KREN / KRENG

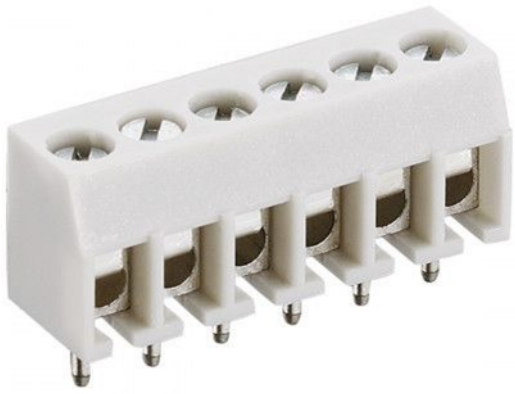
KRE / KREG

KRESS / KRESS 03/02 - 07/04

KRESW

KRESL / KRESL 03/02 - 05/03

KRM / KRMC

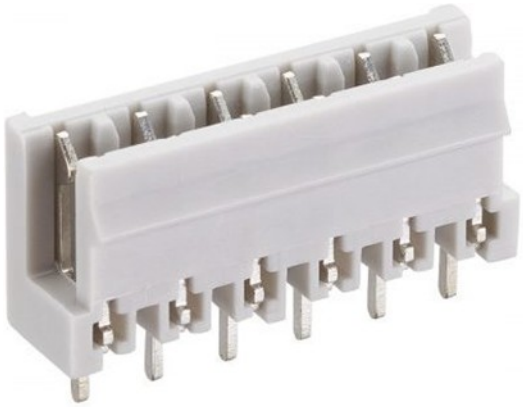


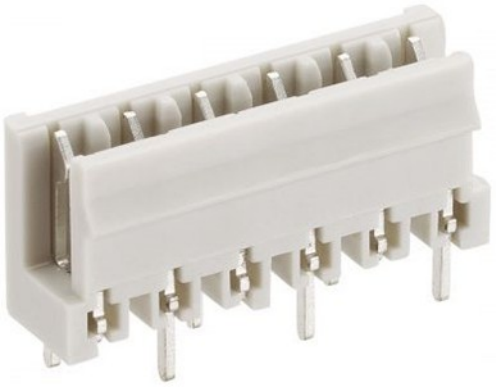
6320

6322

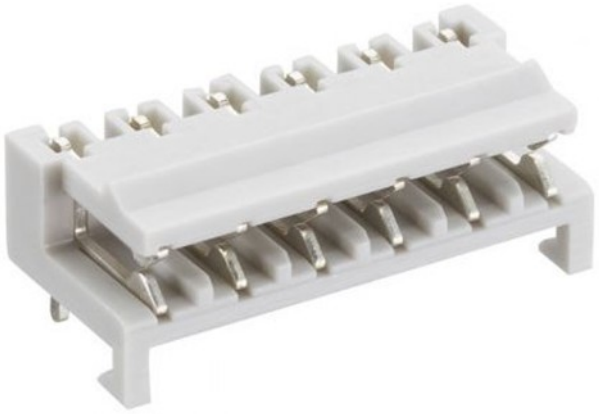
6324

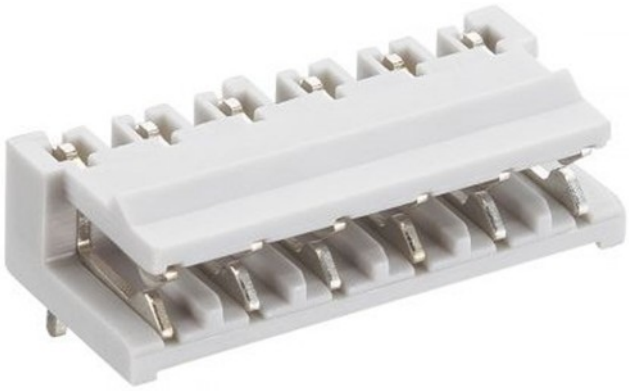
KB / KBQ





KBW / KBWO





KS / KSC

Alteration Description

Edition	Alteration carried out

Contents

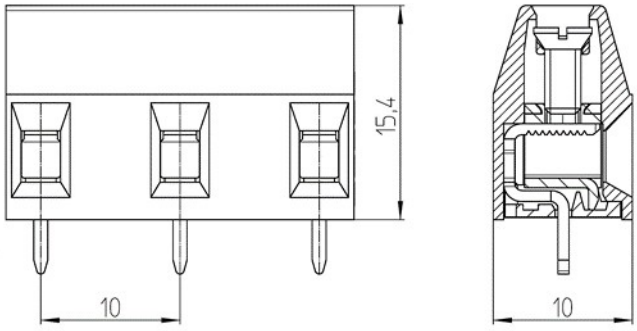
1. Product description

1.1. Product types

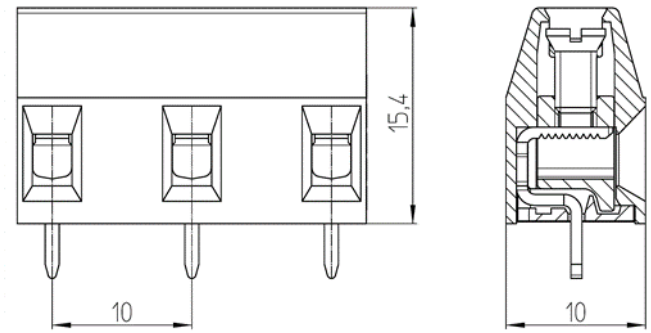
KREN / KRENG

