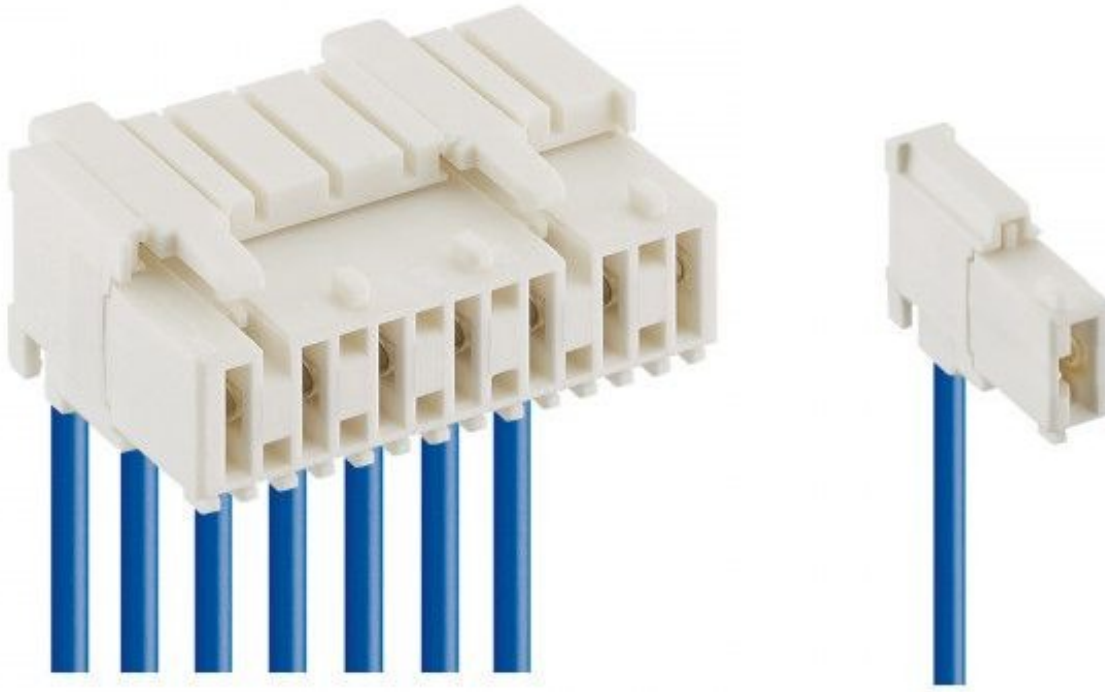
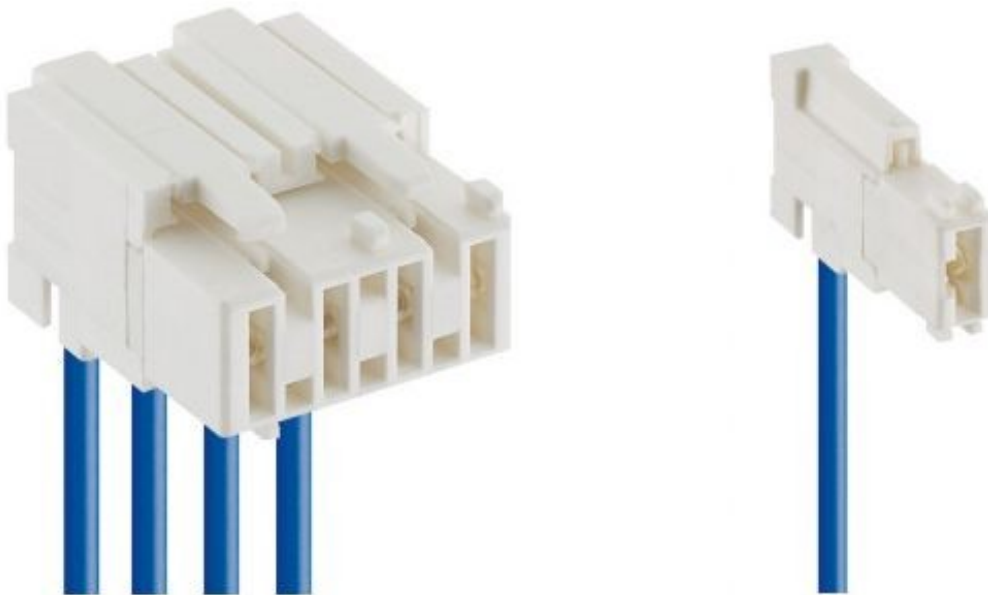


3623

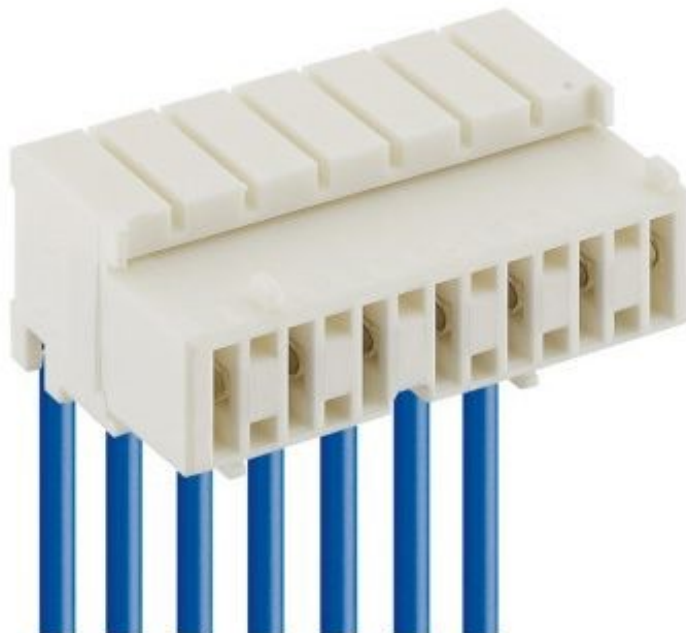


3625



	Date	Name	Edition	7	8	9	10	11	12
Author	04.11.02	hi	Name	jvoss	jvoss				
Checked	19.06.24	wie	Date	15.03.24	05.06.24				

