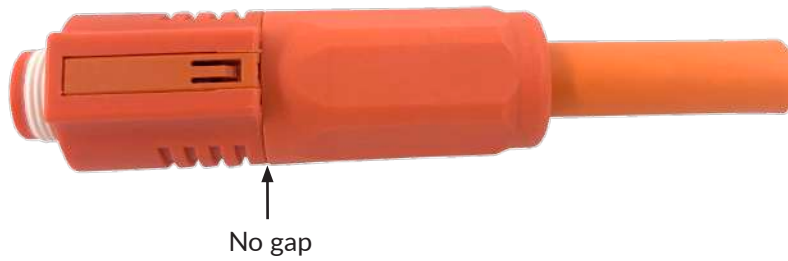
Die: 25mm² die for 25mm² cable

16mm² die for 16mm² cable



6. Assemble the grommet and backshell. Tighten backshell to the indicated location shown in the below picture by hand or tool. The recommended torque is shown in the table below.

Recommended torque of rear shell		
Cable Size	Cable O.D.	Torque
16 mm ²	8.1±0.2 mm	TBD N.m
25 mm ²	10.2±0.2 mm	TBD N.m



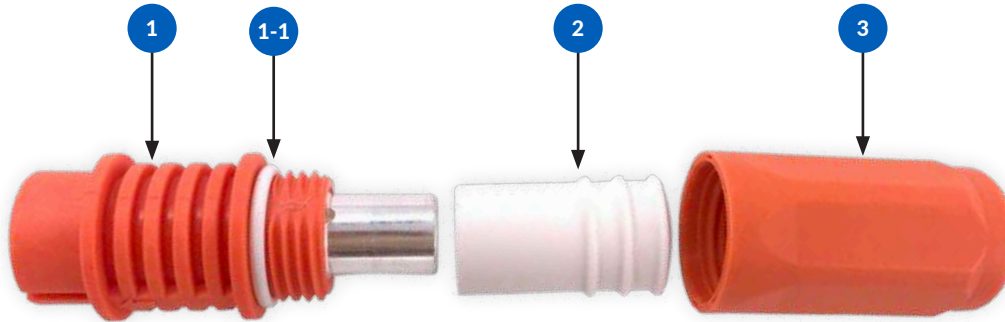
CABLE ASSEMBLY WORK INSTRUCTION

SurLok Plus™ 5.7mm Receptacle Inline Type
5.7mm SurLok+



C10-762231-XXXX

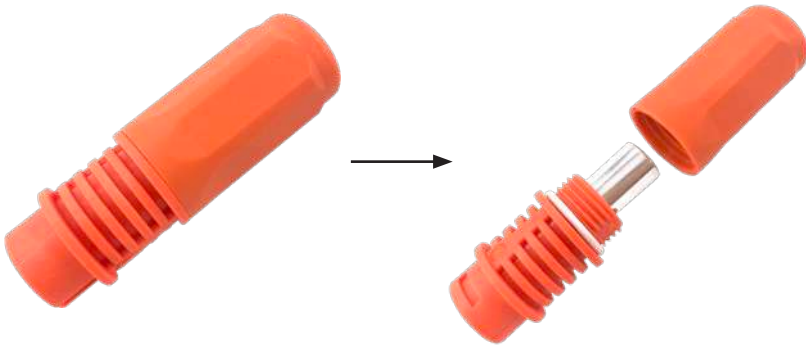
Part 1: Package Contents



1. Connector Body
1-1: O-Ring (not included when there is no sealing requirement)
2. Grommet (not included when there is no sealing requirement)
3. Backshell

Part 2: Receptacle Assembly

1. Unscrew the backshell (grommet should remain within the backshell)

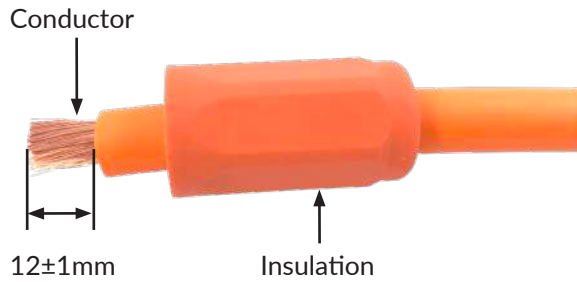


2. Slide the grommet/backshell onto the cable as shown

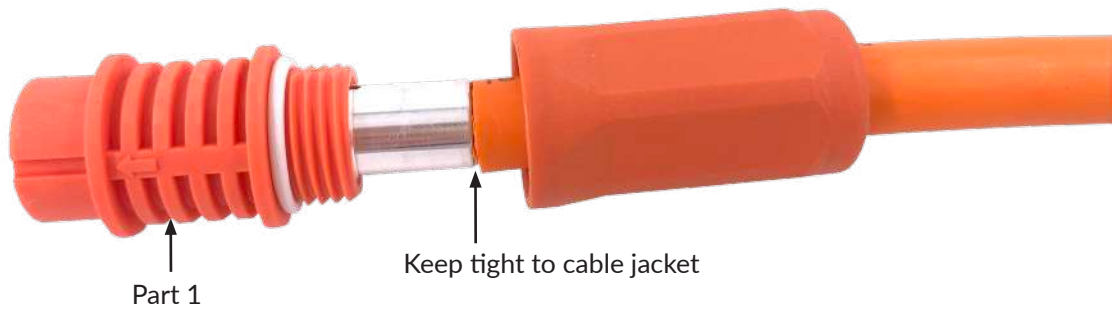


3. Wire cutting and stripping (applies to 16mm² & 25mm² cables).

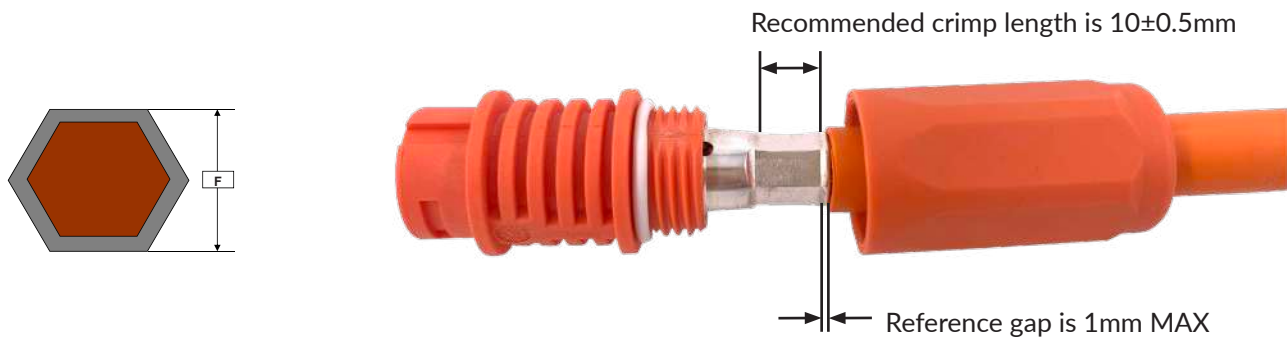
Strip conductor: 12±1mm



4. Install the cable conductor into the connector body lug



5. Crimp wire well as shown below



Cable Size	Cable Range	Recommended crimp dist across Flats F	Cable Pullout Force	Applicable Current
25 mm ²	10.20±0.20 mm	7.5±0.1 mm	1900N Min.	120A Max.
16mm ²	8.10±0.20 mm	TBD	1500N Min.	100A Max.

Notes: The recommended crimp sizes are only for reference. The customer should adjust them according to cable specification and crimp tool. Test results including temperature rise, metallographic analysis, and pullout force.

Recommended crimping tool: Manual hydraulic crimper

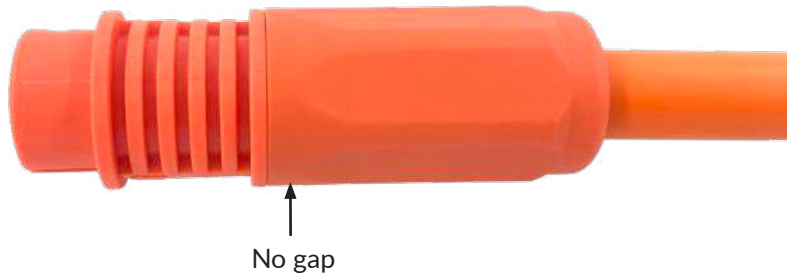
Die: 25mm² die for 25mm² cable

16mm² die for 16mm² cable



6. Assemble the grommet and backshell. Tighten backshell to the indicated location shown in the below picture by hand or tool. The recommended torque is shown in the table below.

