

3111 01



3111 03



	Date	Name	Edition	1	2	3	4	5	6
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Checked	22.08.24	sve	Date	05.04.19	11.05.22	18.07.24	22.08.24		

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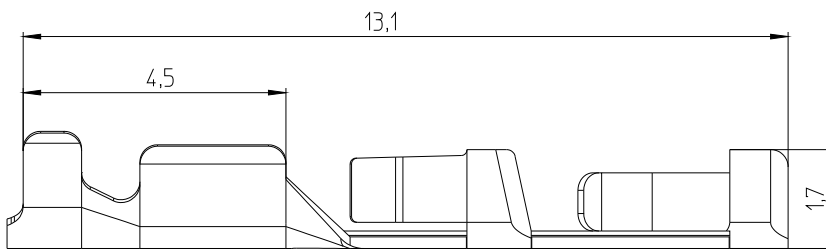
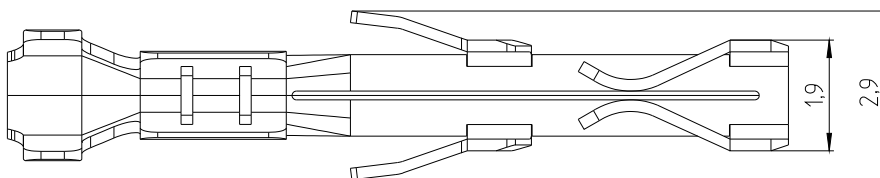
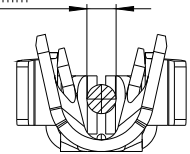
1. Product types

acc. to data sheet 3114 02

Technical data:

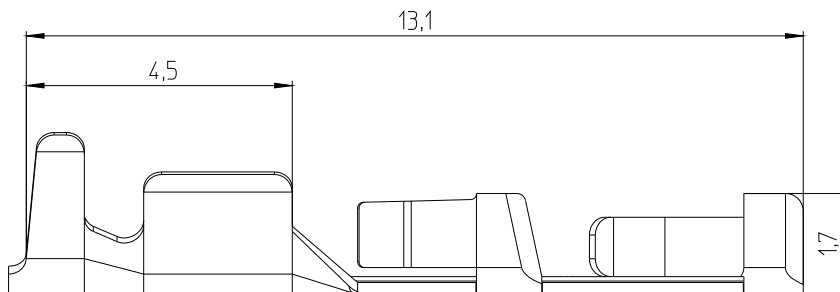
Temperature range:	-25°C / +100°C
Insertion force / contact:	≤ 4,0 N
Withdrawal force / contactt:	≥ 0,5 N
Retaining force in housing:	≥ 50 N
Contact resistance:	≤ 5 mΩ
Rated current at $T_{u_{amb}} = 30^{\circ}\text{C}$	5,0 A
$T_{u_{amb}} = 70^{\circ}\text{C}$	2,5 A

1.1. Type 3111 01

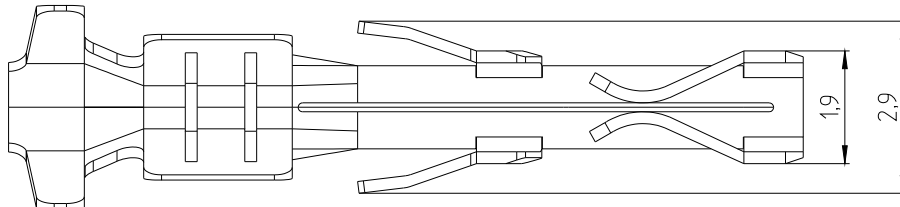
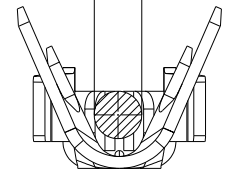
Minimodul crimp contact, cable cross-section 0,14 - 0,25 mm²cable cross section
0,14 - 0,25 mm²

1.2. Type 3111 03

Multimodul crimp contact, cable cross-section 0,3 – 0,6 mm²



cable cross section
0,3 - 0,6 mm²



1.3. As-delivered condition

in bulk



on reel



2. Contact principle

Lumberg's manual crimping tool or processing machines must be used to make the crimp connection.



3. Application tooling and machines

The function, safety and quality of the crimp contacts are only guaranteed by using of Lumberg processing equipment. It has to be taken into account that the crimp contacts aren't checked electrically before the processing / assembling. Because of that an electrical test should be carried out after crimping.

The user bears full responsibility if any other processing equipment is used.

In case of using any lubricants or sliding agents in the feed and crimp areas residues (impurities) must not come onto contact with the crimp contacts.

Manual processing tool

For crimping of crimp contacts, designed for single-piece production and small batches.

Manual processing device

For crimping of crimp contacts, designed for small batches.

Electrical processing device

Electrically assisted processing device with manual cable and crimp contact in-feed, designed for small and medium batches.

Semi-automatic processing device

For the affordable crimping of automatically supplied crimp contacts and manual cable in-feed, designed for series production.

Automatic processing device

For the optimal crimping of automatically supplied conductors and crimp contacts, designed for large-scale industrial production.