3626



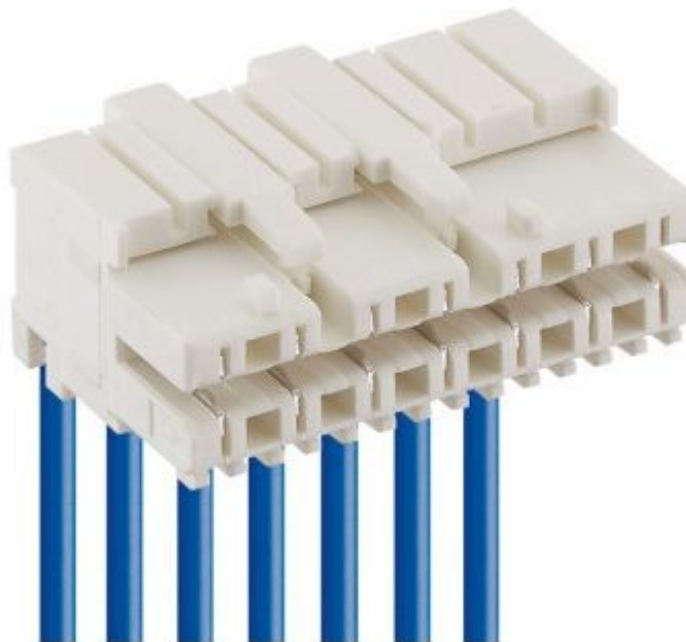
3627



3628-1



3633



LUMBERG CONNECT
GMBH

Im Gewerbepark 2
58579 Schalksmühle

Processing Instruction

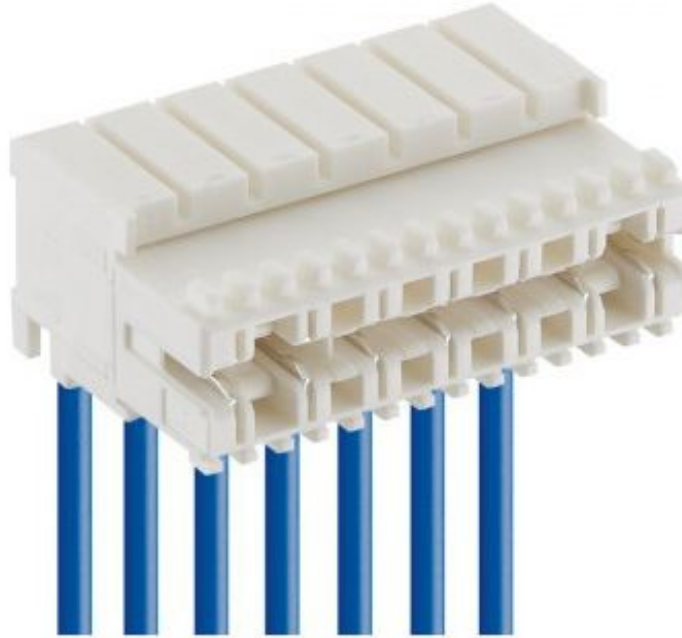
Lumberg 
passion for connections

**Connector
RAST 5**

36V01EN

Page 4 of 22

3636



Contents

1. Product description.....	7
1.1. Product types.....	7
Connector 3623.....	7
Connector 3626.....	7
Connector 3633.....	7
Connector 3636.....	8
Connector 3625.....	8
Connector 3627.....	8
Connector 3628-1.....	8
2. System features.....	9
3. Contact principle.....	11
3.1. Indirect mating on the contacts.....	11
3.2. Direct mating on the PCB.....	11
4. Cutting-off coding keys.....	12
4.1. Cutting blades.....	12
5. Application tooling and machines.....	13
6. Wire specification.....	14
6.1. Wire specifications cross section for connection 0,50...0,75 mm ²	14
6.2. Wire specifications cross section for connection 1,0...1,5 mm ²	14
7. Assembly.....	15
7.1. Connector feed.....	15
7.2. Termination head.....	16
7.3. Setting dimension of the termination head.....	16
7.4. Wire end position.....	18
7.5. Housing.....	18
7.6. Wire.....	19
8. Quality assurance.....	20
8.1. Quality features.....	20
8.2. Quality features / IDC.....	20
8.3. ID slot width.....	20
8.4. Symmetry of the ID slot.....	20
8.5. Wire quality.....	20
8.6. Wire end position.....	20
8.7. Retention force of the wire.....	21
8.8. Electrical testing.....	21
9. Storage.....	22

1. Product description

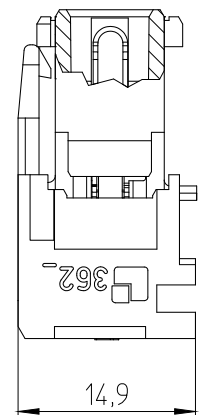
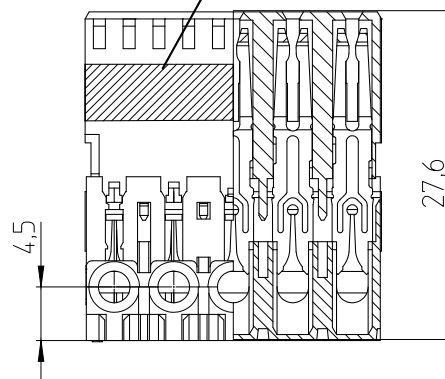
1.1. Product types

Connector for direct and indirect mating in ID technology, pitch 5,0 mm

Indirect Connector 3623

acc. to data sheet 3623...