Recommended torque of rear shell		
Cable Size	Cable O.D.	Torque
25mm ²	10.2±0.2 mm	TBD N.m
16mm ²	8.1±0.2 mm	TBD N.m



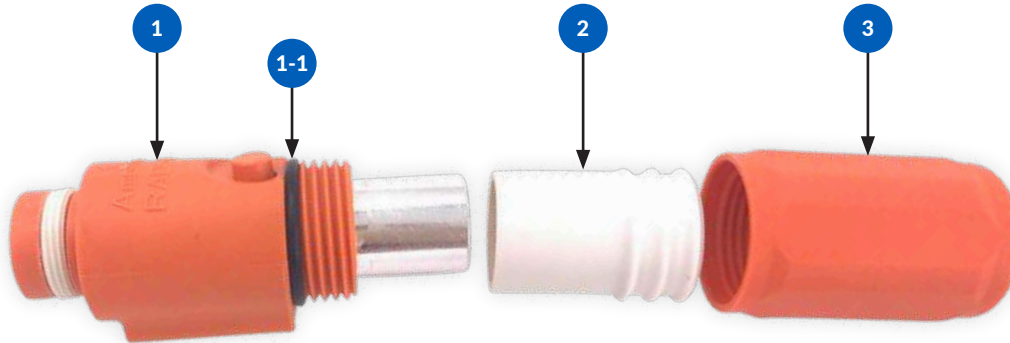
CABLE ASSEMBLY WORK INSTRUCTION

SurLok Plus™ 8.0mm Plug Inline Type
8.0mm SurLok+



C10-754487-XXXX

Part 1: Package Contents



1. Connector Body
1-1: O-Ring (not included when there is no sealing requirement)
2. Grommet (not included when there is no sealing requirement)
3. Backshell

Part 2: Plug Assembly

1. Unscrew the backshell (grommet should remain within the backshell)

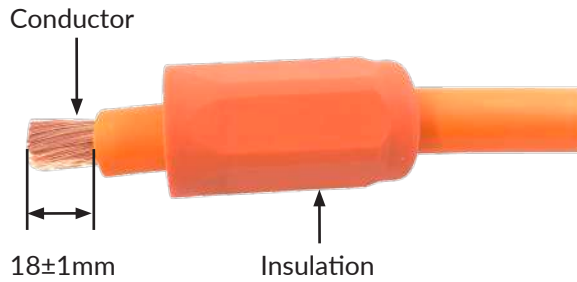


2. Slide the grommet/backshell onto the cable as shown



3. Wire cutting and stripping (applies to 16mm² & 25mm² cables).

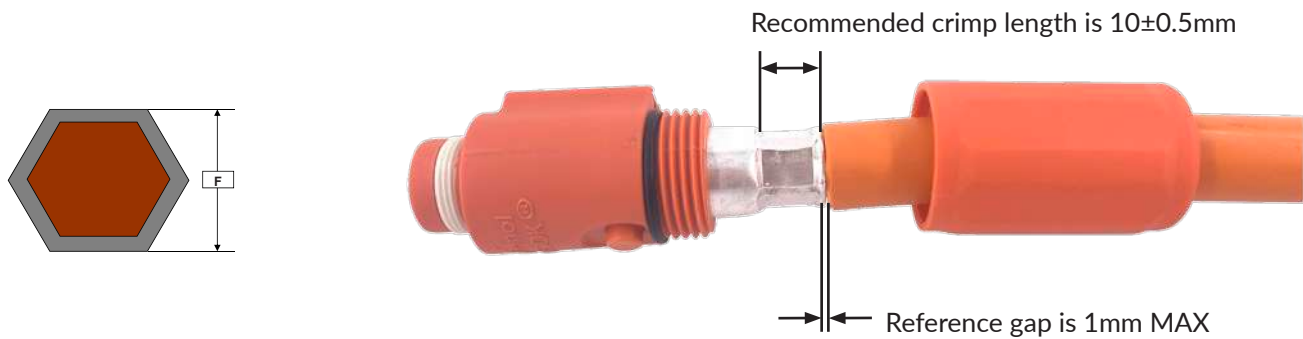
Strip conductor: 18±1mm



4. Install the cable conductor into the connector body lug



5. Crimp wire well as shown below



Cable Size	Cable Range	Recommended crimp dist across Flats F	Cable Pullout Force	Applicable Current
25 mm ²	10.20±0.20 mm	TBD	1900N Min.	120A Max.
35 mm ²	11.50±0.30 mm	TBD	2300N Min.	150A Max.
50 mm ²	13.60±0.30 mm	TBD	2800N Min.	200A Max.

Notes: The recommended crimp sizes are only for reference. The customer should adjust them according to cable specification and crimp tool. Test results including temperature rise, metallographic analysis, and pullout force.

Recommended crimping tool: Manual hydraulic crimper

Die: 25mm² die for 25mm² cable

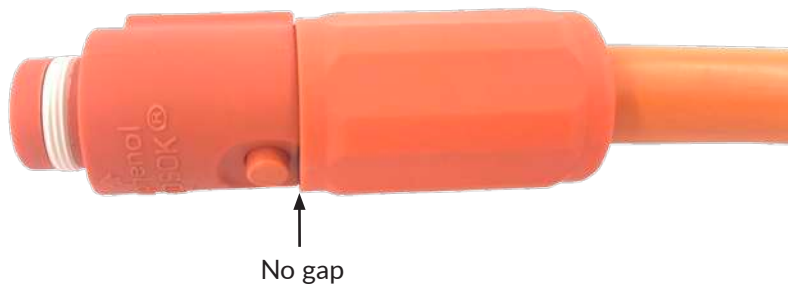
35mm² die for 35mm² cable

50mm² die for 50mm² cable



6. Assemble the grommet and backshell. Tighten backshell to the indicated location shown in the below picture by hand or tool. The recommended torque is shown in the table below.

Recommended torque of rear shell		
Cable Size	Cable O.D.	Torque
25mm ²	10.2±0.2 mm	TBD N.m
35mm ²	11.5±0.3 mm	TBD N.m
50mm ²	13.6±0.3 mm	TBD N.m



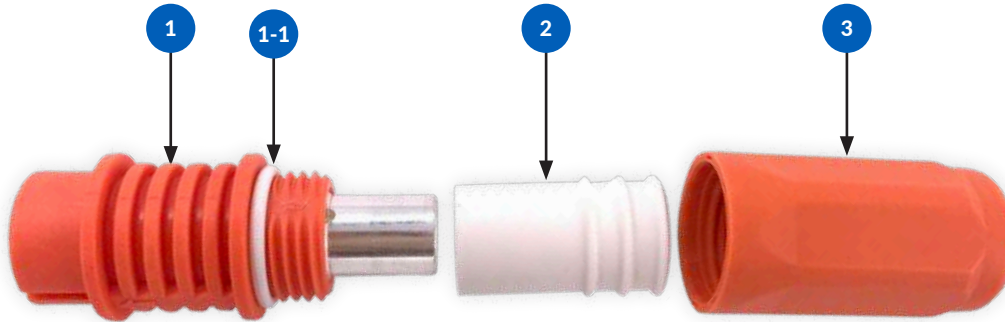
CABLE ASSEMBLY WORK INSTRUCTION

SurLok Plus™ 8.0mm Receptacle Inline Type
8.0mm SurLok+



C10-754487-XXXX

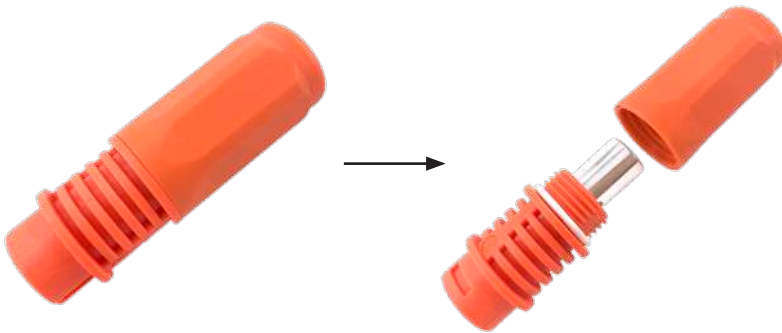
Part 1: Package Contents



1. Connector Body
1-1: O-Ring (not included when there is no sealing requirement)
2. Grommet (not included when there is no sealing requirement)
3. Backshell

Part 2: Plug Assembly

1. Unscrew the backshell (grommet should remain within the backshell)

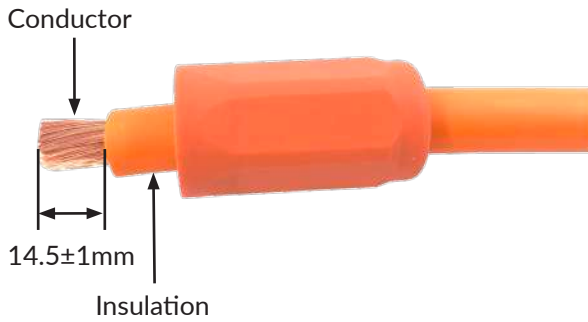


2. Slide the grommet/backshell onto the cable as shown

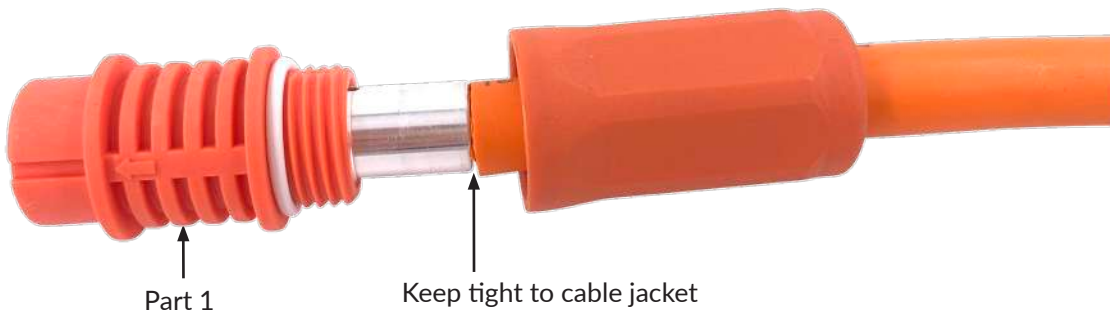


3. Wire cutting and stripping (applies to 16mm² & 25mm² cables).

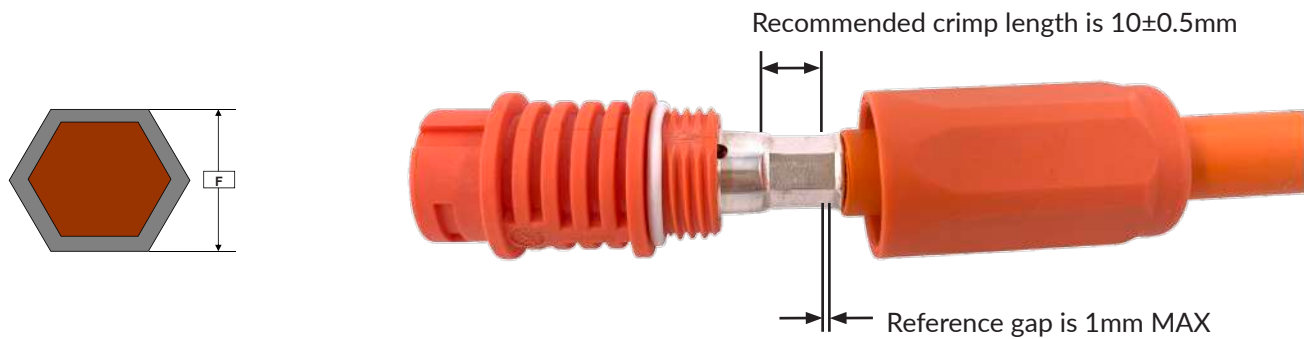
Strip conductor: 18±1mm



4. Install the cable conductor into the connector body lug



5. Crimp wire well as shown below



Cable Size	Cable Range	Recommended crimp dist across Flats F	Cable Pullout Force	Applicable Current
25 mm ²	10.20±0.20 mm	TBD	1900N Min.	120A Max.
35 mm ²	11.50±0.30 mm	TBD	2300N Min.	150A Max.
50 mm ²	13.60±0.30 mm	TBD	2800N Min.	200A Max.

