

331000



332100




in preparation

	Date	Name	Edition	1	2	3	4	5	6
Author	27.02.25	jham	Name						
Checked	26.05.25	sve	Date						

Alteration Description

[illegible]

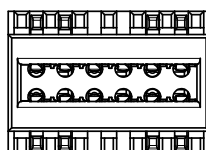
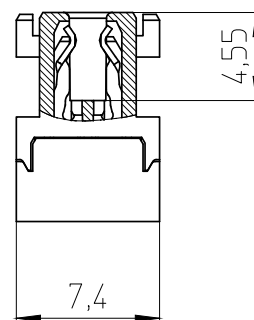
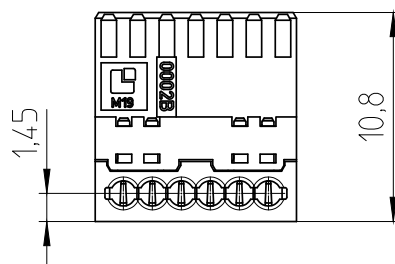
<p>LUMBERG CONNECT GMBH</p> <p>Im Gewerbepark 2 58579 Schalksmühle</p>	<h1>Processing instructions</h1> <h2>Connector RAST 1.5</h2>	<p>Lumberg  passion for connections</p> <p>33V01EN</p> <p>Page 3 of 18</p>
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1. Product description

1.1. Product types

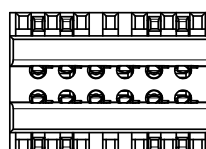
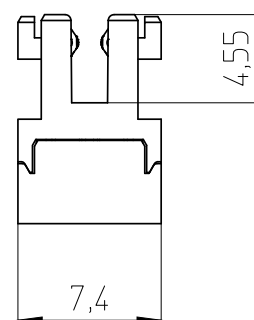
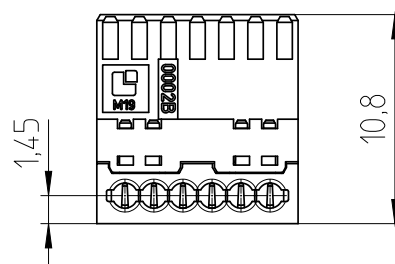
Series RAST 1.5 331000

