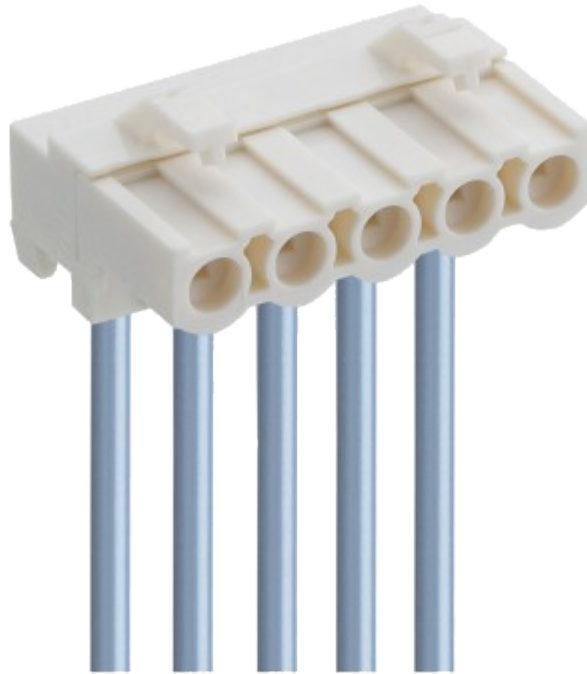


6770



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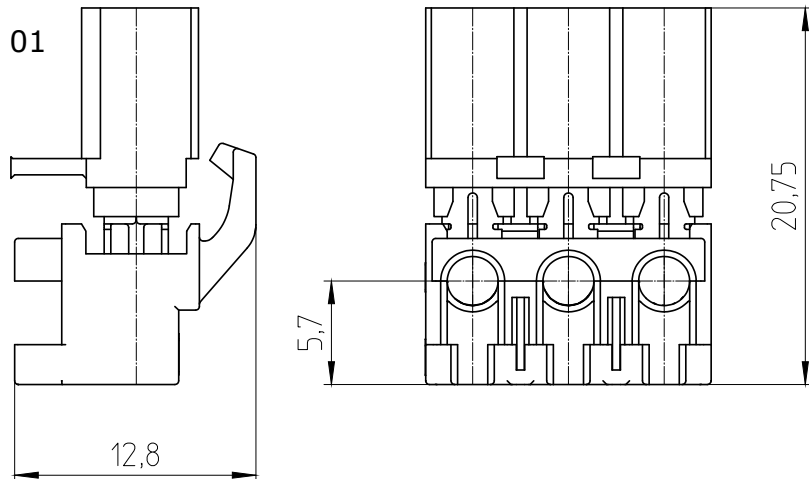
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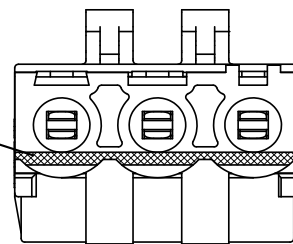
1. Product types

Connector for direct and indirect mating in ID Technology, coding in conjunction with additional coding parts or injection-moulded, with all-insulation and test hole.

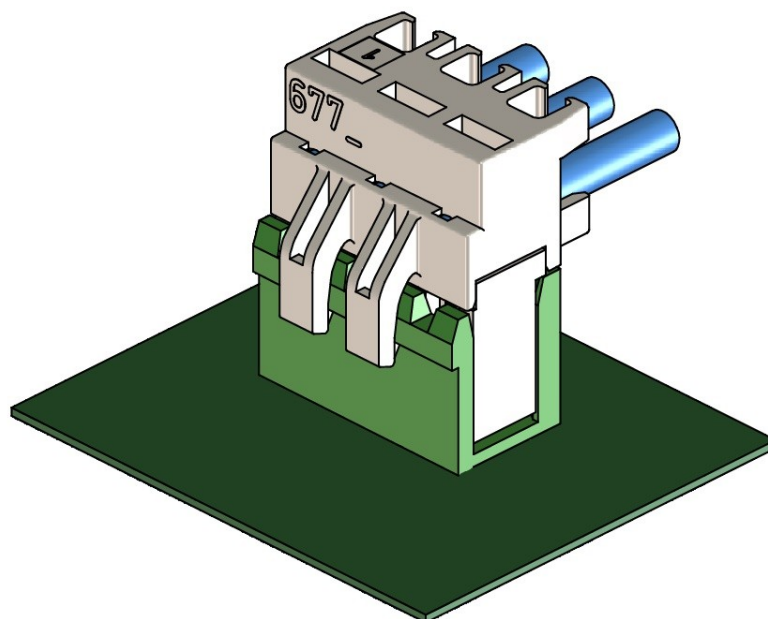
Pitch 5,08 mm
acc. to specification sheet 6770 01



