

COOLSPlice CONNECTOR



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DR.
J. van der Krogt

DATE
Oct 2010

APVD
O. Lijense

DATE
Oct 2010

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1. SCOPE

1.1 Content

This specification covers the requirements for application of "COOLSPLICE CONNECTOR" in the versions listed below:

- unsealed version (transparent, light green color) : **P/N 293545-1**
- sealed version (transparent, light blue color) : **P/N 293545-2**

2. REQUIREMENTS

2.1 Cable requirements

POWER WIRES: - 18 AWG solid wire, UL AWM 1316, 1408, 1452, PVC/nylon;
 - 18 AWG stranded wire (19/30 max.), UL AWM 1316, 1408, 1452, PVC/nylon;
 - 0,75 mm² solid wire, H05V-U 300/500V, PVC

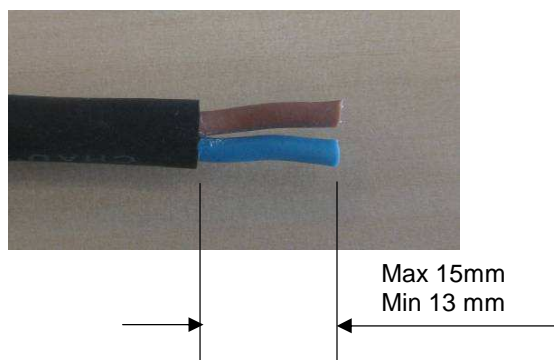
For all these wires, the admitted insulation diameter range is from 1,75 to 2.85mm.
 Not admitted are wires with non uniform centering of the insulation

NOTE: The product has been released using wires according above specifications. It can be expected that if a wire fits the above specification, it will perform according the requirements.

However, due to the fact that there are many different type of wires and materials it can not be guaranteed that all wires will perform as well as the ones used to release the product. In case of doubt it is advised to submit a wire sample for testing and release.

2.2 Cable preparation

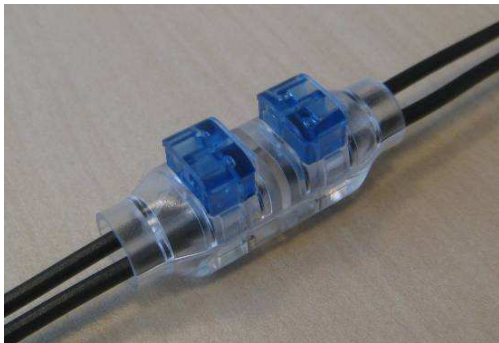
Before use make sure the applicable cable is clean and free of superficial pollution like dust or other substances that can compromise the insulation level. When stripping the cable jacket make sure it is a straight clean cut and prevent at all times that the insulation of the wires within the cable are damaged or cut in. The stripped jacket end shall be cut under a maximum angle of 10°. Proper cutting tooling shall be used to avoid spacing deformation and burrs.



2.3 Cable or wire insertion

The images below are showing connectors terminated with wires and cable. The connector can also be used to make a connection for only 1 electrical connection. The connector is not intended to be used as a wire end cap.

The wires have to be inserted into the connector holes as shown below: Insert wires till they are blocked by the inside center wall of the connector.



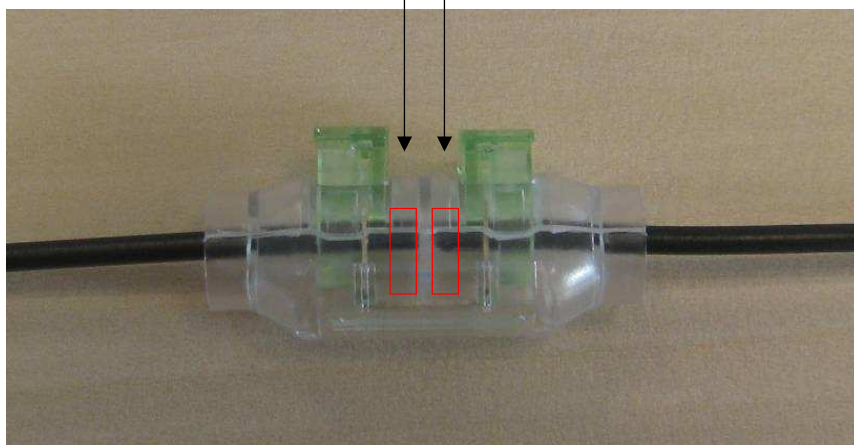
Connector with single wires insertion, before termination



Connector with cable insertion, before termination

Before termination, check if the wires are inserted correctly. This can be done visually through the side walls of the connector. Wires have to be inserted as deep as possible and at least 1mm past the point where the colored button is ending.

Visual inspection area to check if the wires are inserted deep enough in the connector.



2.4 Cables termination

When the cable or wires are correctly inserted the connector can be terminated. Standard pliers can be used for termination. Preferably use a tool as shown below.



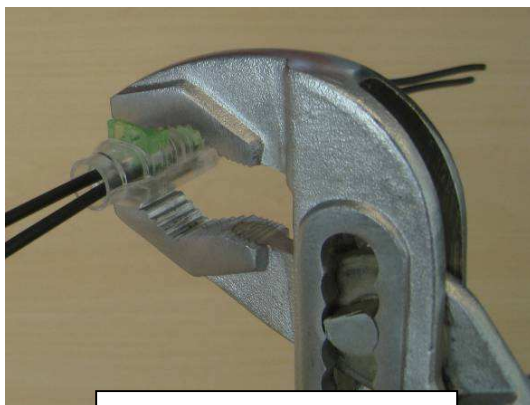
After wire insertion press buttons with the pliers as shown below. Hold the wires or cable in place to prevent them to slip out of the connector during termination. Make sure to position the beak of the pliers on the top center of the button and use enough force to gradually terminate the wires.