Notes: The recommended crimp sizes are only for reference. The customer should adjust them according to cable specification and crimp tool. Test results including temperature rise, metallographic analysis, and pullout force.

Recommended crimping tool: Manual hydraulic crimper

Die: 25mm² die for 25mm² cable

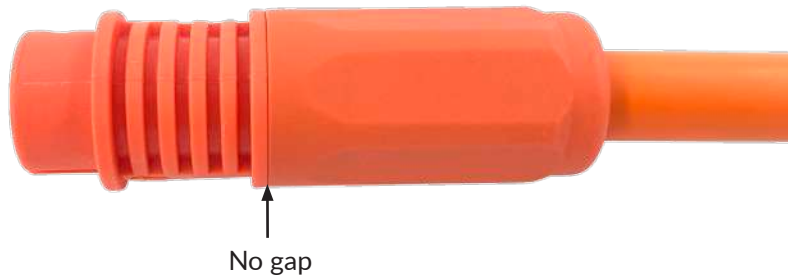
35mm² die for 35mm² cable

50mm² die for 50mm² cable



6. Assemble the grommet and backshell. Tighten backshell to the indicated location shown in the below picture by hand or tool. The recommended torque is shown in the table below.

Recommended torque of rear shell		
Cable Size	Cable O.D.	Torque
25mm ²	10.2±0.2 mm	TBD N.m
35mm ²	11.5±0.3 mm	TBD N.m
50mm ²	13.6±0.3 mm	TBD N.m



CABLE ASSEMBLY WORK INSTRUCTION

5.7 & 8.0mm SurLok Plus™ Connector Inline Type
Mating and Unmating Work Instruction
5.7mm & 8.0mm SL+

5.7mm SurLok Plus Connector:

Plug: C10-752785-()

Receptacle: C10-762231-()



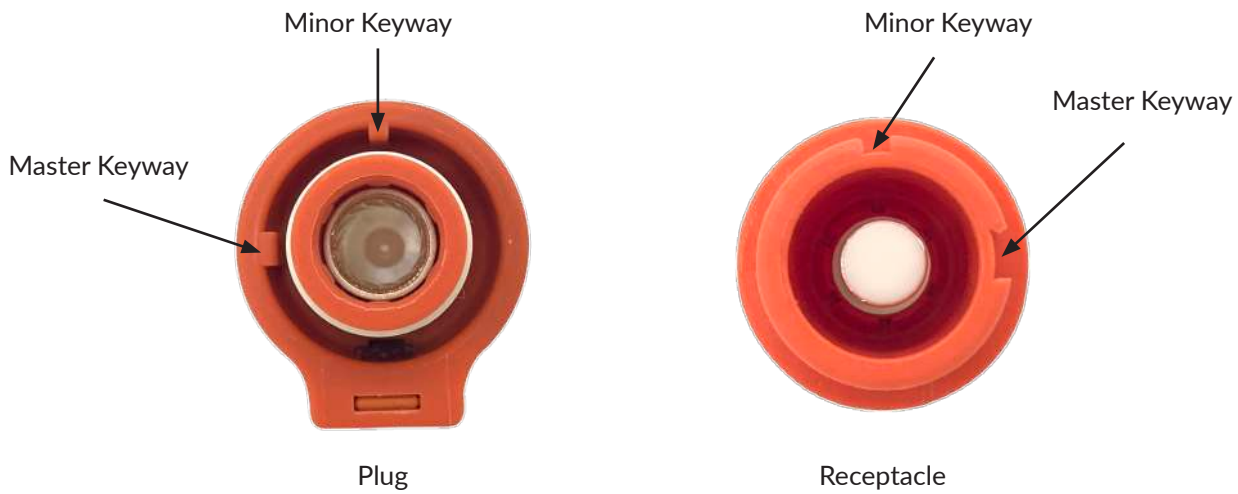
8.0mm SurLok Plus Connector:

Plug: C10-731951-()

Receptacle: C10-754488-()



Part 1: Keyway Description



Part 2: Mating Operation

1. Initial mating: Align the master keyway of the receptacle and plug (skip this step if there is no keyway/key option), and push the plug vertically into the receptacle as shown in the diagram.



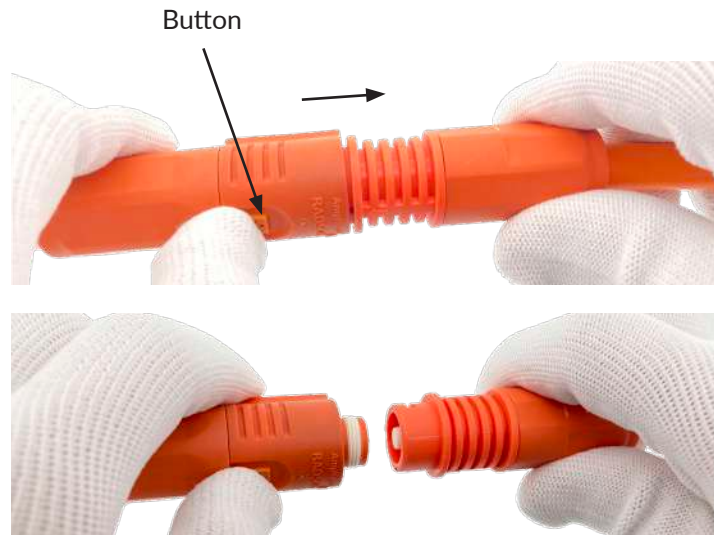
2. Continue mating plug into receptacle, until you hear an audible "click" to indicate that the plug and receptacle are fully mated.



Note: Attempt to unmate the plug and receptacle (without pressing lock button) by hand to confirm they are properly mated.

Part 3: Unmating Operation

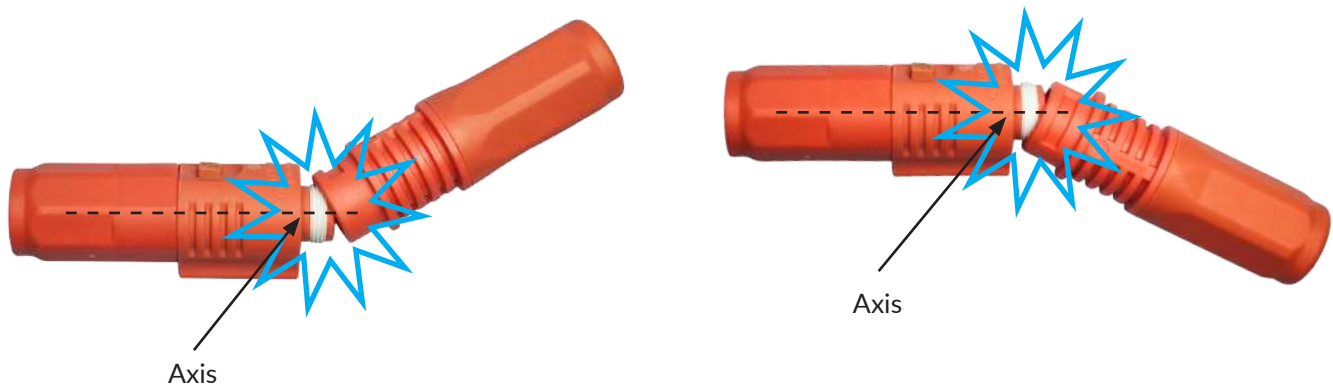
1. After shutting down the electrical current, press the button and pull the plug horizontally from the receptacle, in the direction shown below.



Note: For end use, the separation active space required is 129mm minimum, this does not include the active space for hand or tool operation.



2. Do not deviate from the axis direction of the receptacle until unmating is complete in order to eliminate potential damage to the connectors.

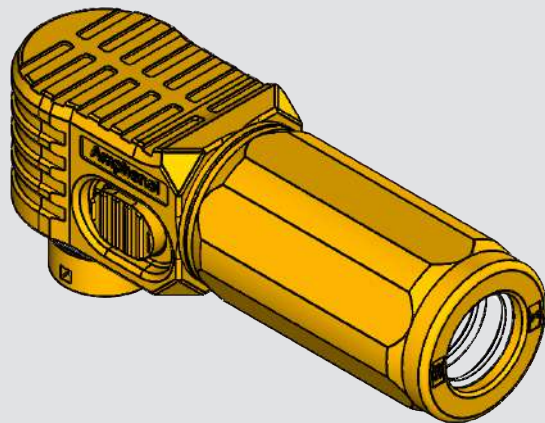


Note: This product is not suitable for live mating and unmating. At the same time, it is recommended to add a protection mechanism to the equipment to prevent accidental unplugging.