4. Cable specification

The cable specification must be kept. Any deviation must be discussed and approved by Lumberg.

4.1. Type 3111 01

cable	conductor crimp		insulation crimp	
	height	width	height	width
14 x Ø 0,15 mm = 0,25 mm ²	0,73	1,22	1,29	1,73
32 x Ø 0,10 mm = 0,25 mm ²	0,84	1,23	1,44	1,71
7 x Ø 0,20 mm = 0,21 mm ²	0,77	1,22	1,33	1,72
7 x Ø 0,19 mm = 0,20 mm ²	0,76	1,22	1,31	1,70
7 x Ø 0,16 mm = 0,14 mm ²	0,75	1,22	1,19	1,72
18 x Ø 0,10 mm = 0,14 mm ²	0,75	1,23	1,37	1,71
7 x Ø 0,15 mm = 0,12 mm ²	0,70	1,22	1,16	1,70
18 x Ø 0,08 mm = 0,30 mm ²	0,67	1,21	1,12	1,69

4.2. Type 3111 03

cable	conductor crimp		insulation crimp	
	height	width	height	width
16 x Ø 0,20 mm = 0,50 mm ²	0,93	1,52	1,68	2,22
64 x Ø 0,10 mm = 0,50 mm ²	0,94	1,52	1,69	2,22
28 x Ø 0,16 mm = 0,50 mm ²	0,94	1,52	1,69	2,22
7 x Ø 0,30 mm = 0,50 mm ²	0,94	1,52	1,68	2,22
19 x Ø 0,15 mm = 0,34 mm ²	0,81	1,52	1,65	2,22
24 x Ø 0,10 mm = 0,34 mm ²	0,86	1,52	1,62	2,22
7 x Ø 0,24 mm = 0,30 mm ²	0,81	1,52	1,55	2,22
17 x Ø 0,12 mm = 0,30 mm ²	0,79	1,51	1,64	2,21

5. Quality assurance

For all working processing steps and alterations (e.g. product launch, changes of the cable, changes of the tool or machine...), which may affect the product quality, the responsible departments have to be care of appropriate quality assurance steps.

5.1. Quality features

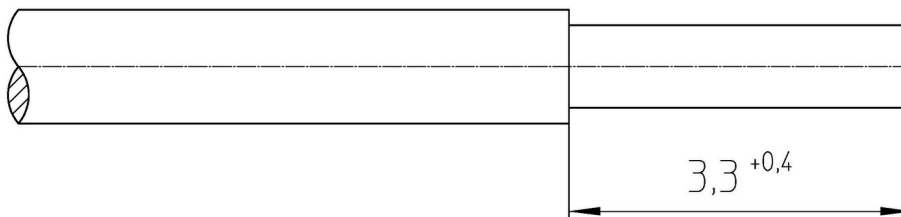
The following quality features must be taken into consideration:

- Stripping
- Crimping the wire
- Location of the wire
- Measuring method and measuring instruments

5.1.1. Stripping

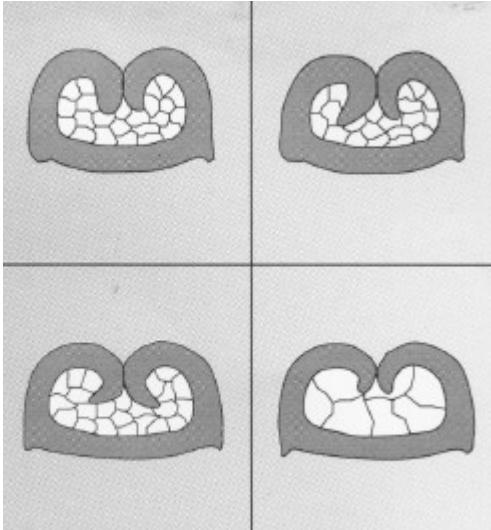
The user must ensure that the individual wire strands are not damaged during the stripping process. The specified stripping lengths must be maintained.

A tolerance of + 0,4 mm is permitted.

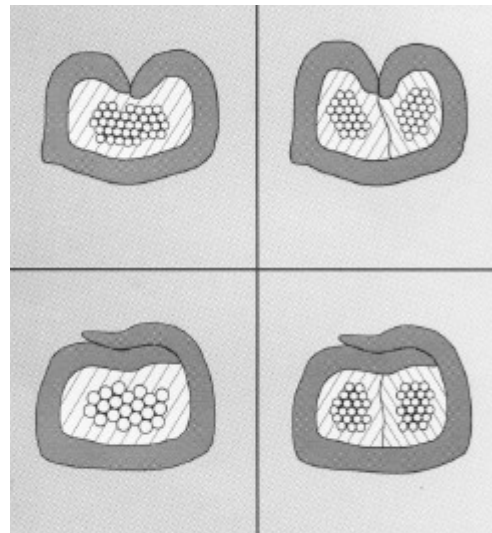


5.1.2. Crimping the wire

The illustrations are intended as decision support for assessment of the Crimp-Versions. Deviations of curling of the wire- and insulation crimp are possible.