Pitch 1,5 mm
acc. to data sheet 331000 01



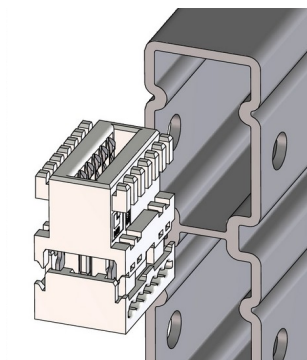
Series RAST 1.5 332100

Pitch 1,5 mm
acc. to data sheet 332100 01

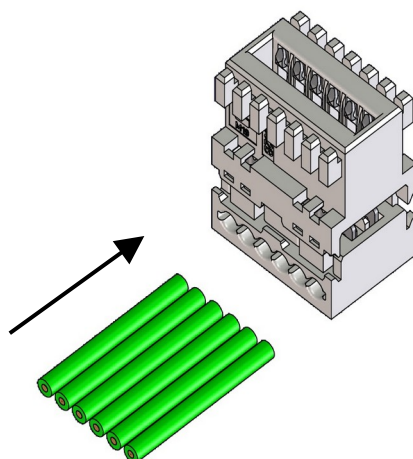


2. System features

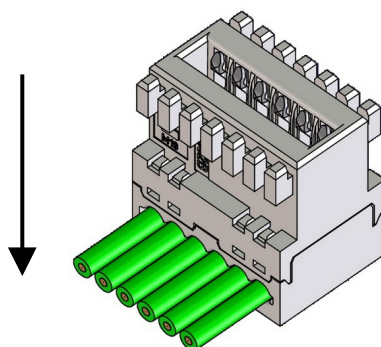
Two-part body
Supplied in a tube



Wire termination

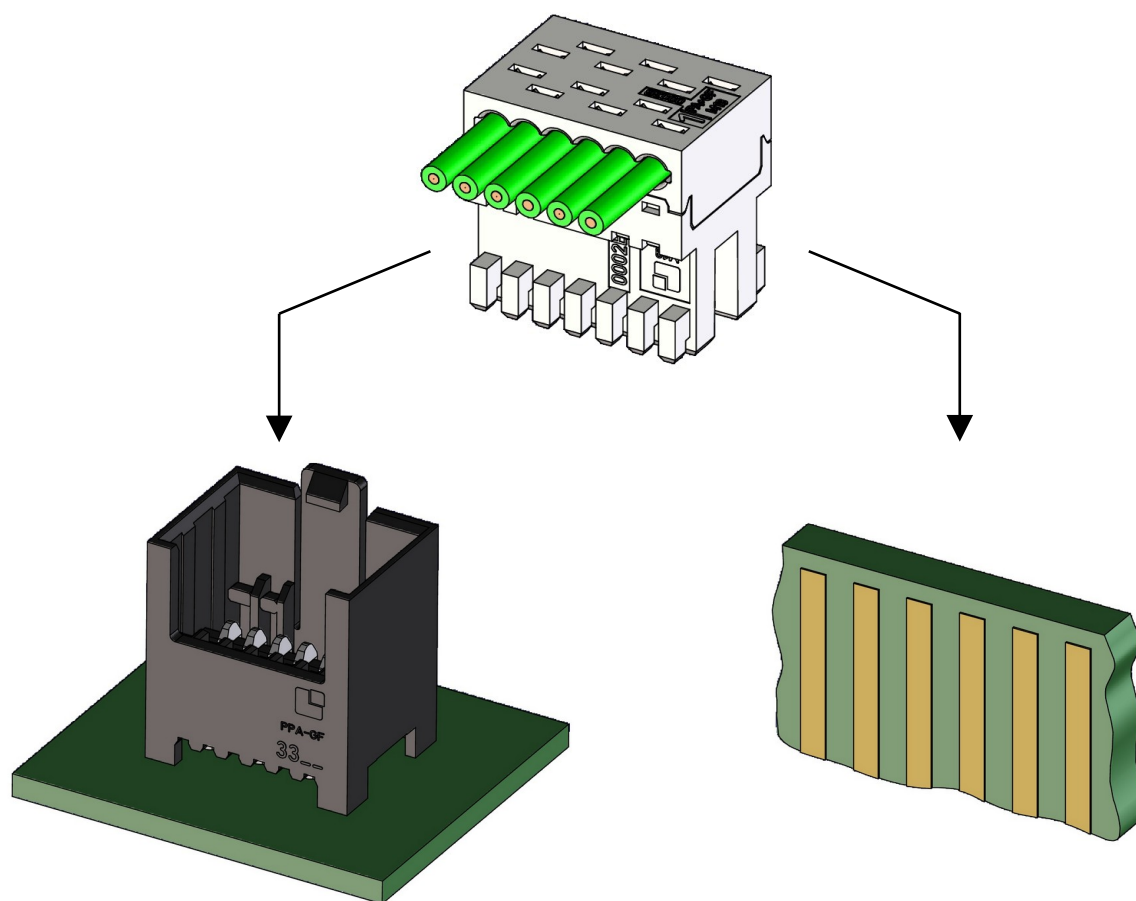


Insulation displacement connection by pressing the top
Wire exit 90°



The connectors are used with pin headers as indirect connectors or with guide frames as direct connectors (edge connectors).