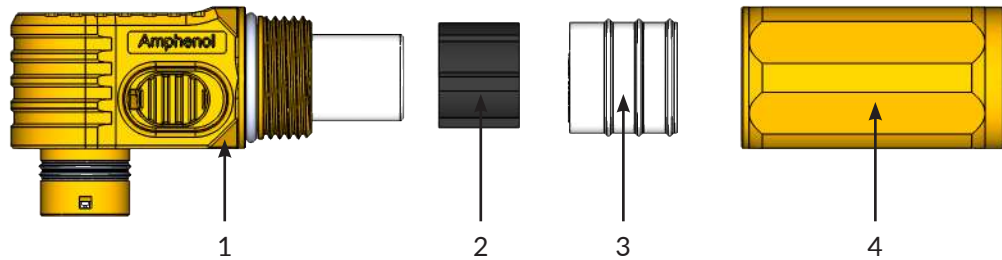
ASSEMBLY WORK INSTRUCTION

8.0 mm Surlok Plus Plug

**Part Number:
C10-765467-()**



Part 1: Plug Components



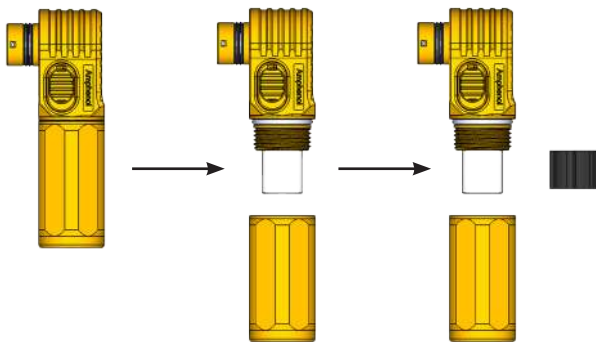
Item	Components Description	Quantity
1	Connector Body	1 set
2	Bracket	1 pcs
3	Grommet	1 pcs
4	Rear Shell	1 pcs

Part 1: Plug Cable Assembly

Step 1: Un-assemble rear attachments

Screw out the rear shell then take out the bracket.

Notes: The grommet should be kept inside of rear shell.



Step 2: Wire stripping

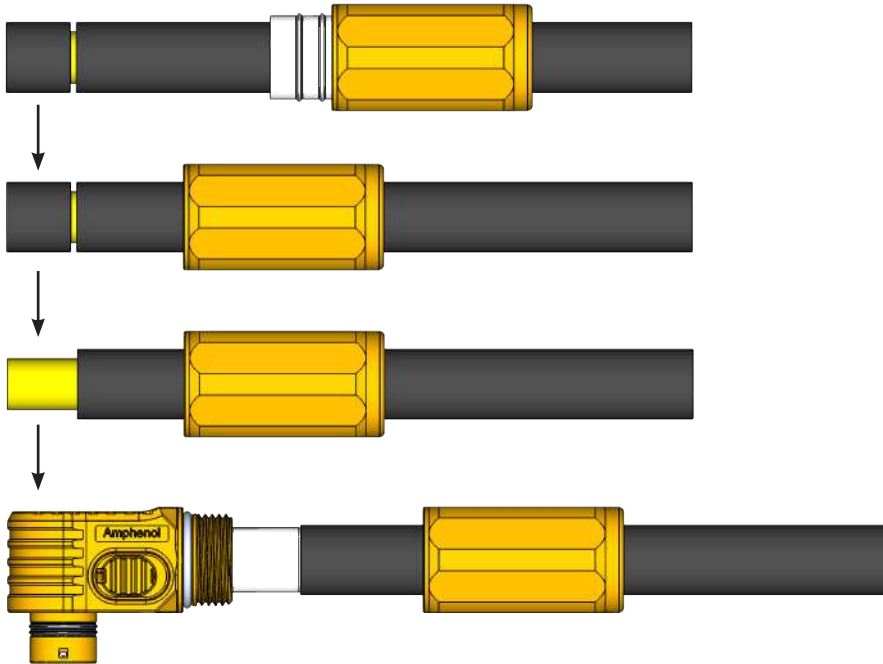
Strip the insulator of 14.0 ± 0.5 mm.

Notes: The cut insulator should kept cover on the conductor.



Step 3: Preloaded rear attachments

Wire pass through rear shell and grommet, then take off the cut insulator. Finally put the conductors of cable into the lug of connector body.



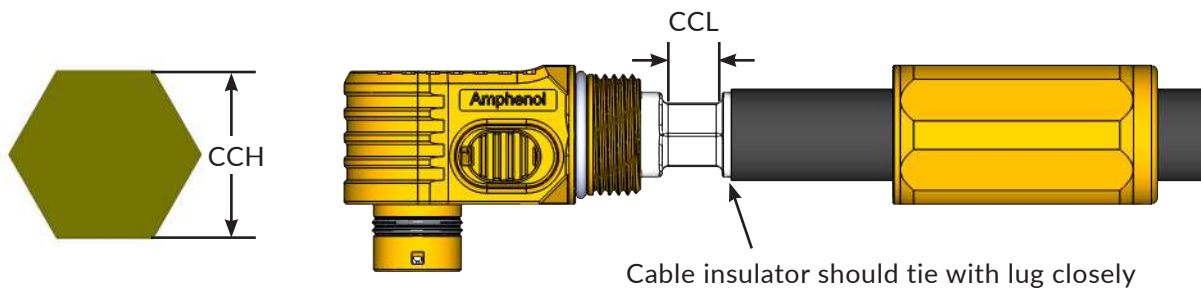
Step 4: Crimping the lug

Crimp lug together with cable conductor according to below table.

Recommended crimping parameter				
Cable size	Cable O.D.	CCH	CCL	Pullout force
35mm ²	11.5±0.3mm	9.0±0.1mm	10.0±0.3mm	1900N Min.
50mm ²	13.6±0.3mm	10.5±0.1mm	10.0±0.3mm	2700N Min.

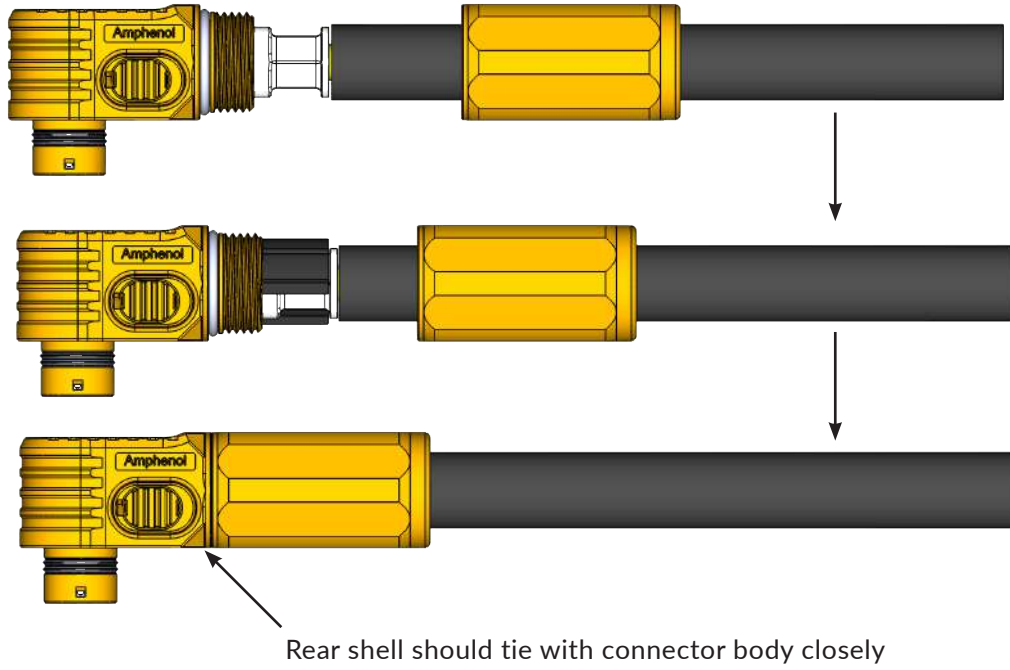
Notes:

The recommended crimp sizes are only for reference. The customer shall adjust them according to cable specification and crimp tool and test results including temperature rise and metallographic analysis and pullout force, etc.



Step 5: Assemble rear attachments

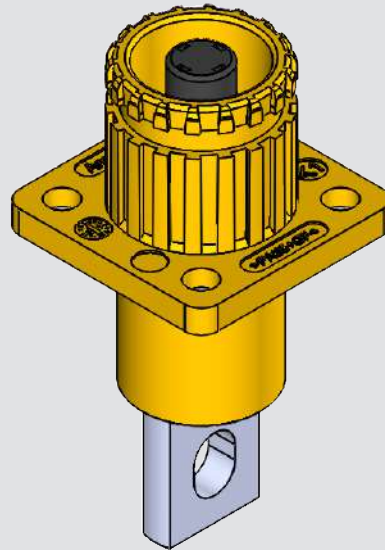
Put the bracket onto the lug of connector body, then tighten rear shell to the indicated location shown as picture by hand or wrench (recommended torque is $1.2 \pm 0.1 \text{N.m}$).