Colour coding blue

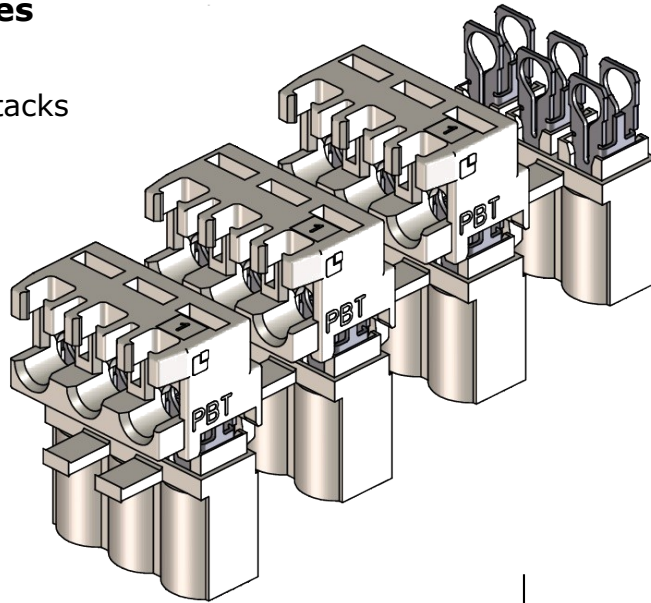


Indirect mating

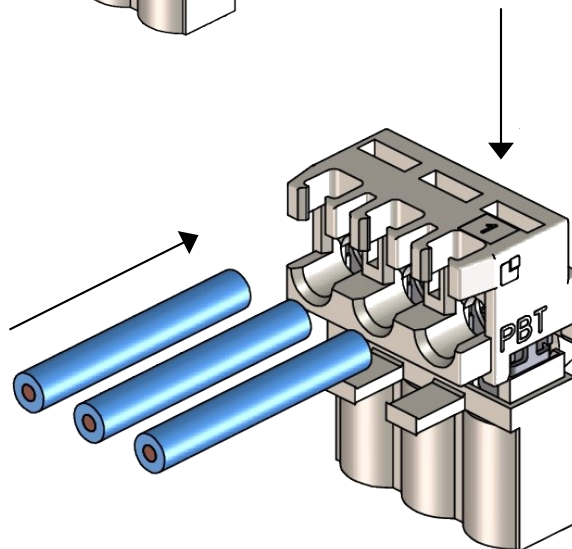


2. System features

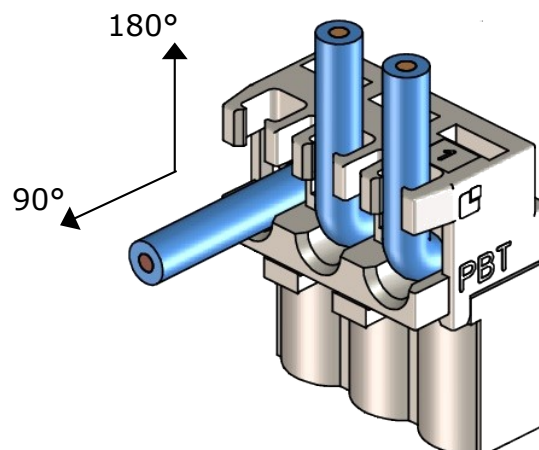
Two-part body
Supplied in following stacks