connector acc. to RAST 1.5



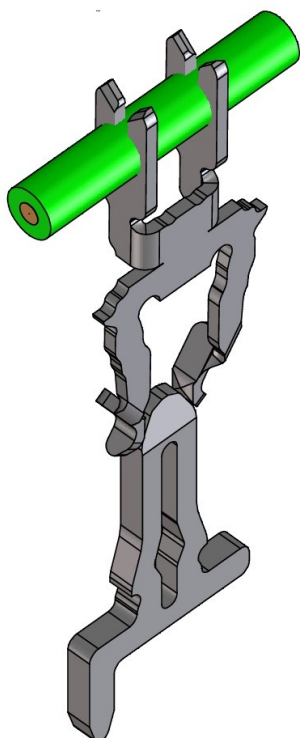
pin header

guide frame

3. Contact principle

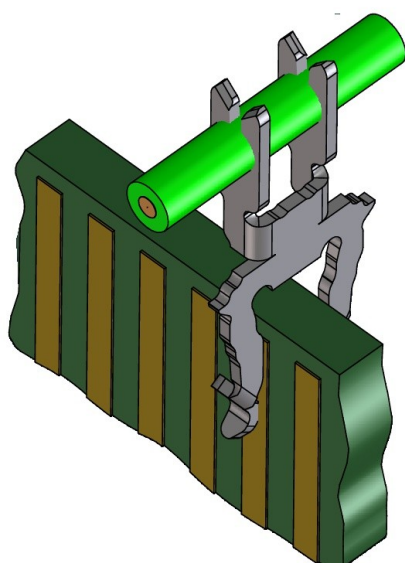
Indirect mating on the contact pin

Insulation displacement connection
(test acc. to DIN EN 60352-4 / IEC 60352-4)



Direct mating on the PCB

Insulation displacement connection
(test acc. to DIN EN 60352-4 / IEC 60352-4)



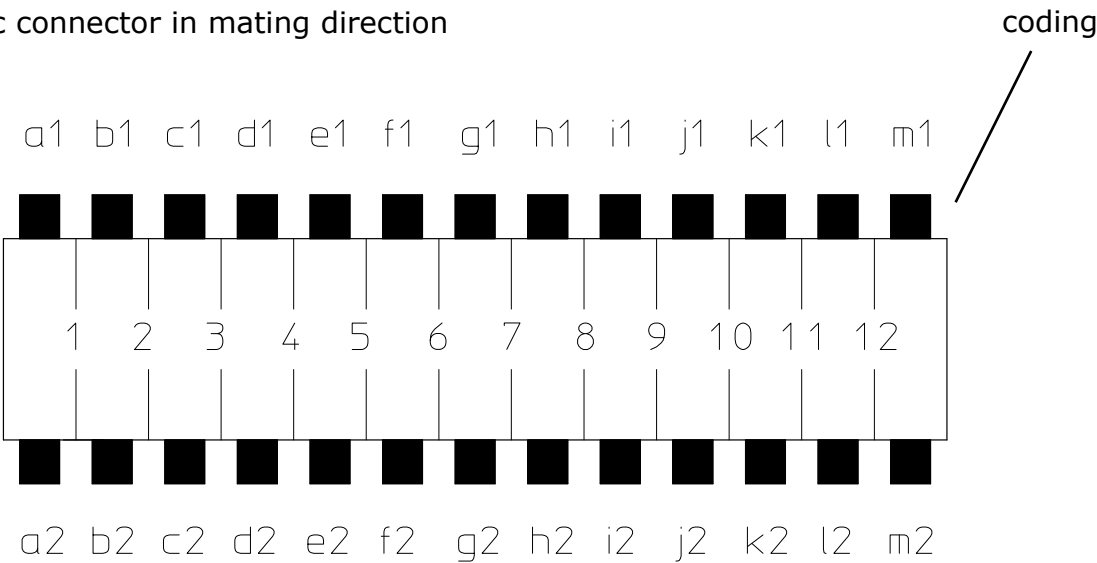
4. Cutting-off coding keys

The cutting-off coding keys acc. to RAST 1.5 standard at the termination machine.
The allocation of connector, color marking and cutting-off coding keys are the sole responsibility of the customer.

Caution !
Connectors and pin headers are always shown in mating direction.


4.1. Coding acc. to RAST 1.5


basic connector in mating direction




4.2. Cutting blades

To ensure a correct cutting-off of the coding keys, use onlyLumberg cutting blades.
A minimal remaining burr is permitted.