ASSEMBLY WORK INSTRUCTION

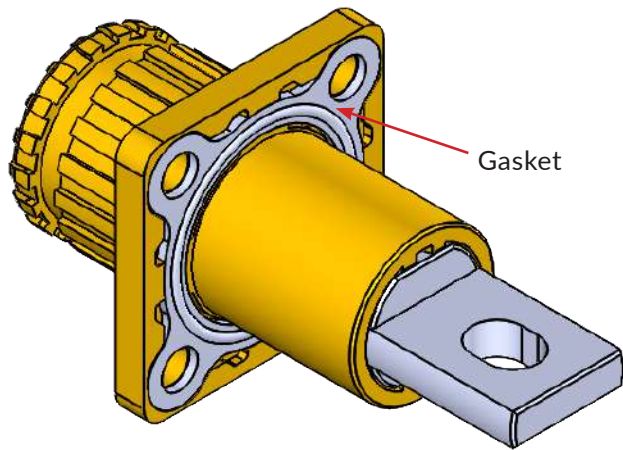
8.0mm Surlok Plus Receptacle 1500V Busbar Type

**Part Number:
C10-765468-X1XX**



Part 1: Package Contents

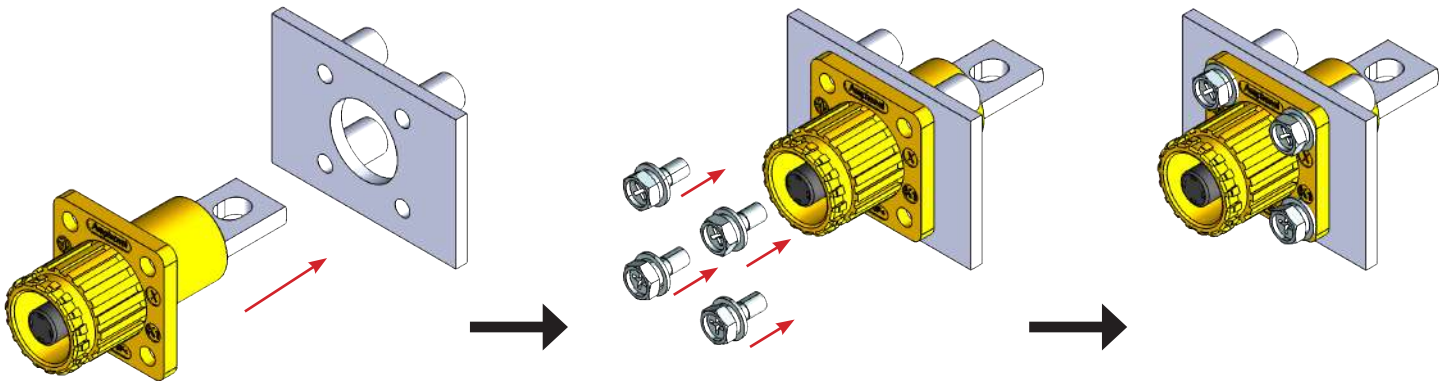
1: Receptacle shell



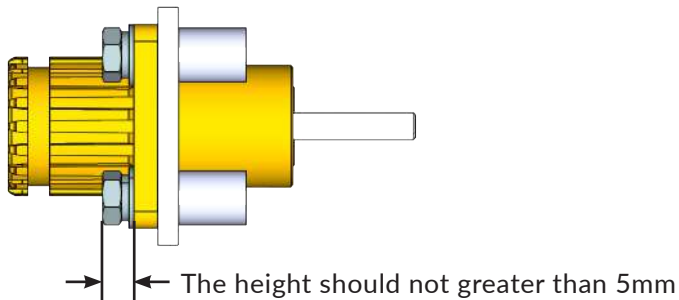
1-1: Gasket (Not included when no sealing requirement)

Part 2: Receptacle Assembly

Step 1: Tighten housing onto the panel with M4 screws (recommended torque as $0.8 \pm 0.1 \text{N.m}$)



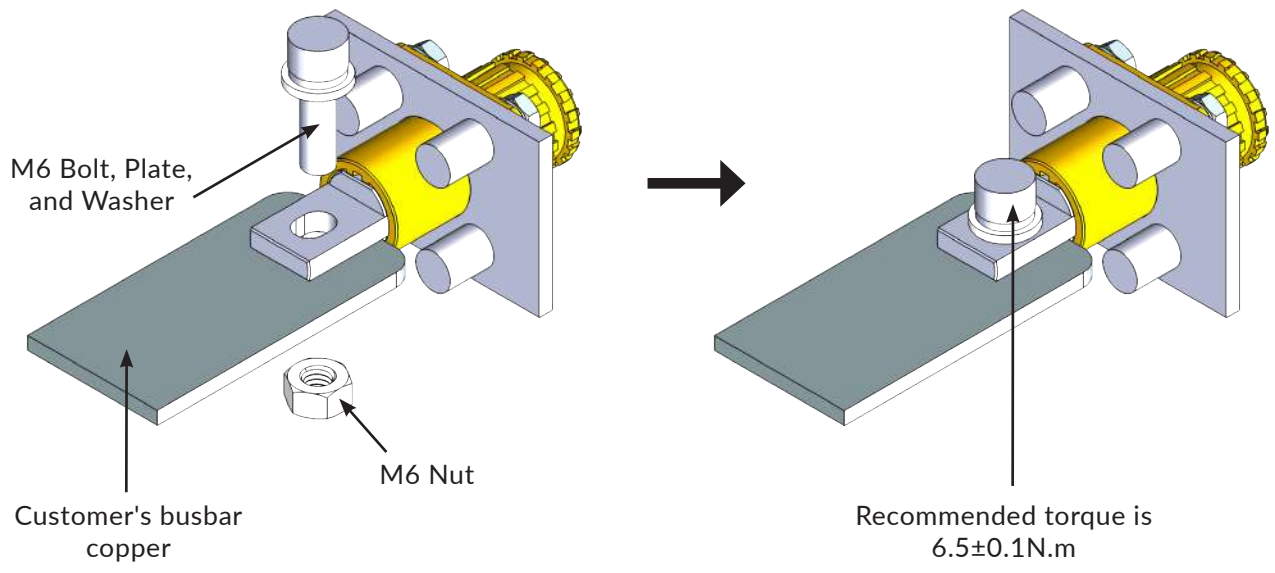
Recommended screw is GB 9074.13 M4.



Notes:

The customer shall verify the recommended torque base on your application and modify it if necessary.

Step 2: Connect receptacle terminal with customer's busbar copper



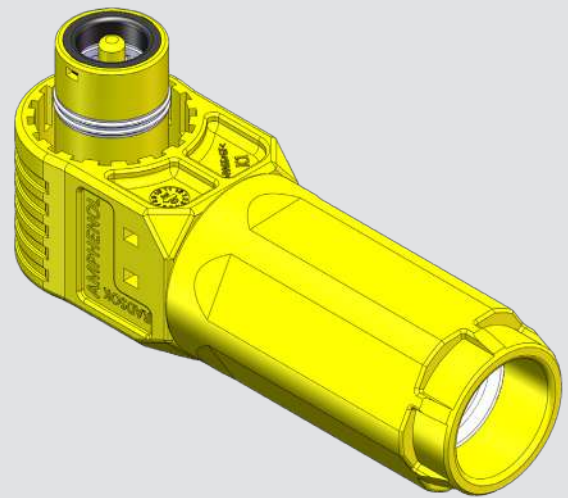
Notes:

The customer shall verify the recommended torque base on your application and modify it if necessary.

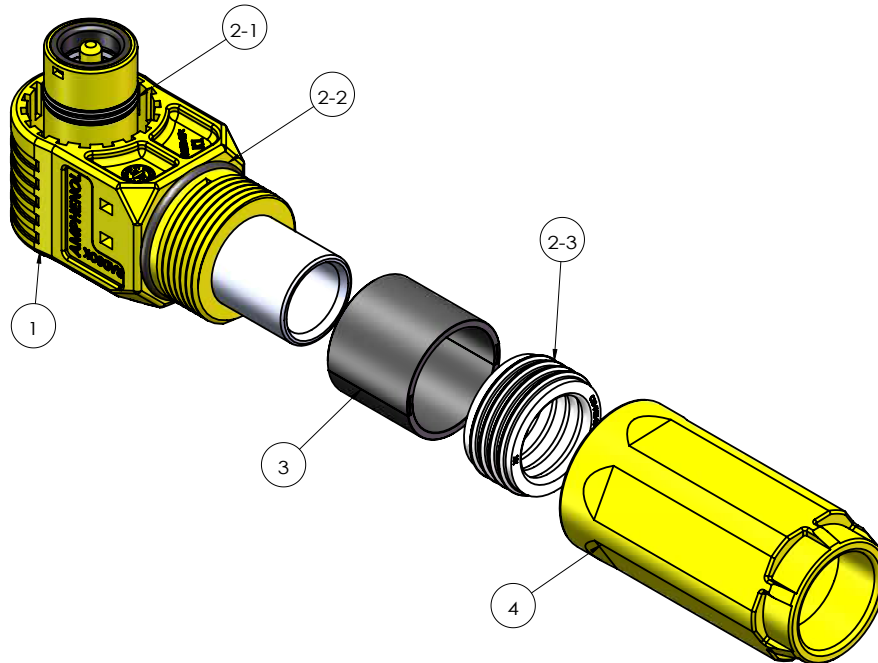
ASSEMBLY WORK INSTRUCTION

**10.3mm Surlok Plus 1500V Right Angle Plug
Connector 2.0 Version**

**Part Number:
C10-7651278-()**



Part 1: Package Contents



1: Connector Body

2: Sealing Parts

2-1: Barrel sealing (Not included when no sealing requirement)

2-2: O-Ring (Not included when no sealing requirement)

2-3: Rubber Grommet (Not included when no sealing requirement)

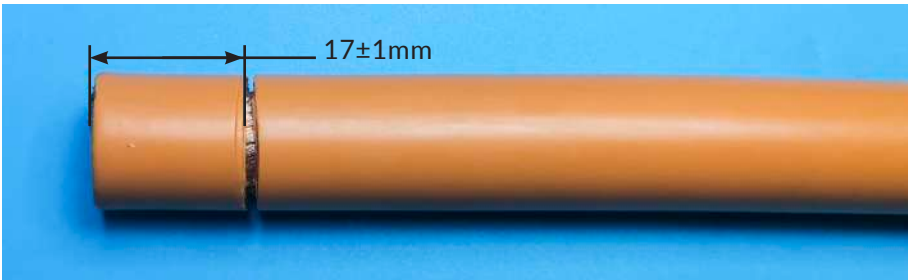
3: Inside Spider (Not included when no sealing requirement)

4: Rear Cap

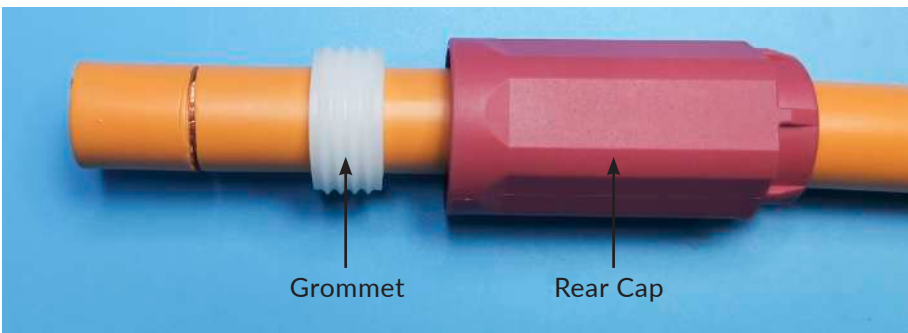
Part 2: Receptacle Assembly

Step 1: Wire cutting and stripping (Apply for 70mm² & 95mm² Cable)