Wire termination

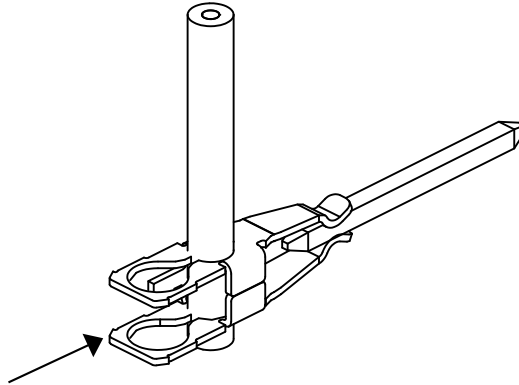


Insulation displacement connection by pressing the cover
Wire exit 90° and 180°



3. Contact principle

3.1. Indirect mating on the contact pin



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

4. Application tooling and machines

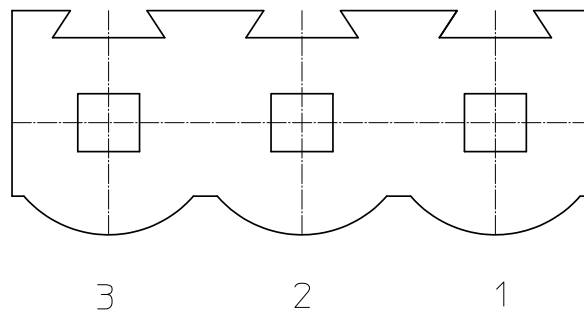
The connectors can be delivered with injection-moulded coding or with slots for belated, alternatively coding.

The customer bears full responsibility for the correct arrangement of the connectors and colours.

Caution !

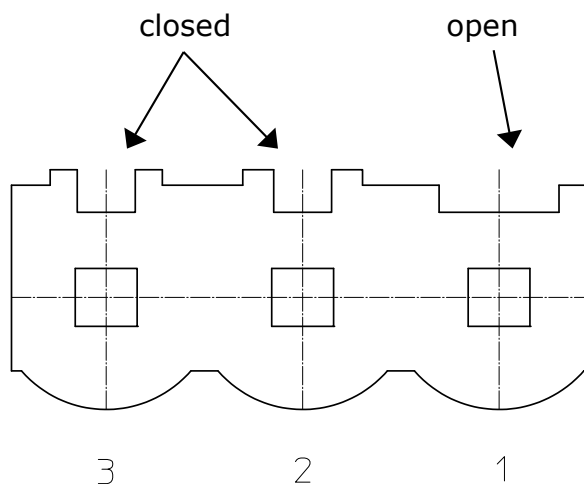
Connectors and pin headers are always marked in mating direction.

Connector basis type K00: Coding alternatively belated with coding elements.



Example with injection-moulded coding e.g. K01

codings:



5. Application tooling and machines

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.

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 press areas residues (impurities) must not come into contact with the connectors.

Manual processing tool – Toggle lever press

For assembling connectors designed for single-unit and small series production.

Semi-automatic processing device

For cost-effective assembling of automatic connector feed and manual wire feed. Designed for serial production.

Automatic processing device

For optimal assembling of automatic wire feed and connector feed. Designed for industrial mass production.

6. Cable specification

The cable specifications must be kept. Any deviation must be discussed and approved by LUMBERG.