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<p>5. Application tooling and machines for 33100, 332100</p> <p>The function, safety and quality of the connectors are only guaranteed by using of Lumberg processing equipment. It has to be taken into account that the connectors aren't checked electrically before the processing / assembling. Because of that an electrical test should be carried out after processing / assembling.</p> <p>The user bears full responsibility if any other processing equipment is used.</p> <p>In case of using any lubricants or sliding agents in the feed and press areas residues (impurities) must not come into contact with the connectors.ng.</p> <p>Manual processing tool For assembling connectors designed for single-unit and small series production.</p> <p>Manual processing device For assembling connectors designed for small series production.</p> <p>Pneumatic processing device Pneumatically assisted processing device with manual wire feed and connector feed. Designed for small and middle series production.</p> <p>Semi-automatic processing device (in preparation) For cost-effective assembling of automatic connector feed and manual wire feed. Designed for serial production.</p> <p>Automatic processing device (in preparation) For optimal assembling of automatic wire feed and connector feed. Designed for industrial mass production.</p>		

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<p>6. Wire specification</p> <p>The wire specification must be kept. Any deviation must be discussed and approved by Lumberg.</p> <p>6.1. Wire specifications cross section for connection 0,22 mm²</p> <p>Technical data sheet 908 89 Technical data sheet 908 90 Technical data sheet 908 xx</p> <p>Other approved wire see Lumberg release list in the internet at www.lumberg.com</p>		

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<div>7. Assembly</div> <div>Connector and cross section should be adapted with each other acc. Lumberg specification (see technical data sheet).</div> <div>7.1. Connector feed</div> <div>In preparation</div>		

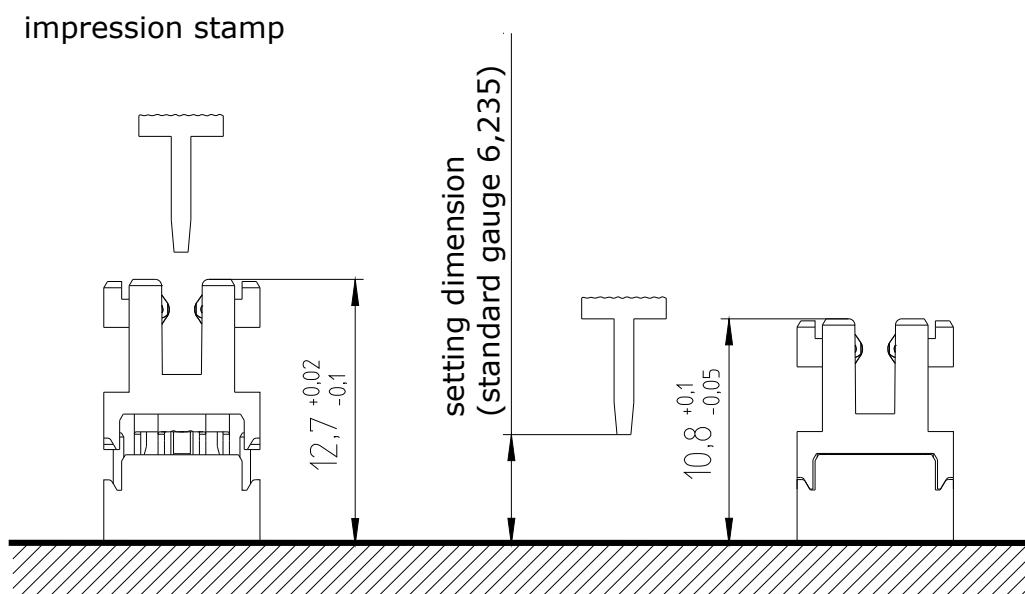
7.2. Impression stamp

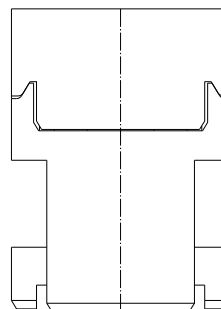
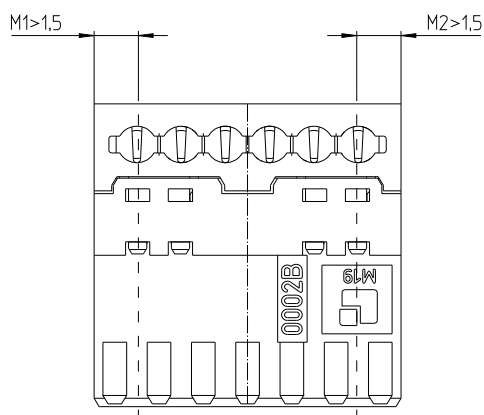
Only use impression stamps from Lumberg.

Impression stamps: free of lubricants and sliding agents.