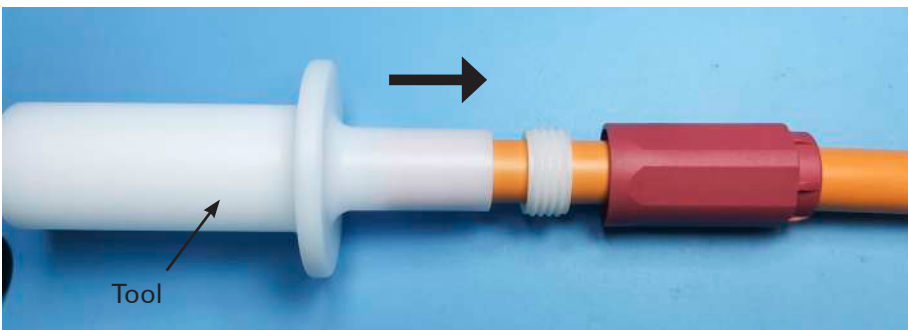
Stripping conductor: 17±1mm



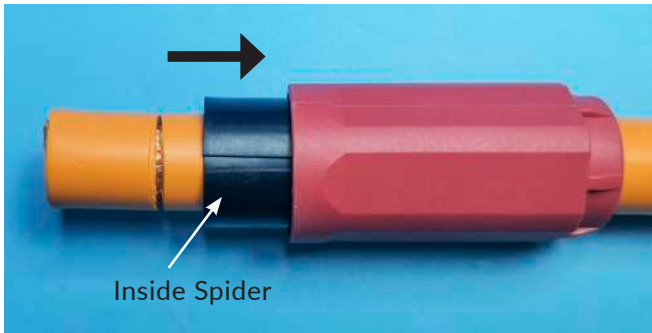
Step 2: Un-assemble Grommet and rear cap over the cable as shown.



Step 3: Use the tool (FX3-0067-001) to fit the grommet to the bottom of rear cap



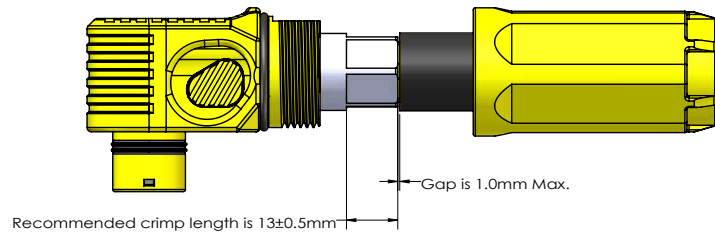
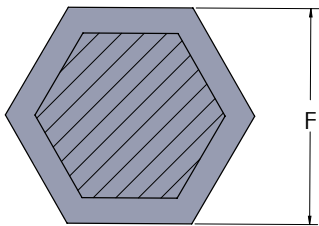
Step 4: Assemble the inside spider into the rear cap



Step 5: Put the cable conductor into the lug



Step 6: Crimping the lug as shown

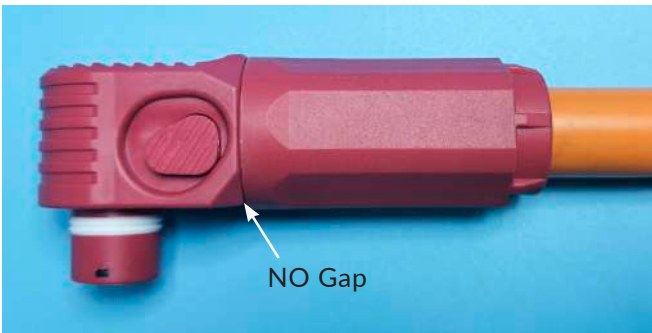


Cable Size	Cable Range	Recommended Fist Across Flats F	Cable Pullout Force
2/0 AWG	15.50±0.30 mm	12.5±0.1 mm	3400N Min.
3/0 AWG	18.20±0.30 mm	14.5±0.1 mm	4200N Min.

Notes:

The recommended crimp sizes are only for reference. The customer should adjust them according to cable specification and crimp tool and test results including temperature rise and metallographic analysis and pullout force.

Step 7: Assemble rear shell



Tighten rear shell to the indicated location shown as picture above by hand or tool.

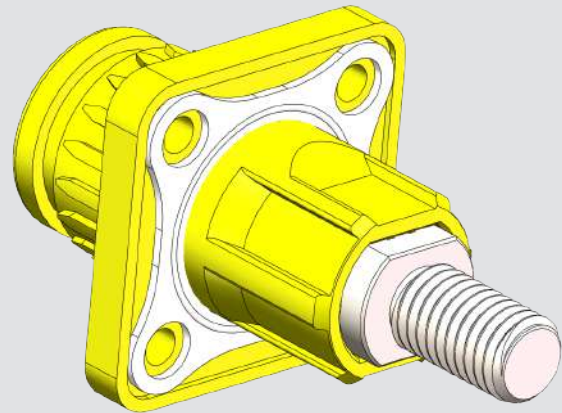
The recommended torque as below:

1.5 ± 2.0 Nm

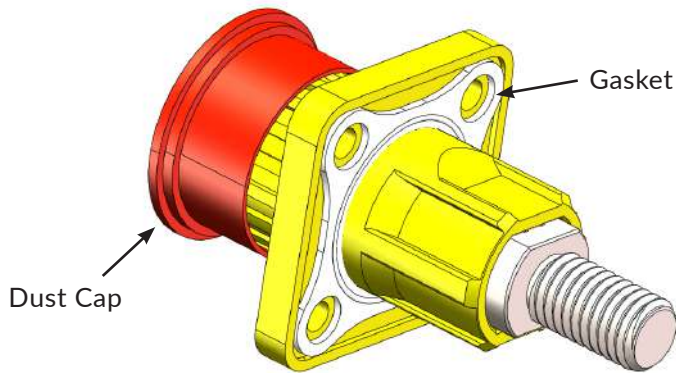
ASSEMBLY WORK INSTRUCTION

**10.3mm Surlok Plus 1500V Receptacle Connector
Screw Type 2.0 Version**

**Part Number:
C10-765128-X2XX**



Part 1: Package Contents

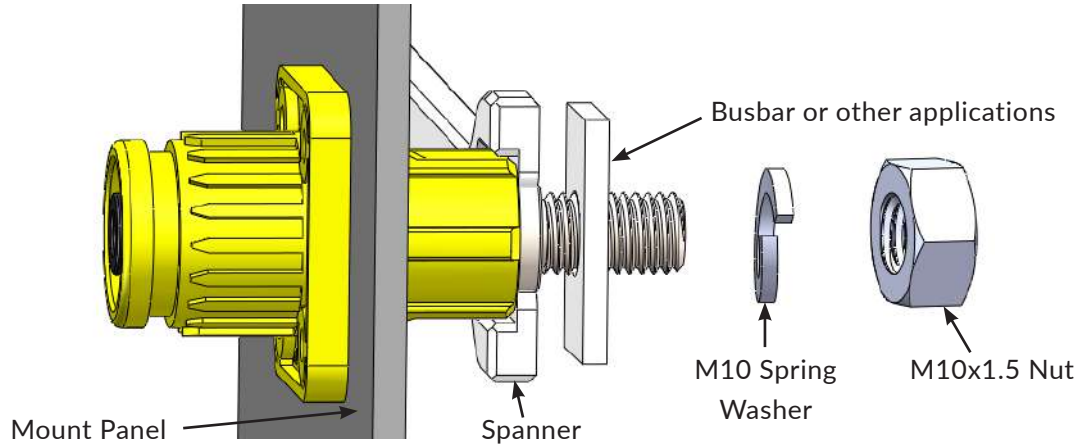


Receptacle connector

Notes: There will be no gasket when no sealing requirement.

Part 2: Receptacle Assembly

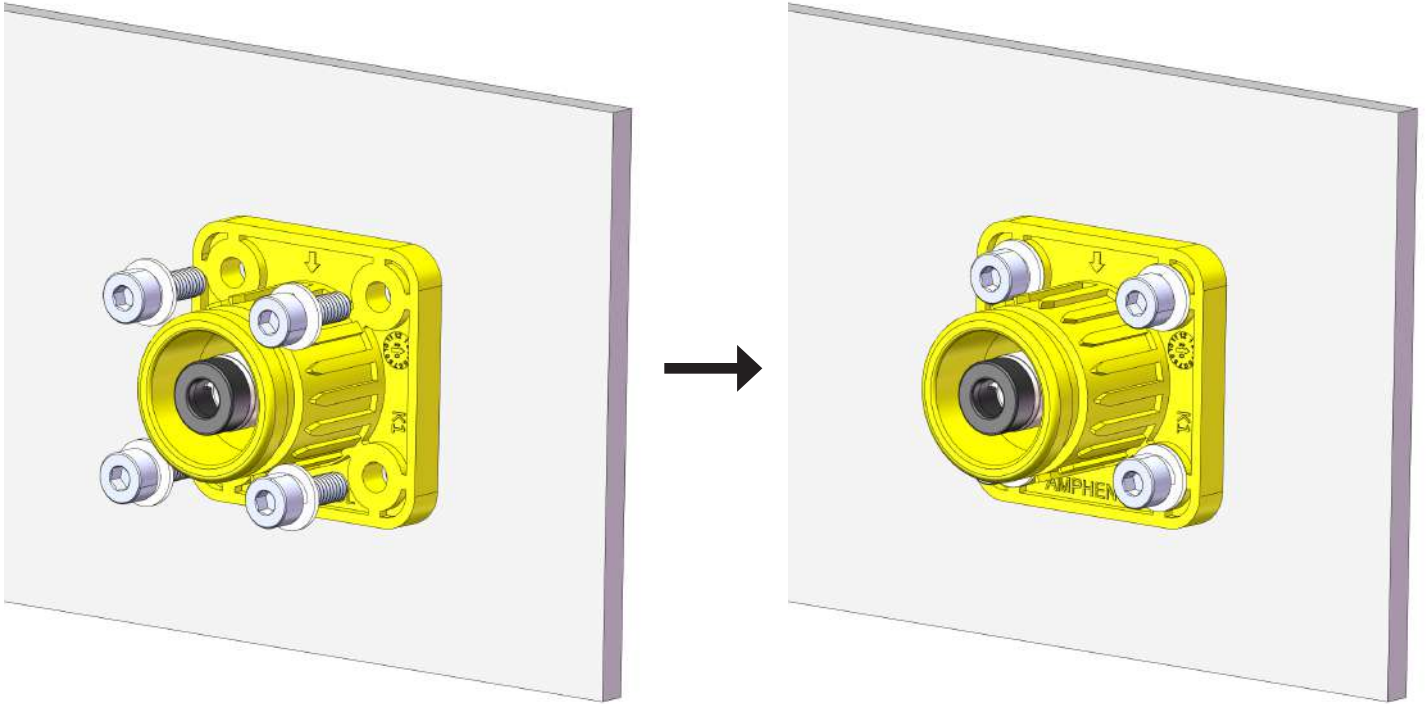
Step 1: Tighten M10x1.5 nut onto busbar (recommended torque is 13~14 Nm)