6.1. Cable specifications 0,38...0,75 mm²

Technical specification sheet 908S10 stranded wire LiY 0,38 mm²

Technical specification sheet 908 15 stranded wire H05V2-K 0,50 mm²

Technical specification sheet 908 15 stranded wire H05V2-K 0,50 mm²

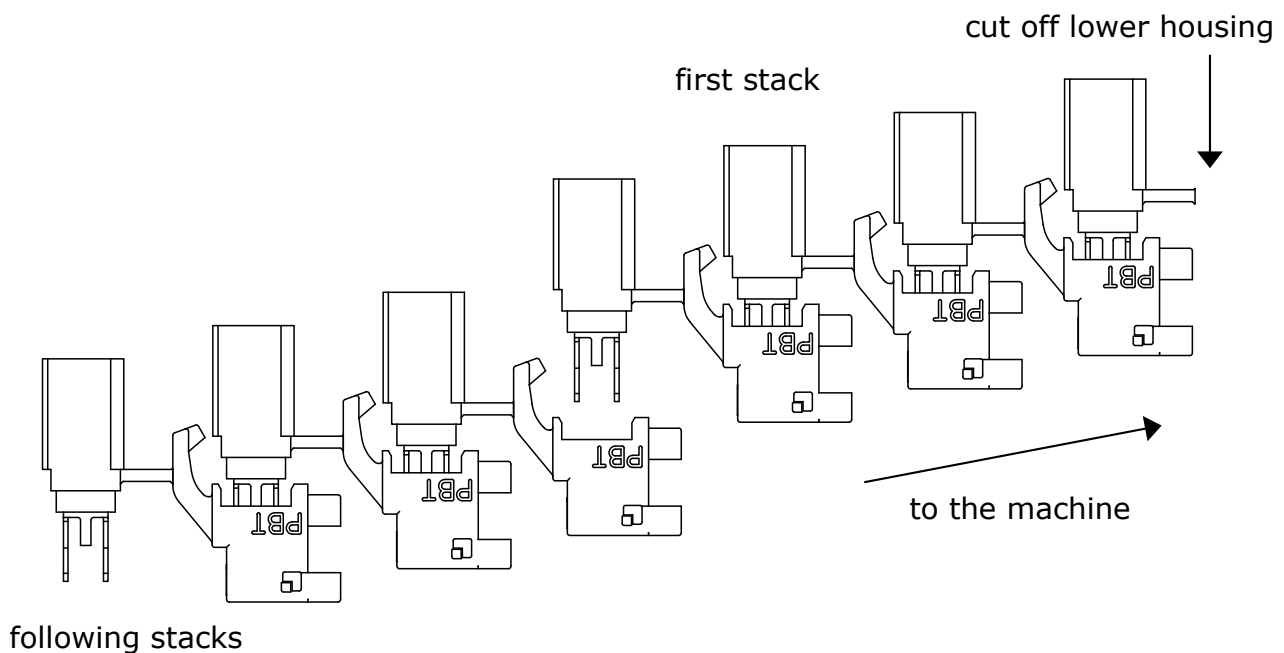
Other cables see LUMBERG – release list.

7. Assembly

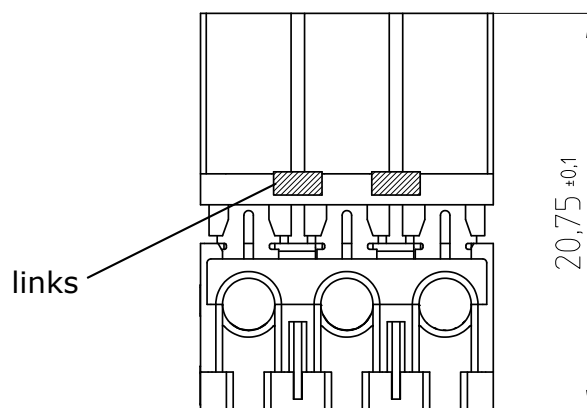
Connector and cross section for connection have to correspond.

7.1. Connector feed

The lower housing must be cut off before the first stack of connectors is fed into the termination head. To feed a new stack into the machine the upper housing of the stack in the machine must be placed into the lower housing of the new stack.



The stacks are securely linked when the height dimension $20,75 \text{ mm} \pm 0,1 \text{ mm}$ is reached in the pre-latching position. The cutting-off of the single connector from the stack is done by the machine, the links will remain on the connector.