Wire crimp



Insulation crimp

5.1.3. Location of the wire

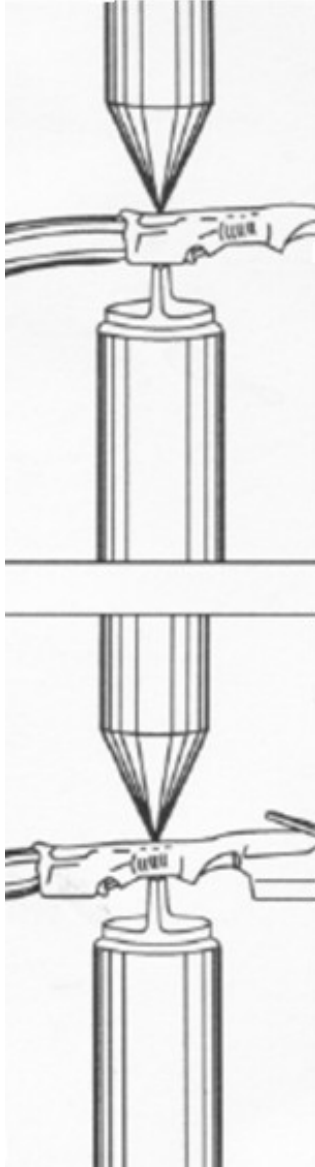
Exact positioning of the wire



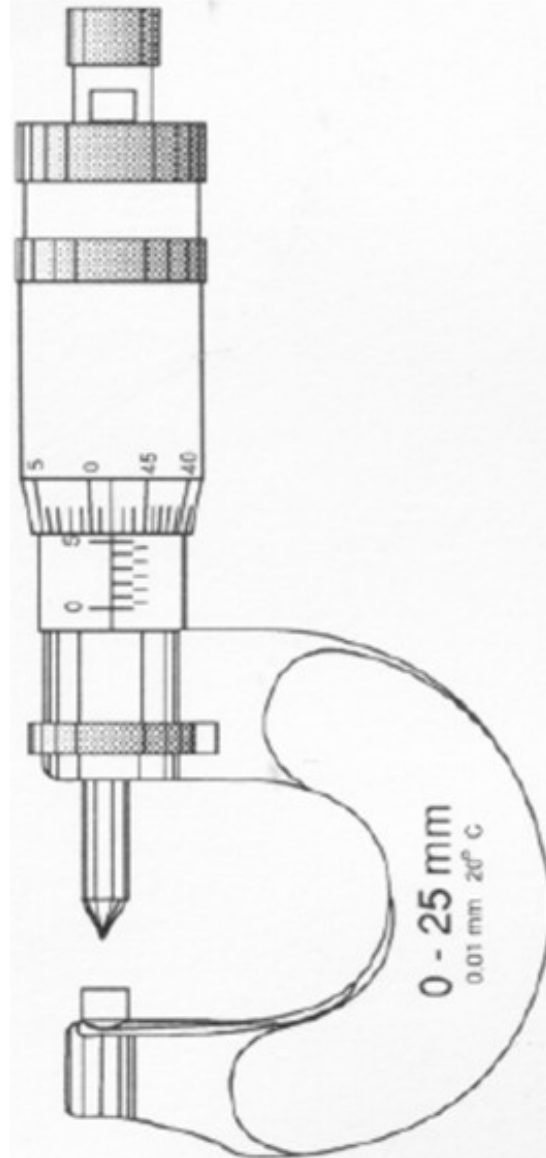
Ending of cable insulation should be between insulation and wire crimp.

5.1.4. Measuring method and measuring instruments

These pictures presented the measurement process with which measurement tool the crimp contacts should be measured. The crimp heights should be measured 3-4 times every day and after every tool change.



Measurement process



Gauge

5.2. Important recommendations and notices

Any use of auxiliary substances (lubricants, oil, fats, etc.) during the assembly is not permitted. Any type of contamination during assembly (from dust, moisture, etc.) will have a negative impact on the lifespan and functionality of the system. Thus, it is very important to carry out the assembly in clean surroundings.

<p>LUMBERG CONNECT GMBH</p> <p>Im Gewerbepark 2 58579 Schalksmühle</p>	<h1>Processing instruction</h1>	<p>Lumberg  passion for connections</p>
<h2>Crimp contact</h2>		<p>3114V02EN</p> <p>Page 12 of 12</p>

6. Storage

Due to physical processes, surface finished components are subject to aging processes, which can have a negative effect on further processability. To ensure optimum processability, the following instructions should be observed and ensured during further processing steps:

Storage conditions:

The parts should ideally be stored in the closed original packaging, at a constant temperature of 21 – 25° C and with a relative humidity of no more than 55%. The components should not be exposed to direct light. They should also be protected from any extreme ambient conditions (such as air pollution).

Due to the physical properties of the parts the storage times should be reduced as short as possible. Silver-plated components have to be processed within half a year and tin-plated components within one year after delivery.

For components that are soldered due to their application, it is necessary to use a commercially available suitable flux.

These specifications are based on experience, using components stored under optimal conditions. They do not constitute and binding commitment for the fulfillment of any characteristics.

Ask Lumberg for more information about alternative packaging options for other temperatures and environmental conditions.