Screw terminal block for mains supply, with lift clamp with protection against misplacing, upright version

KREN acc. to data sheet 610 01
screw size M2,6



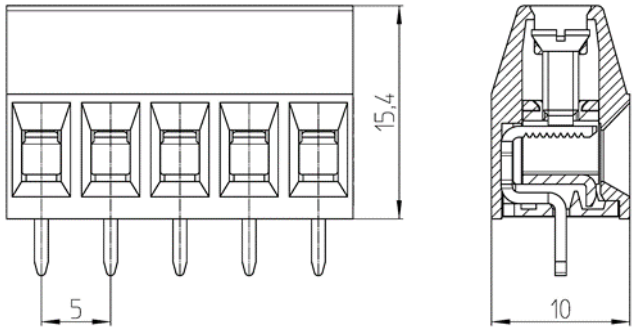
KRENG acc. to data sheet 610 02
screw size M3



KRE / KREG

Screw terminal block, with lift clamp, with protection against misplacing, upright version, consecutive placement without loss of pitch

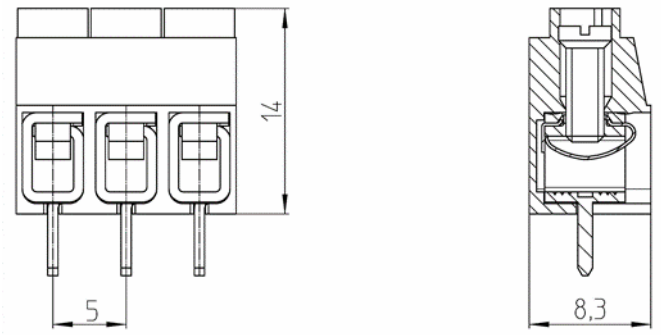
KRE acc. to data sheet 614 01
screw size M2,6



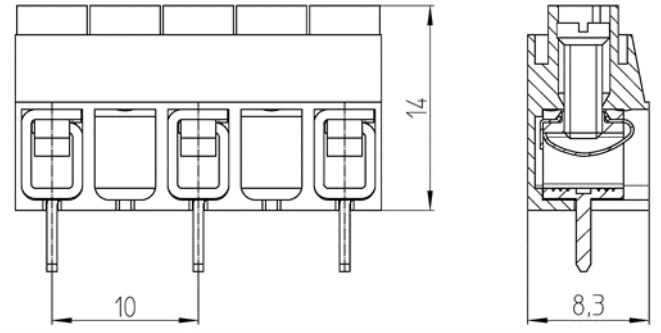
KRESS / KRESS 03/02 – 07/04

Screw terminal block, clamp with wire protector, upright version, consecutive placement without loss of pitch