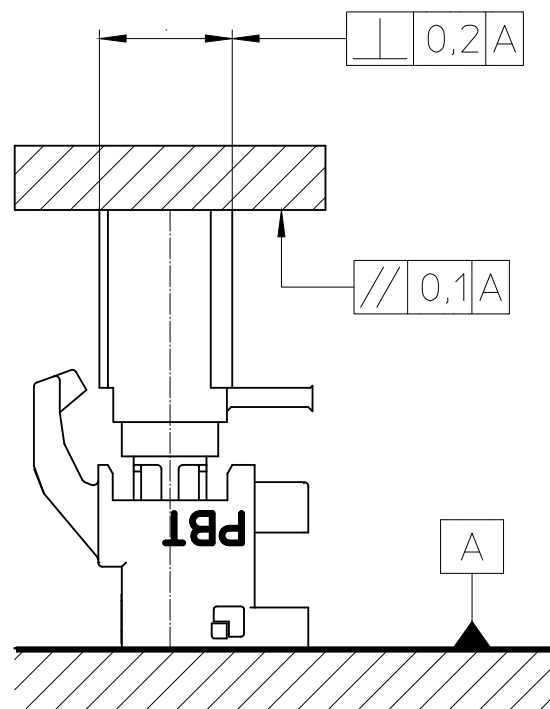


7.2. Cutting blades

In order to guarantee a clean cutting off of each connector, only LUMBERG cutting blades are to be used. Remaining burr max. 0,1 mm.