The force on the button will not be higher than 500 N max.

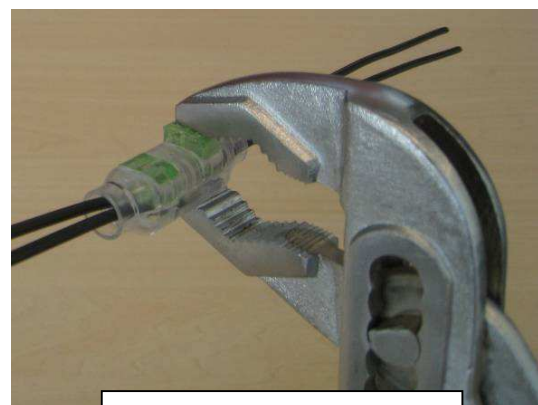
The button has to be closed till the top of the button is flush with the connector housing. The wires are now terminated and the button is locked in the connector. A button shall not be removed or lifted after it has been terminated.

The Coolsplice connector shall not be opened for reuse or correction after termination.

CLOSING OF CONNECTOR:



STEP 1.
Press on first button (max 500 N)



STEP 2.
Press on second button (max 500 N)

INSPECTION:

Rev. A

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LOC I

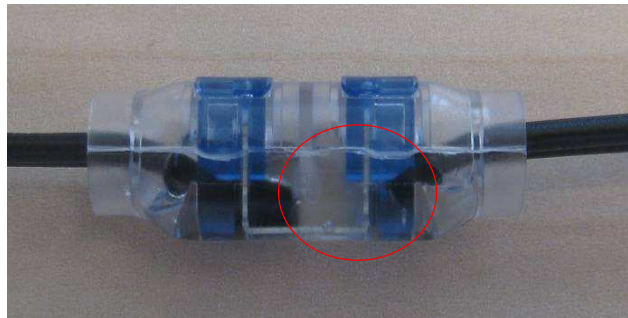
INSPECTION

Visually inspect the connector to verify if the wires are positioned correctly and the buttons are fully pressed down. Wires should be inserted deep enough according as explained in chapter 2.3

Wires terminated
correctly



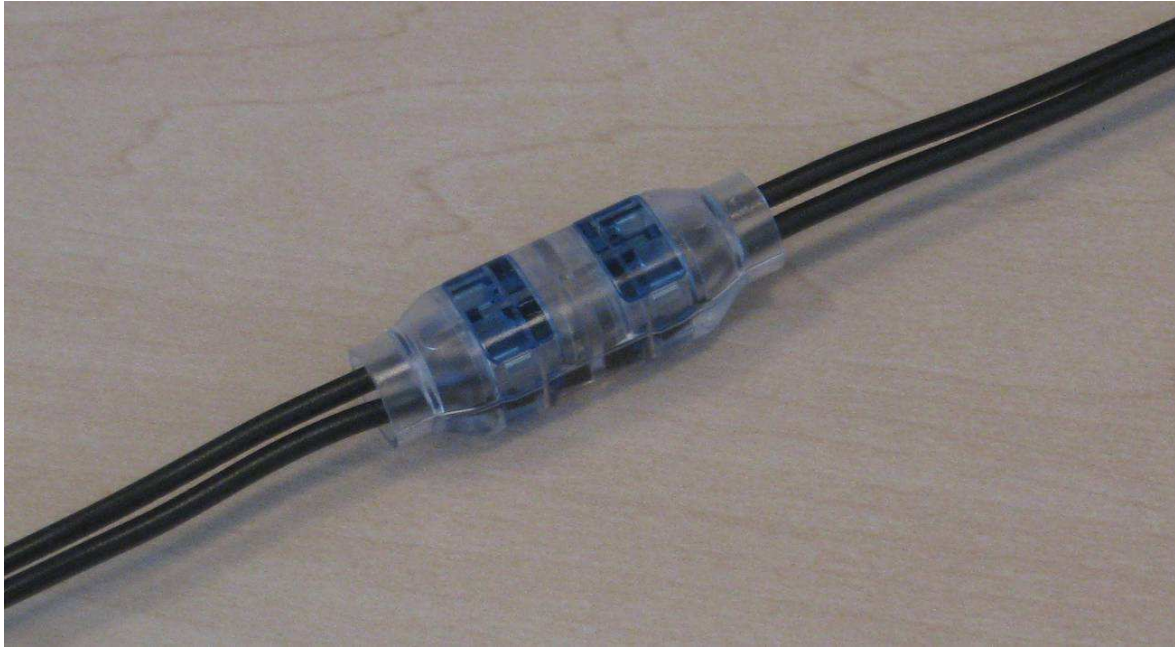
Wires terminated
incorrectly



The termination is finished when the wires are inserted correctly and the buttons are fully pressed down. There shall be no visually exposed copper chips or broken strands.

After termination the following should be checked :

- wires or cable correctly positioned and terminated
- The 2 buttons are fully pressed down and locked
- the final connector height must be 11,5 +- 0,2 mm
- the final terminated connector shall be carefully examined to determine if it meets the requirements of this specification
- there shall be no signs of bent or misaligned terminals as a result of improper application.
- No apparent damages or cracks visible on the connector housing or buttons.



READY.