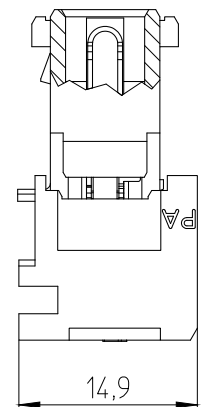
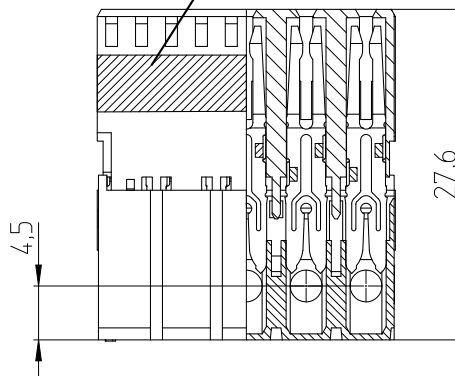
colour marking for insulation displacement termination S01



Indirect Connector 3626

acc. to data sheet 3626...

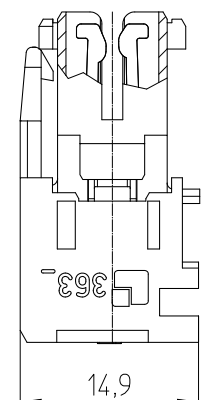
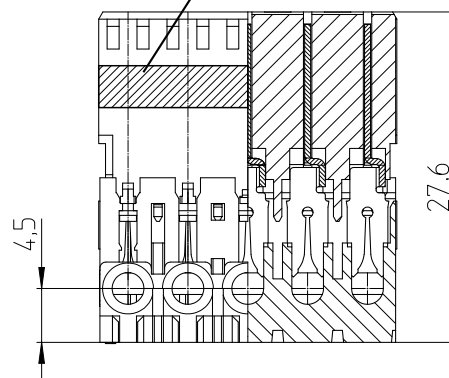
colour marking for insulation displacement termination S01



Direct Connector 3633

acc. to data sheet 3633...

colour marking for insulation displacement termination S01



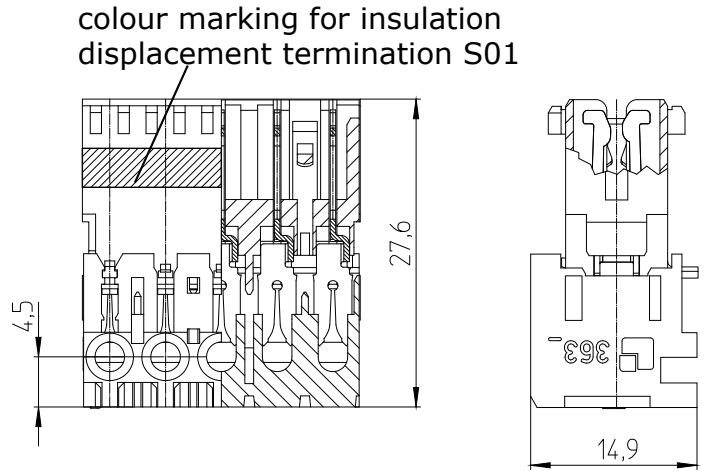
Connector RAST 5

36V01EN

Page 8 of 22

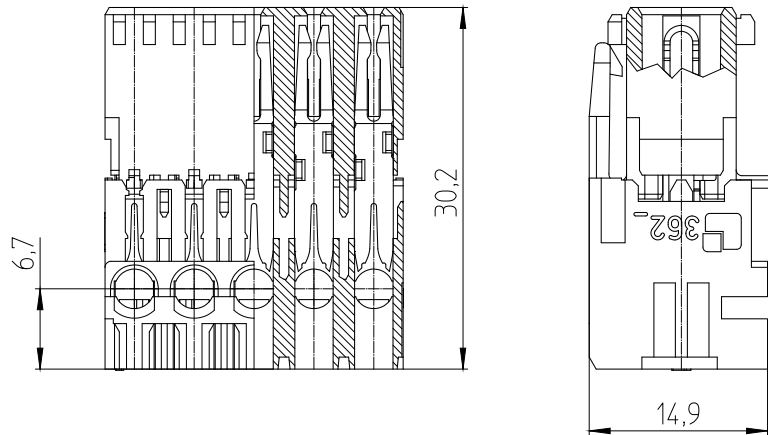
Direct Connector 3636

acc. to data sheet 3636...



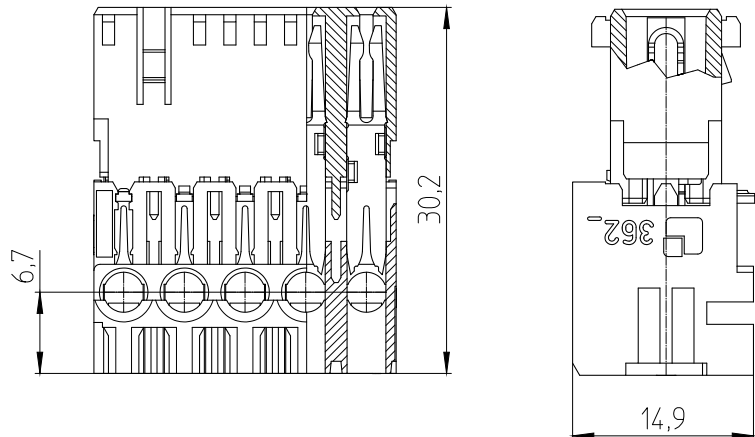
Indirect Connector 3625

acc. to data sheet 3625...