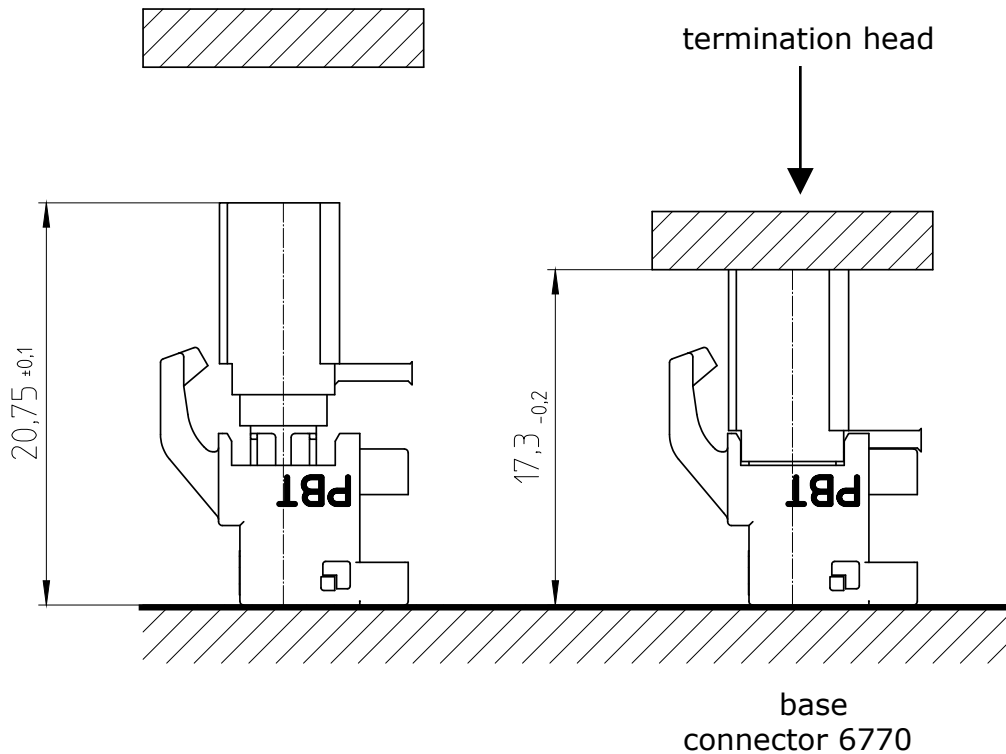
7.3. Termination head

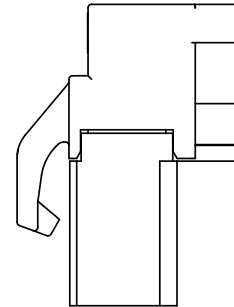
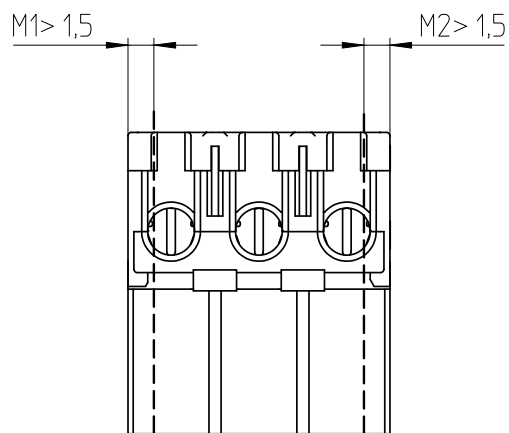
The connector will be terminated by using a flat termination head. The connector must be perpendicular to the base of the termination head and also the base must be parallel to the top.



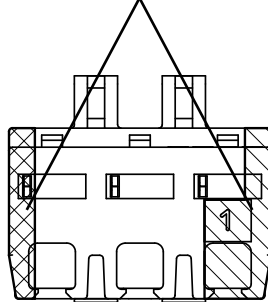
7.4. Shut height dimension of the termination head and connector height after termination

An important feature for the correct function of harness is the connector height after termination. It is determined by the shut height dimension of the termination head.





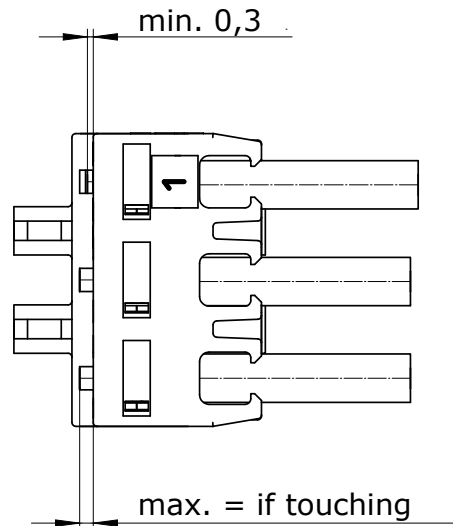
No measuring area



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.

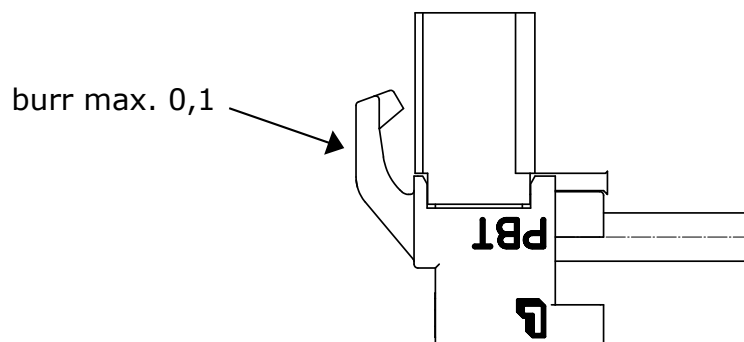
7.5. Cable protrusion

There must be the correct cable protrusion to guarantee good wire termination in both ID slots of the contact. After termination the cable protrusion must be visually checked.