- a:** Receptacle tail (studs side) pass through the hole of mounting panel
- b:** Studs pass through copper busbar and washer and nut in proper order
- c:** Fix the power pin plane with a wrench
- d:** Tighten nut by tool

Step 2: Tighten receptacle onto the panel with M4 bolts (recommended torque is 0.8~1.0 N.m)

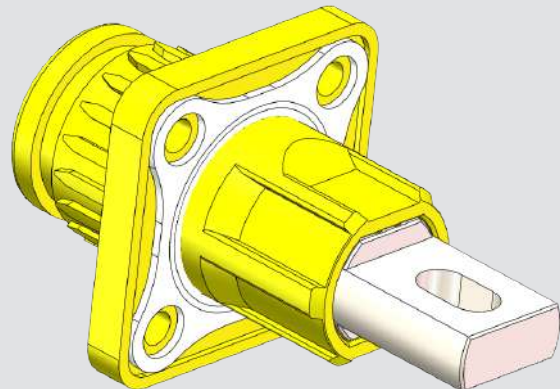
- 1:** Recommended M4 bolts refer to GB/T 70.L-2000 (eqv ISO 4762:7997)
- 2:** Recommended M4 spring lock washer refer to GB 93-87
- 3:** Recommended M4 plain washer refer to GB 97.1-2002



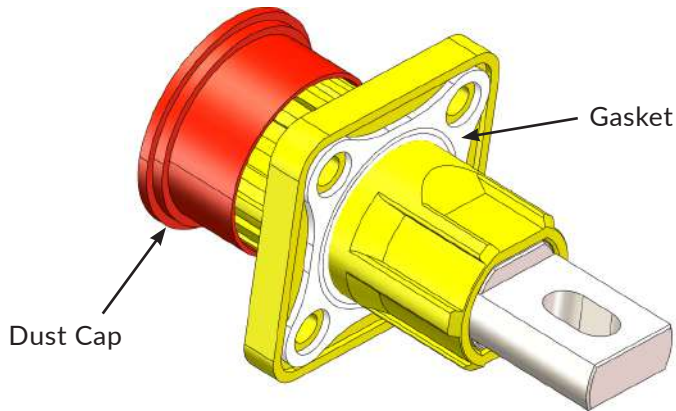
ASSEMBLY WORK INSTRUCTION

**10.3mm Surlok Plus 1500V Receptacle Connector
Busbar Type 2.0 Version**

**Part Number:
C10-765128-X1XX**



Part 1: Package Contents

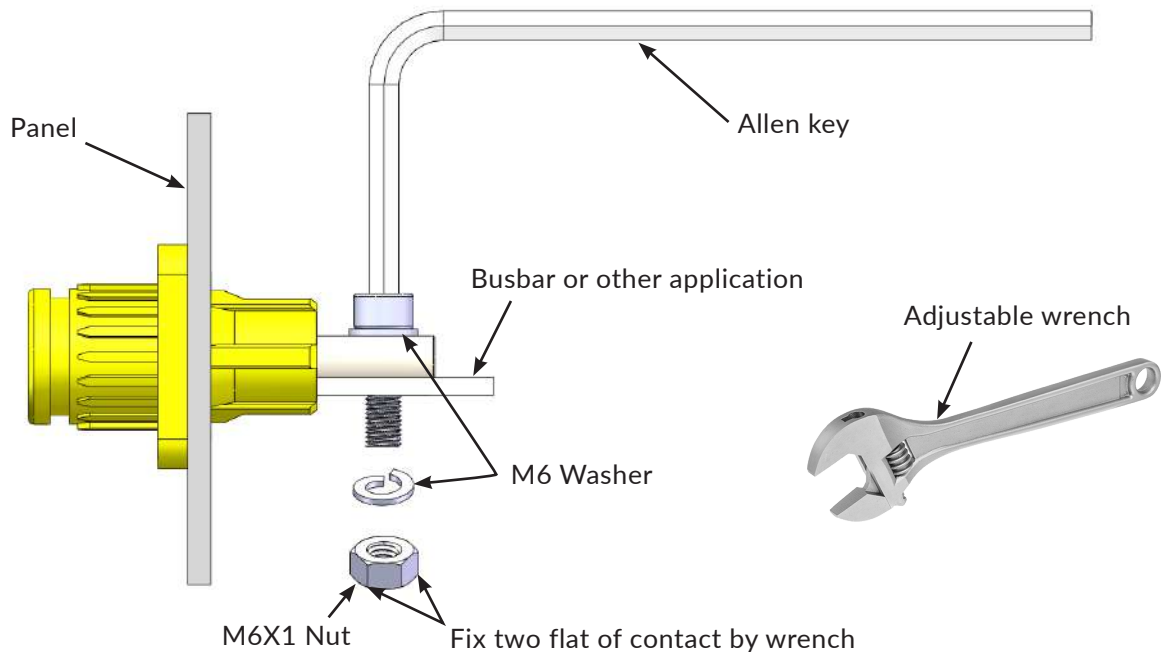


Receptacle connector

Notes: There will be no gasket when no sealing requirement.

Part 2: Receptacle Assembly

Step 1: Tighten Nuts (recommended torque for nut is 4N.m max.)



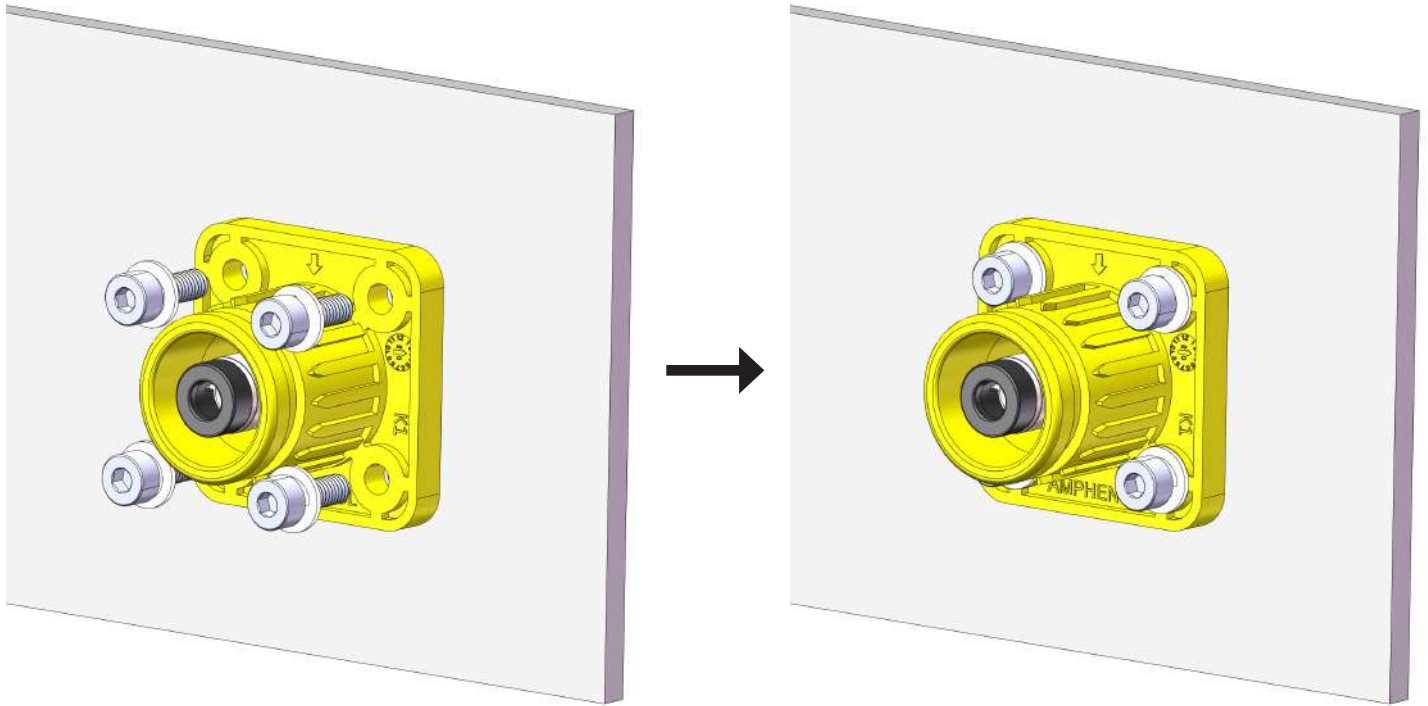
- a:** Receptacle tail pass through the hole of mounting panel
- b:** Studs pass through copper busbar and washer and nut in proper order
- c:** Tighten nut by tool