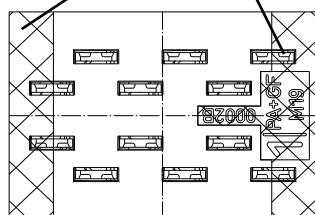
7.3. Setting dimension of the termination machine

An important feature for the function of the connector is the connector height, measured after assembling. The shut height is determined by the setting dimension of the termination machine.





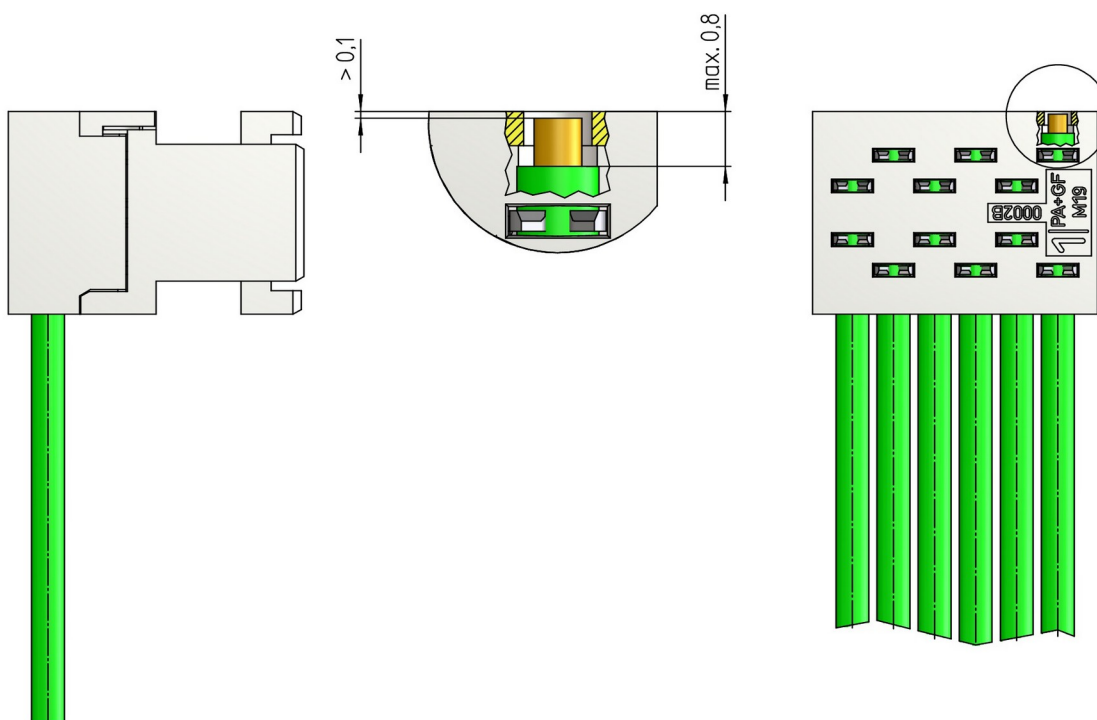
no measuring area



The shut height has to be measured on both sides and in the center area. If a depth gauge is used for measuring, the connector must lay flat with its mating face downwards. A measuring tip of at least $\varnothing 3$ mm is required. Make sure that the measurement is not distorted by a protruding dovetail guide, pole number marking or similar.

7.4. Wire end position

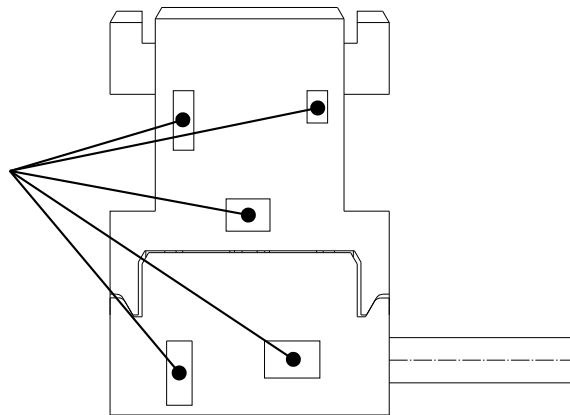
The correct position of the wire guarantees the mating of both ID slots. After termination no wire protrusion is allowed at the connector in order to ensure a correct mating and dismating of the connection. The correct position of the wire ensures the mating of both ID slots. The insulation offset inwards is only permitted within the specified dimension range.