KRESS acc. to data sheet 6200 01
screw size M2,6



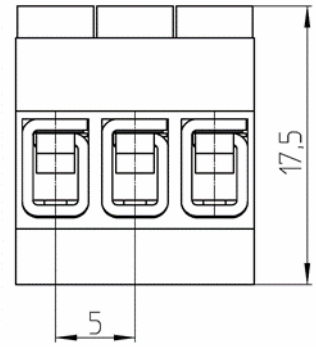
KRESS 03/02 – 07/04 acc. to data sheet 6201 01
screw size M2,6

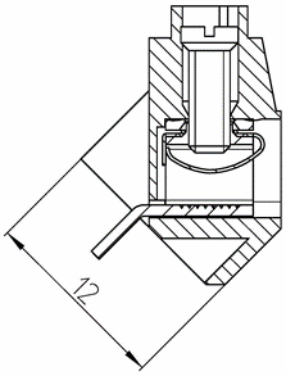


KRESW

Screw terminal block, clamp with wire protector, 45° angular version, with test hole, consecutive placement without loss of pitch

KRESW acc. to data sheet 6240 01
screw size M2,6

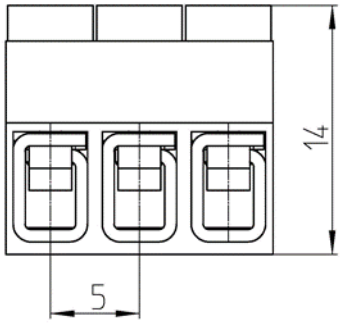


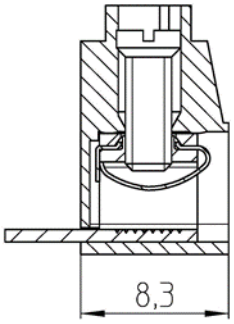


KRESL / KRESL 03/02 – 05/03

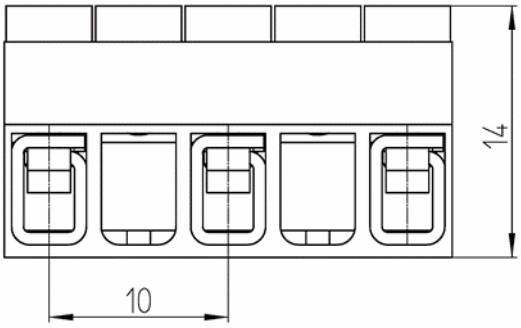
Screw terminal block, clamp with wire protector, 90° horizontal version, with test hole, consecutive placement without loss of pitch

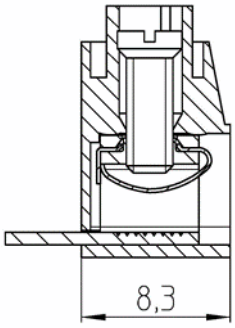
KRESL acc. to data sheet 6260 01
screw size M2,6