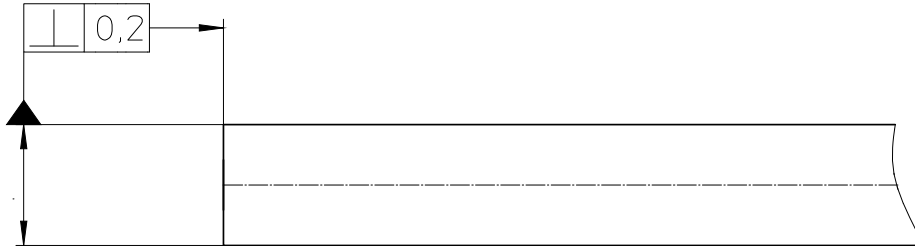
7.6. Housing

No damage of the connector is allowed after termination (visual check).
The terminated connector must mate with the male header (functional check).
The contacts must be in correct position in the housing (visual check).



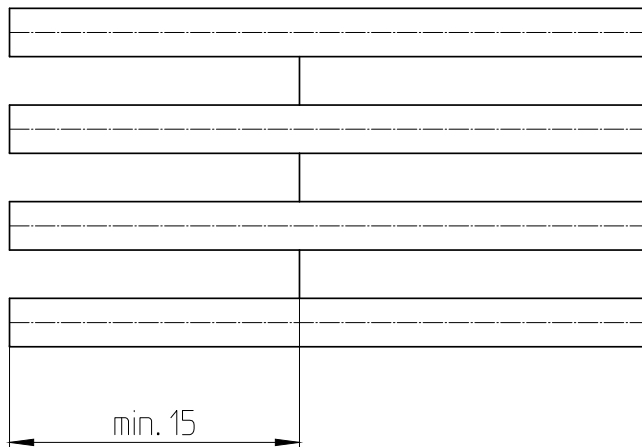
7.7. Cable

The cables must be cut off without burr and deformity.



No cuts in the insulation are allowed in wire exit direction (visual check).
Insulation cuts are permitted between the ID slots of the contact.

Flat cables must be punched out.



8. Quality assurance

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.

8.1. Quality features

The following quality features must be taken into consideration:

8.2. Quality features / IDC

- ID slot width
- Symmetry of the ID slot
- Cable quality
- Cable insertion depth
- Cable protrusion

8.3. ID slot width

LUMBERG guarantees correct ID slot.

8.4. Symmetry of the ID slot

Symmetry of ID slot and cable, tolerance $\pm 0,1$ mm, is guaranteed by the body.

8.5. Cable quality

The wire must meet Lumberg specification acc. to point 6.1.

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.

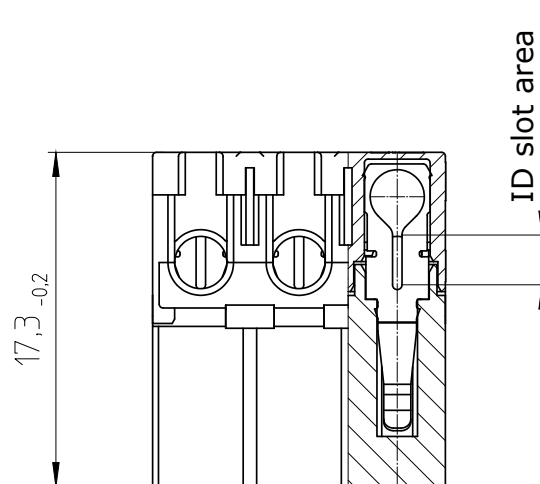
The user must ensure that all approved wires are delivered in an adequate quality. The wire cross-section, concentricity, micro Shore hardness and the termination (lay) length should all be checked.

8.6. Cable protrusion

The min. cable protrusion according to point 7.5 must be kept. Smaller cable protrusions lead to an incorrect mating.

8.7. Cable insertion depth

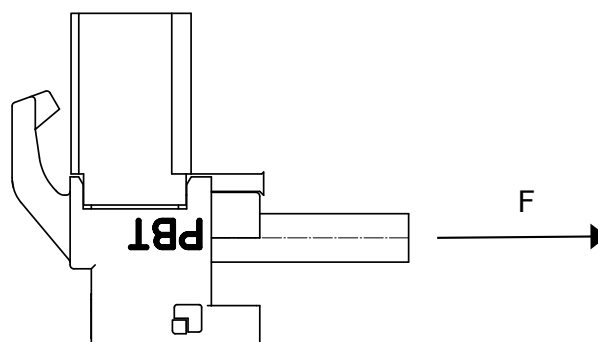
The cable insertion depth is determined by the height of the body.
All single conductors must be in the ID slot area.