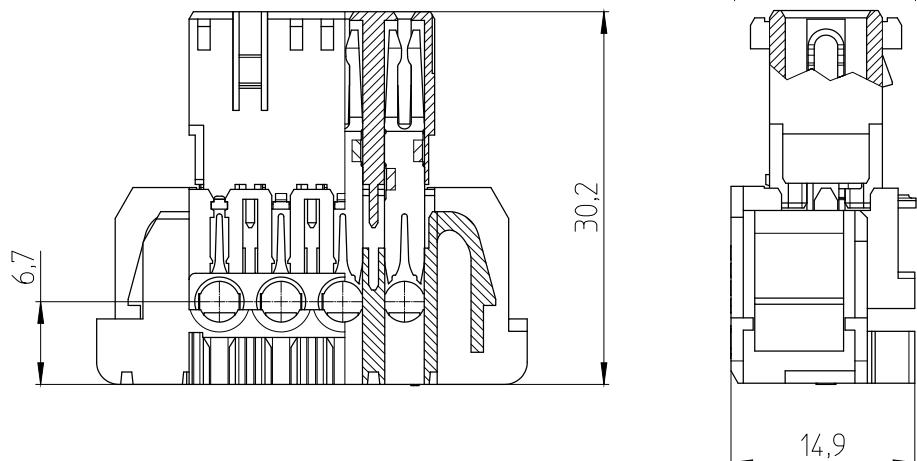
Indirect Connector 3627

acc. to data sheet 3627...



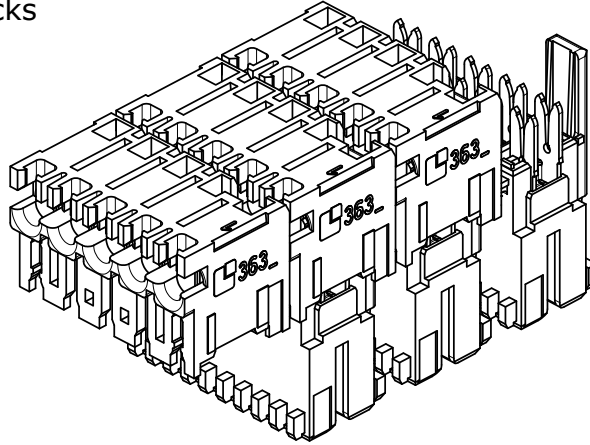
Indirect Connector 3628-1

acc. to data sheet 3628...

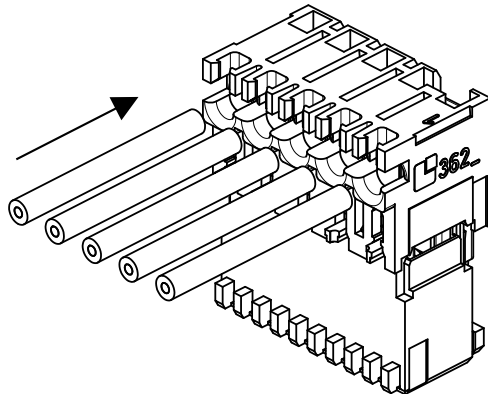


2. System features

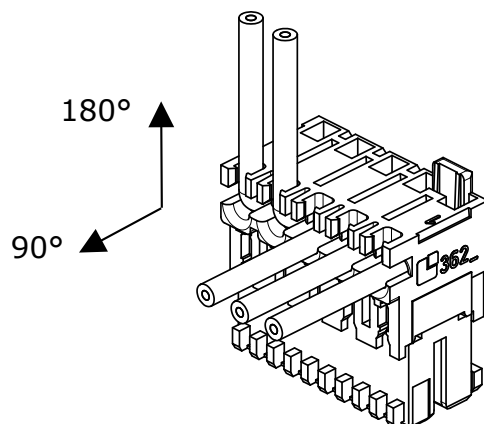
Two part body
Supplied in following stacks