KRESL 03/02 – 05/03 acc. to data sheet 6261 01
screw size M2,6

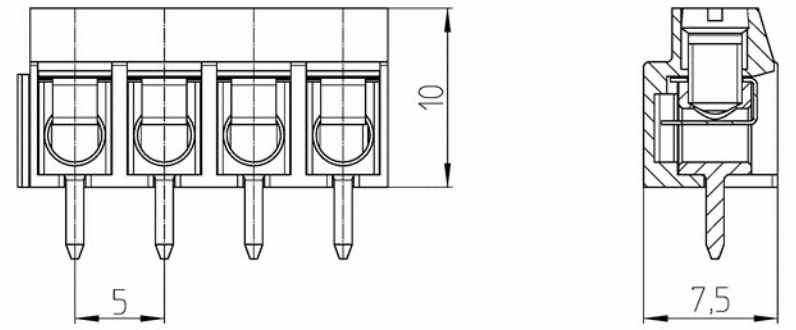




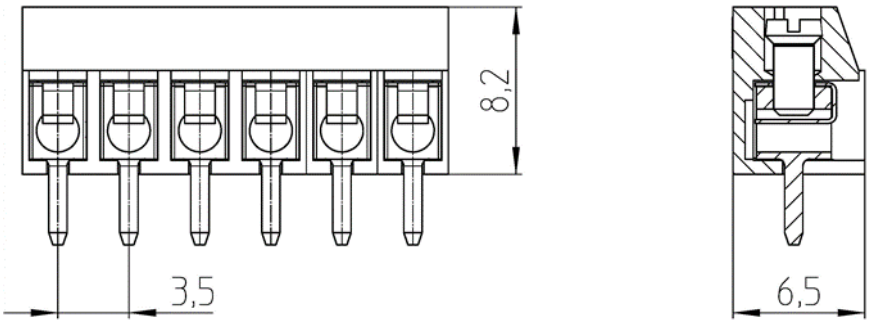
KRM / KRMC

Screw terminal block, clamp with wire protection, upright version, consecutive placement without loss of pitch

KRM acc. to data sheet 630 01
screw size M3



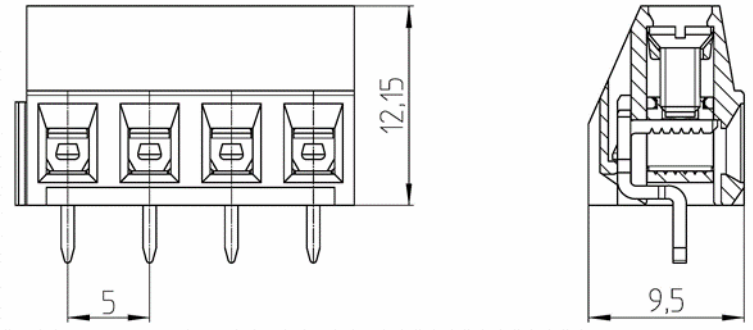
KRMC acc. to data sheet 6361 01
screw size M2



6320

Miniature-Screw terminal block, with lift clamp,without protector, upright version, with test hole, consecutive placement without loss of pitch by dovetail guide

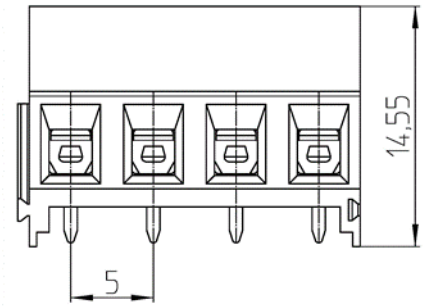
6320 acc. to data sheet 6320 01
screw size M2,5

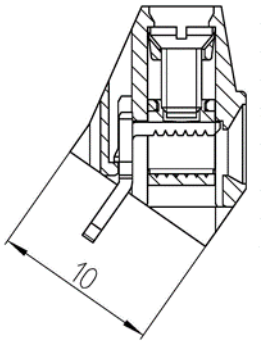


6322

Miniature-Screw terminal block, with lift clamp, without protector, 35° angular version, with test hole, consecutive placement without loss of pitch by dovetail guide

6322 acc. to data sheet 6322 01
screw size M2,5

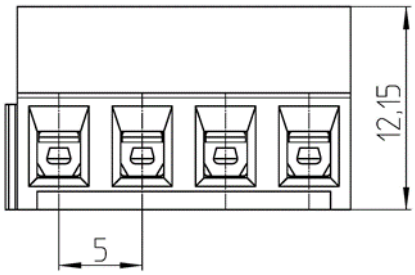


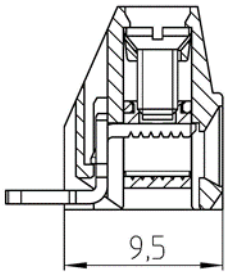


6324

Miniature-Screw terminal block, with lift clamp without protector, right angle version , with test hole, consecutive placement without loss of pitch by dovetail guide