8.8. Retention force of the wire

The minimal retention force of the wire from the ID contact:

Stranded wire	0,38 mm ²	>	50 N
Stranded wire	0,50 mm ²	>	75 N
Stranded wire	0,75 mm ²	>	100 N



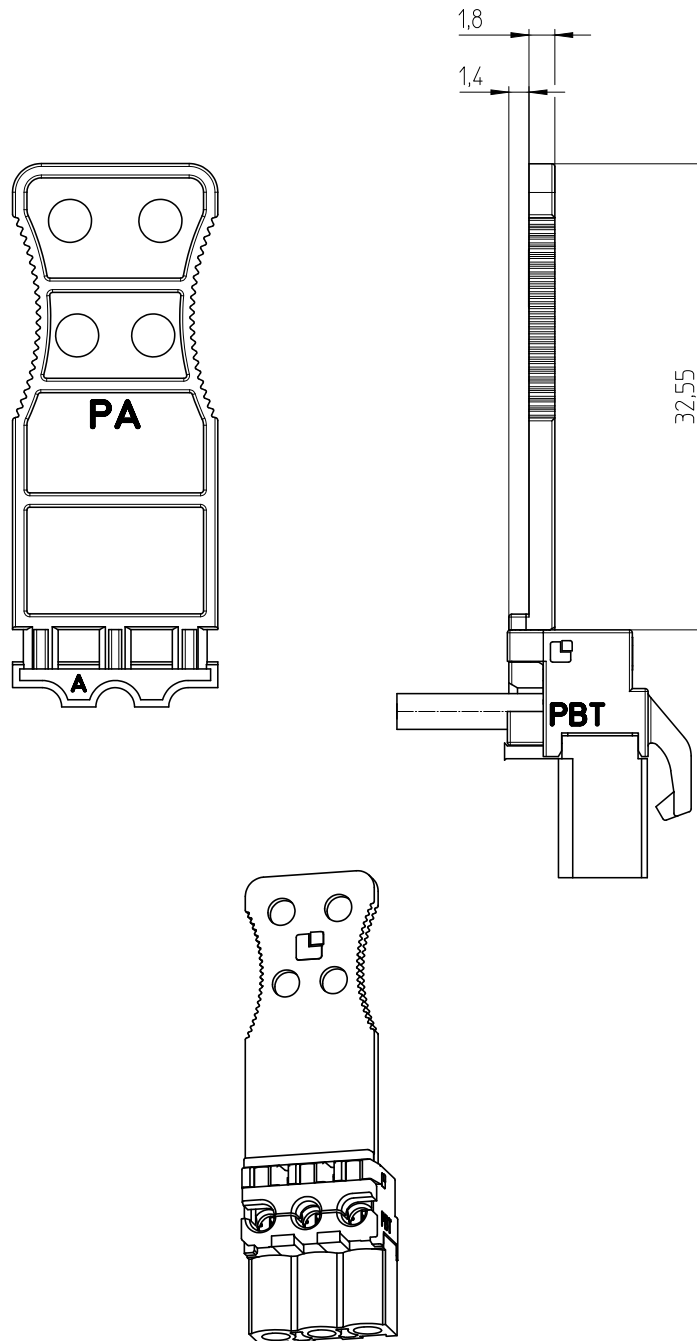
9. Accessories:

9.1. Handle latch for locking:

(only possible with wire exit 90°)

According to the following pictures the handle latch can be locked by hand or automatically to the locking hooks, which are provided with 180° wire exit for the strain relief of the cables.

For the connectors are appropriate handle latches available for 2-pole, polypole even and odd numbers of poles, which can be centrally locked on the connector.



10. 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 a binding commitment for the fulfillment of any characteristics.

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