Step 2: Tighten housing onto the panel with M4 screws (recommended torque is 0.8~1.0 N.m)

1: Recommended M4 bolts refer to GB/T 70.L-2000 (eqv ISo 4762:7997)

2: Recommended M4 spring lock washer refer to GB 93-87

3: Recommended M4 plain washer refer to GB 97.1-2002

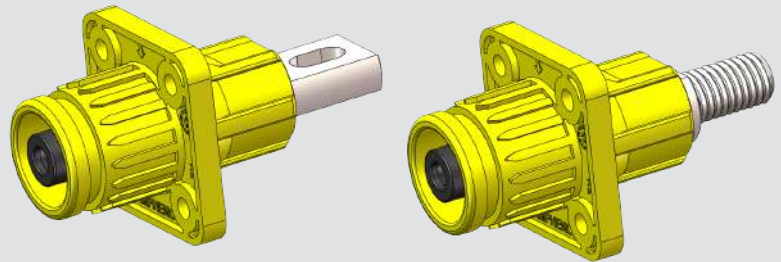


ASSEMBLY WORK INSTRUCTION

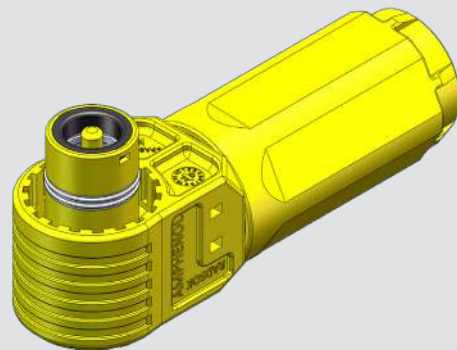
**10.3mm Surlok Plus 1500V Connector Right Angle
Mating and Unmating Work Instruction**

Part Number:

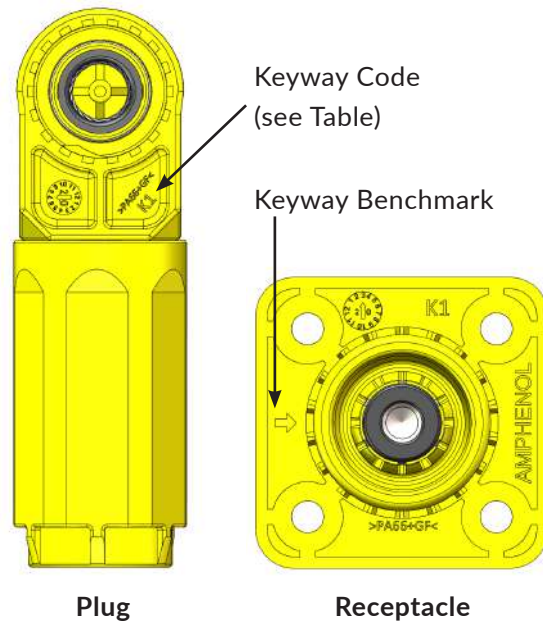
C10-765127-()



C10-765128-()



Part 1: Plug Components



Keyway Code Table	
Y°	Keyway Code
20°	K1
30°	K2
45°	K3

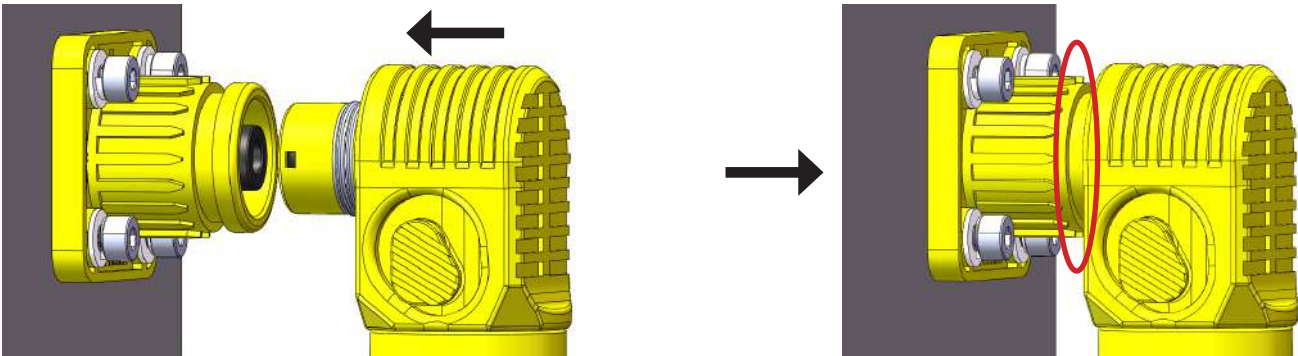
Notes:

This product is not suitable for live plugging and unplugging.

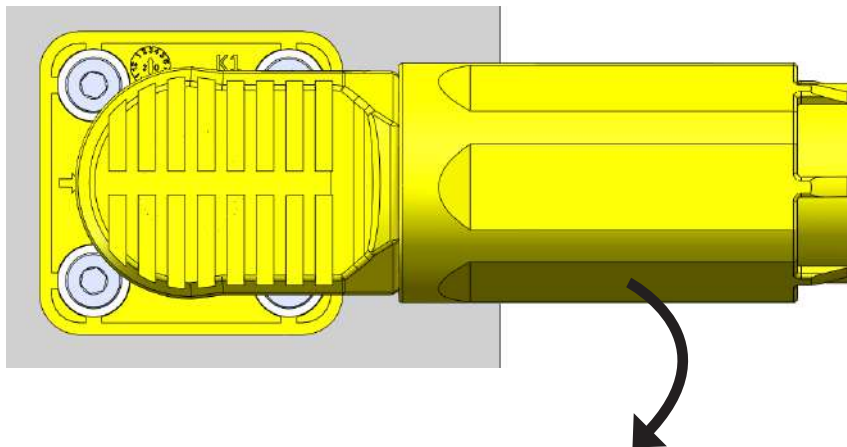
In order to prevent the plug from being pulled out by mistake, it is recommended to add a protection mechanism on the device

Part 2: Mating Operation

Step 1: Preliminary mating: Insert the plug and receptacle into the following positions shown in the figure.



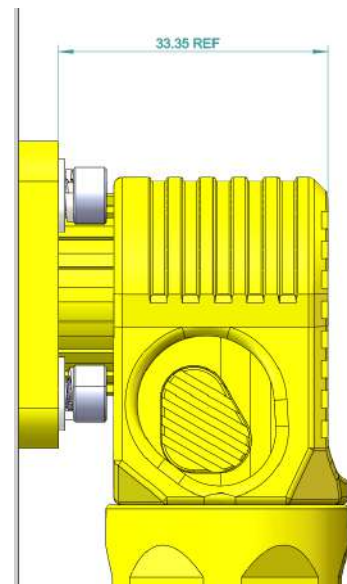
Step 2: Rotate the Plug and adjust the outgoing direction of the cable to the desired position.



Step 3: Align the key with the keyway and push the plug vertically into the receptacle, until hear a "click" to indicate that plug and receptacle mated well.

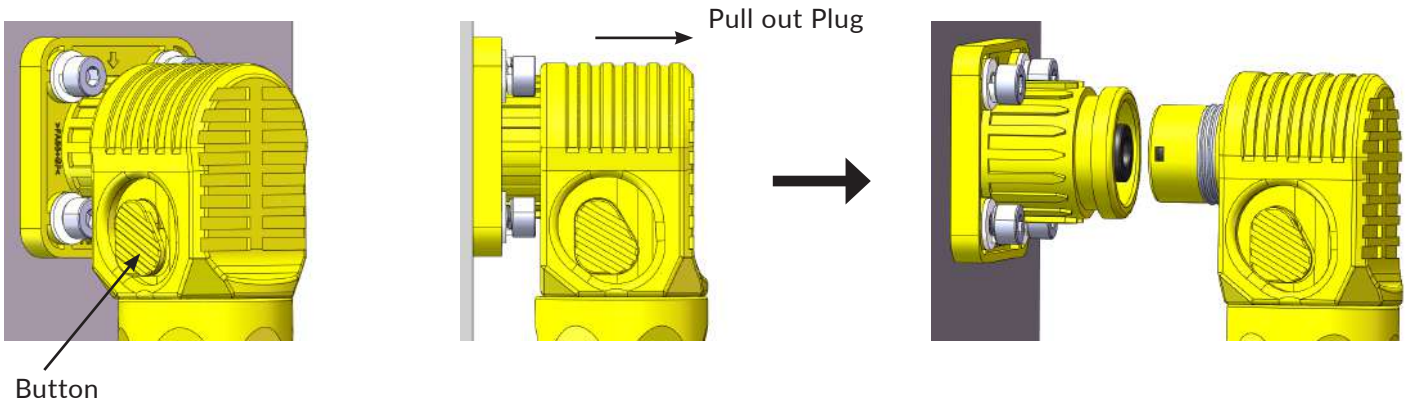
Note:

Pull the plug body slightly by hand to reconfirm if they mated well

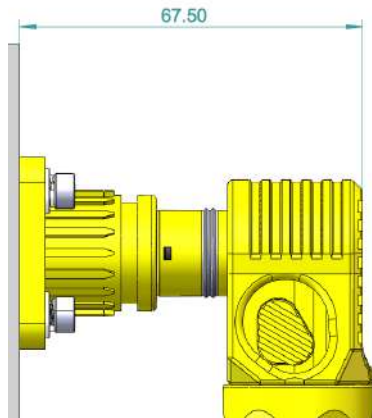


Part 3: Unmating Operation

After turn off the power, press the button and then pull out the plug horizontally in the direction shown below.



Step 1: For end use, the separation active space requires is 67.5mm minimum.



Step 2: Do not deviate from the axis direction of the receptacle until it was separation complete, or it has a risk to damage the connector.