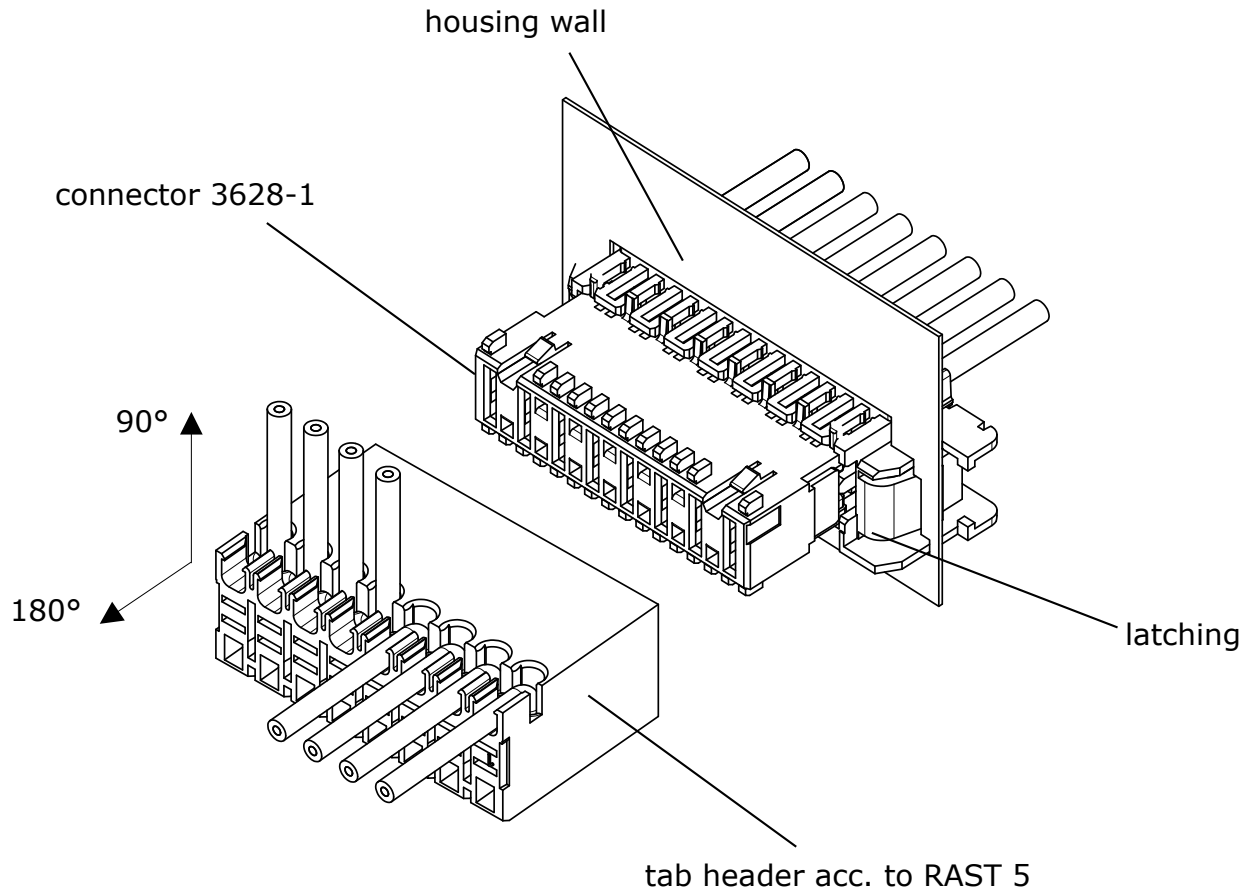
Wire termination



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

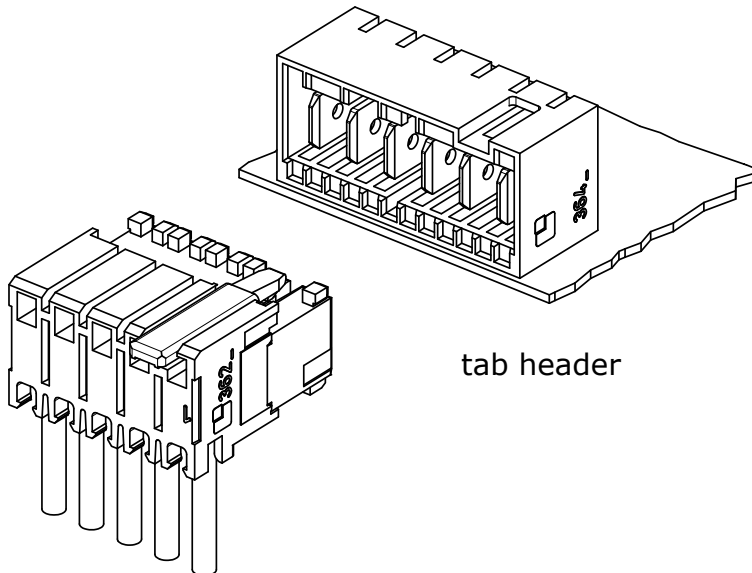


The connector 3628-1 requires a wire exit of 180°.



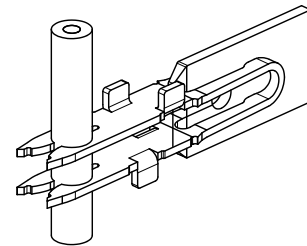
3. Contact principle

3.1. Indirect mating on the contacts



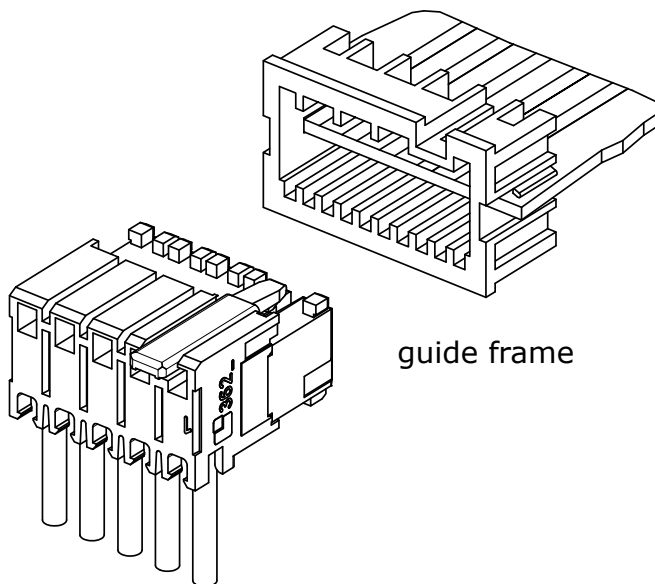
indirect
connector

flat tab. acc.
DIN 46244
4,8 x 0,8 and 6,3 x 0,8



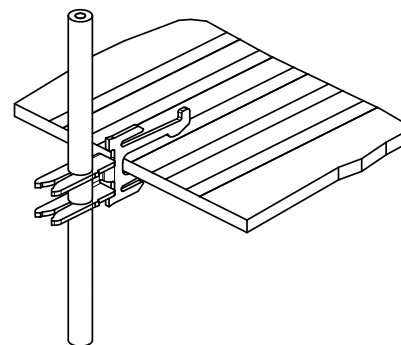
insulation displacement
connection acc. to
DIN EN 60352-4

3.2. Direct mating on the PCB



direct
connector

PCB 1,5 mm



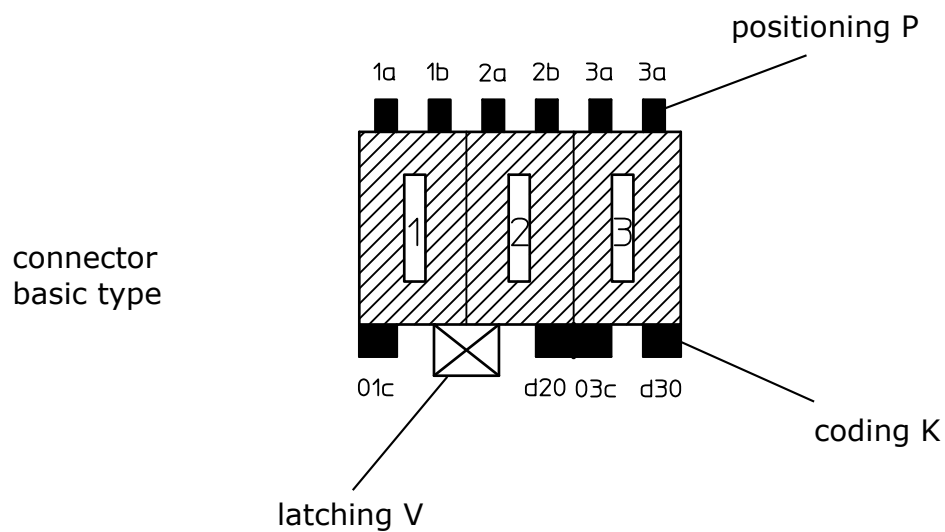
insulation displacement
connection acc. to
DIN EN 60352-4