7.5. Housing

After termination no visual damages of the housing are allowed (visual check).
The terminated connector must mate with the male header (functional test).
The contacts must be in correct position in the housing (visual check).

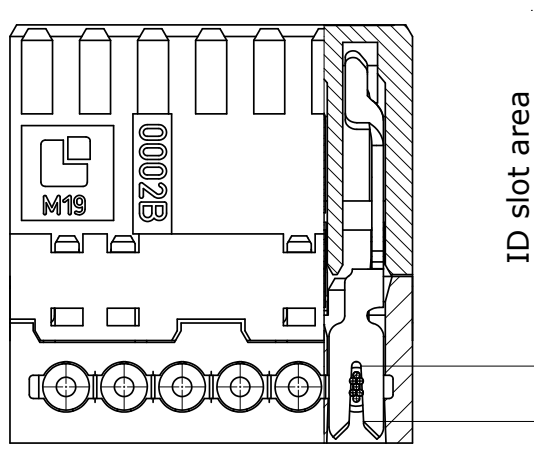
burr
max. 0,05 mm



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<p>8. Quality assurance</p> <p>For all working and processing steps and alterations (e.g. product launch, changes of the wire, changes of the tool or machine ...), which may affect the product quality, the responsible departments have to take care for appropriate quality assurance steps.</p> <p>8.1. Quality features</p> <p>The following quality features must be taken into consideration:</p> <p>8.2. Quality features / IDC</p> <ul style="list-style-type: none"> • ID slot width • Symmetry of the ID slot • Wire quality • Conductor insertion depth • Wire end position • Electrical testing <p>8.3. ID slot width</p> <p>Lumberg guarantees correct ID slot.</p> <p>8.4. Symmetry of the ID slot</p> <p>Symmetry of the ID slot, tolerance ± 0.1 mm is guaranteed by the body.</p> <p>8.5. Wire quality</p> <p>The wire must meet Lumberg specification acc. to point 6. Customized wires, which are listed in the release lists, have to correspond with the available data sheets. Only Lumberg released wires have to be used. The customer bears full responsibility for the correct mating when wires are used which are not listed in the release lists.</p> <p>The user must ensure that all approved wires are delivered in an adequate quality. The wire cross-section, concentricity, micro Shore hardness and the termination (lay) length should all be checked.</p>		

8.6. Contact insertion depth

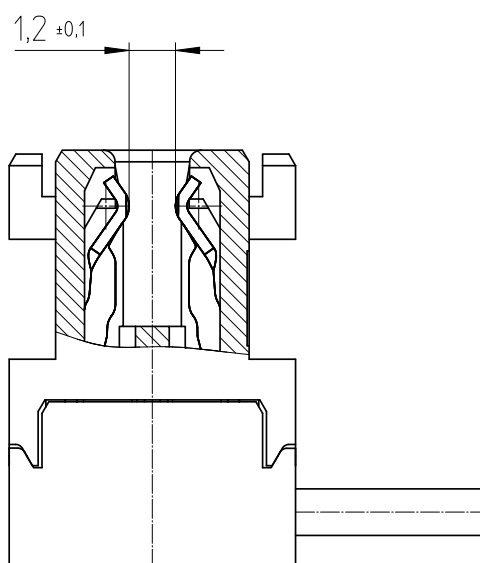
The conductor insertion depth is determined by the height of the body.
All single strands must be in the ID slot area.


**8.7. Wire end position**

The wire protrusion acc. to point 7.4 must be kept. A deeper offset of the wire inwards the housing leads to an incorrect connection.

8.8. Contact gap

Contact gap after termination.



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8.9. Electrical testing

Electrical testing shall be performed in accordance with IPC/WHMA-A-620.

The nature and extent of the electrical tests (short circuit testing, continuity testing, insulation testing, high voltage testing, etc.) should be specified depending on the application and the processing machine.

9. Terms of storage

The general terms and conditions of storage are available on the internet under Downloads at www.lumberg.com.

The specified terms of storage must be complied with.