4. Cutting-off coding keys

Connectors can be supplied to the machine as basic types with all coding keys in place. The machine can cut off the keys in any selected position. It is the responsibility of the customer to make a correct arrangement of the connectors, coding device and colour.

Caution !

Connectors, tab headers and guide frames are always shown in mating direction.

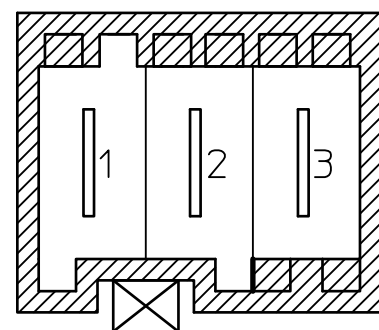
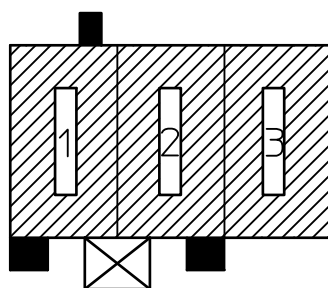


Example

Connector 03 - 01

Tab header 03 - 01

P = 1b
K = 1c d2
V = 1 / 2



4.1. Cutting blades

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

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

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

Manual processing device

For assembling connectors designed for small series production.

Pneumatic processing device

Pneumatically assisted processing device with manual wire feed and connector feed. Designed for small and middle 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. Wire specification

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

6.1. Wire specifications cross section for connection 0,50...0,75 mm²

Technical data sheet 908 03 stranded wire	= 0,50 mm ²
Technical data sheet 908 15 stranded wire	= 0,50 mm ²
Technical data sheet 908 06 stranded wire	= 0,75 mm ²
Technical data sheet 908 13 stranded wire	= 0,75 mm ²

6.2. Wire specifications cross section for connection 1,0...1,5 mm²

Technical data sheet 908 83 stranded wire	= 1,0 mm ²
Technical data sheet 909 479 stranded wire	= 1,0 mm ²
Technical data sheet 909 480 stranded wire	= 1,0 mm ²
Technical data sheet 908 12 stranded wire	= 1,5 mm ²
Technical data sheet 908 16 stranded wire	= 1,5 mm ²

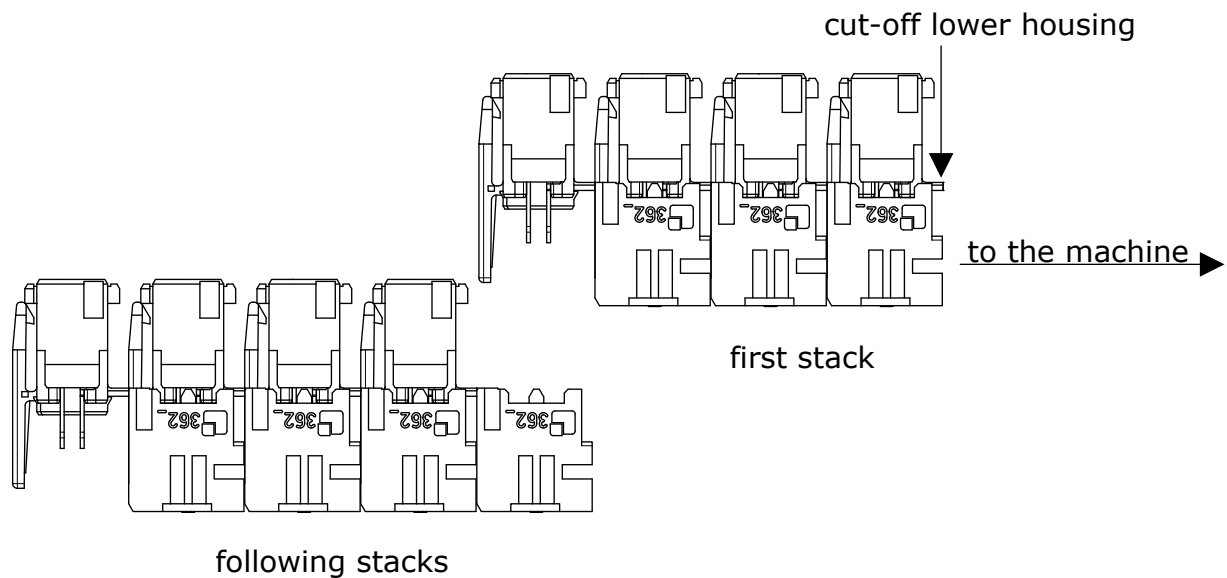
Other approved wire see Lumberg release list in the internet at www.lumberg.com

7. Assembly

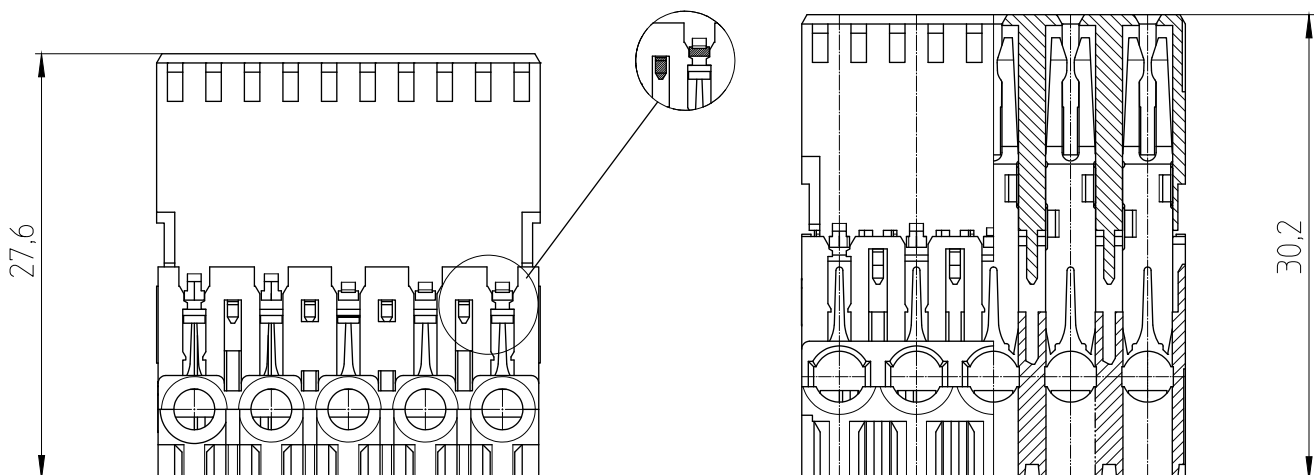
Connector and cross section should be adapted with each other acc. Lumberg specification (see technical data sheet).

7.1. Connector feed

The lower housing must be cut-off before the first stack of connectors is fed into the termination machine. 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 if locking features are visible in the upper window. The cutting-off of the single connector from the stack is done by the machine, the links will remain on the connector.

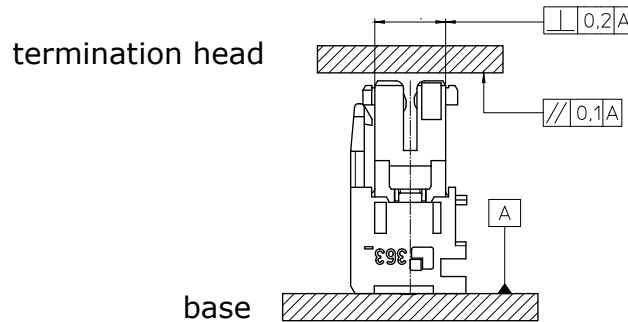


Indirect connector 3623; 3623...S01
Indirect connector 3626; 3626...S01
Direct connector 3633; 3633...S01
Direct connector 3636; 3636...S01

Indirect connector 3625
Indirect connector 3627
Indirect connector 3628-1

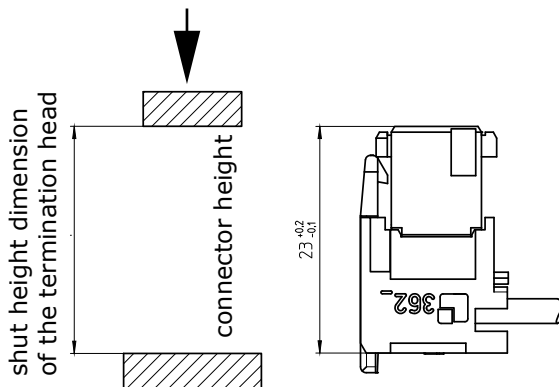
7.2. Termination head

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

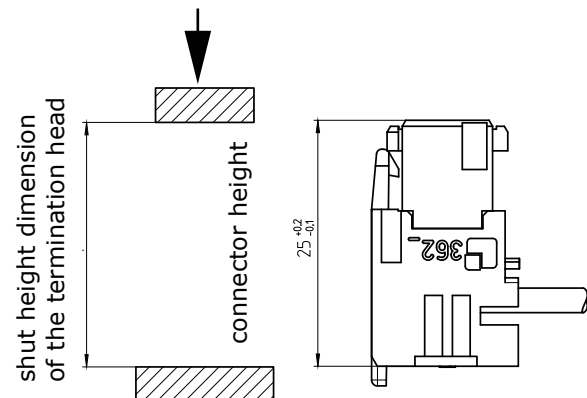


7.3. Setting dimension of the termination head

An important feature for the function of the connector is the connector height, measured after assembling. As a result of the restoring force of the connector housing and wires, the setting dimension of termination head must be slightly less than the connector height. This difference in height must be kept as small as possible in order to prevent damage to the component.

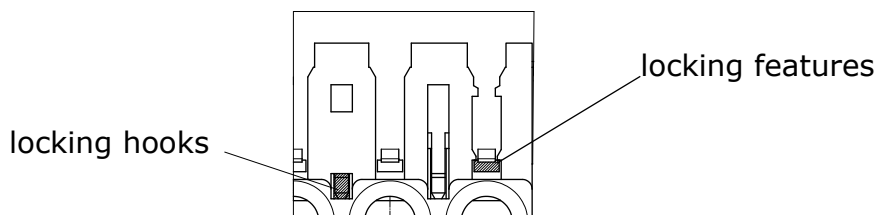


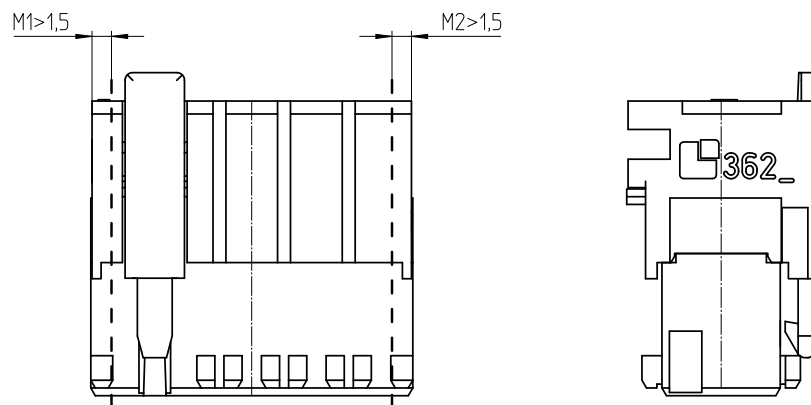
Indirect connector 3623; 3623...S01
Indirect connector 3626; 3626...S01
Direct connector 3633; 3633...S01
Direct connector 3636; 3636...S01



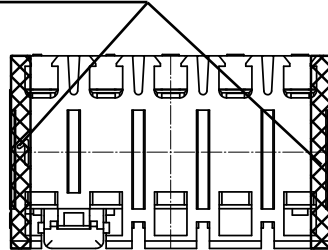
Indirect connector 3625
Indirect connector 3627
Indirect connector 3628-1

After termination the locking features are visible in the lower window and locked under the hooks.





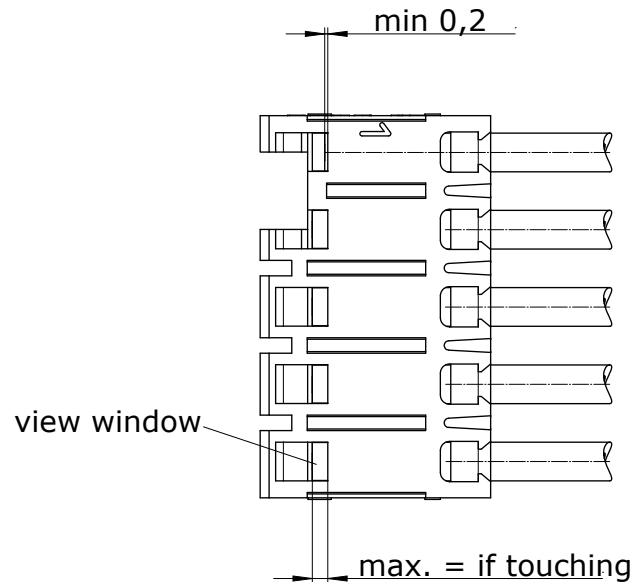
no measuring area



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.

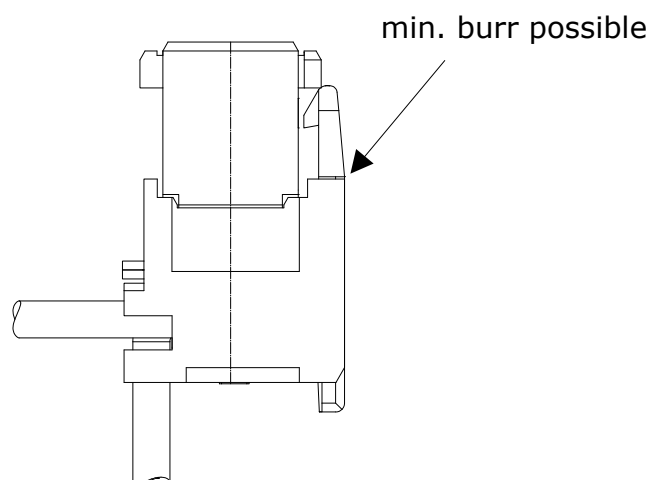
7.4. Wire end position

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



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).

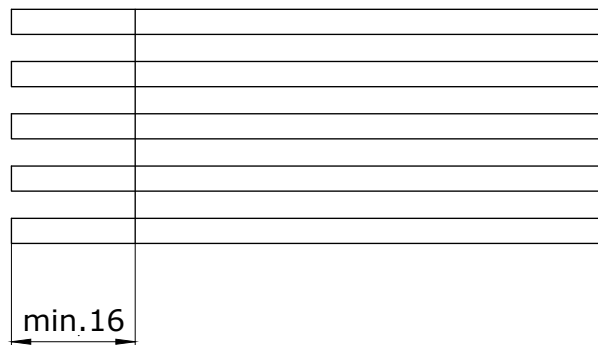


7.6. Wire

The wires 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.



Ribbon 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
- Wire quality
- Conductor insertion depth
- Wire end position
- Electrical testing

8.3. ID slot width

Lumberg guarantees correct ID slot.

8.4. Symmetry of the ID slot

Symmetry of the ID slot, tolerance ± 0.1 , is guaranteed by the body.

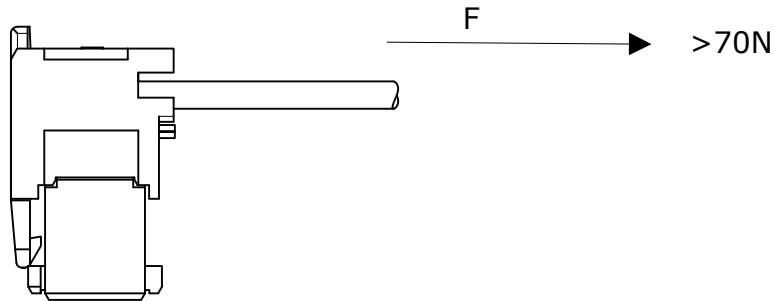
8.5. Wire quality

The wire must meet Lumberg specification.

8.6. 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.


8.7. Retention force of the wire



The stated value for the wire pull-out force is a typical value, established during a test with a standard 0,75 mm² wire. All values were determined under laboratory conditions and serve as a reference.

8.8. 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.

<p>LUMBERG CONNECT GMBH</p> <p>Im Gewerbepark 2 58579 Schalksmühle</p>	<h1>Processing Instruction</h1>	<p>Lumberg  passion for connections</p>
	<p>Connector RAST 5</p>	<p>36V01EN</p> <p>Page 22 of 22</p>

9. 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.