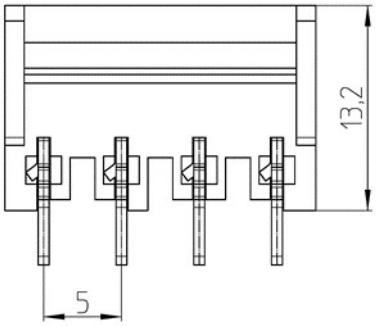
6324 acc. to data sheet 6324 01
screw size M2,5

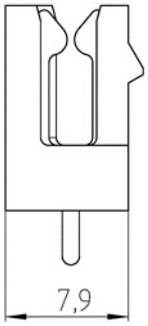




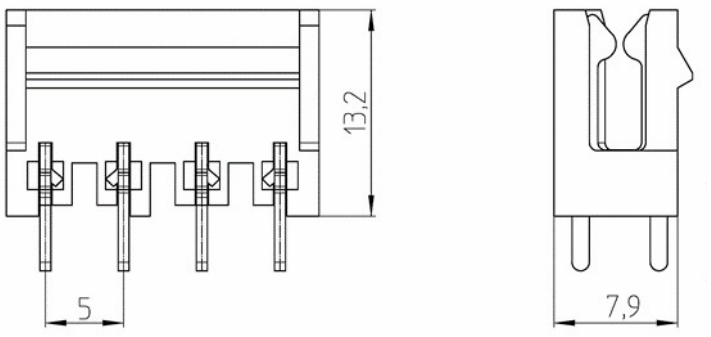
KB / KBQ

Socket board, upright, solder pins single row staggered, consecutive placement without loss of pitch
KB acc. to data sheet 6500 01





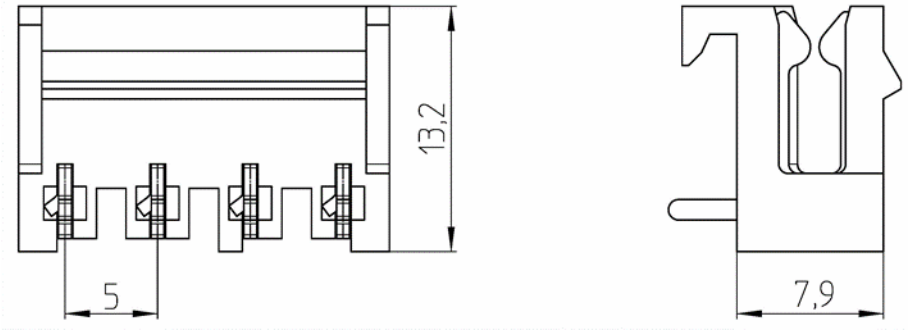
Socket board, upright, solder pins dual row staggered, consecutive placement without loss of pitch
KBQ acc. to data sheet 6510 01



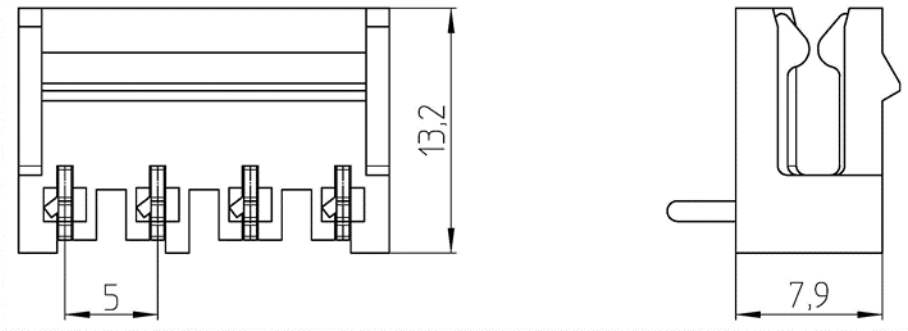
KBW / KBWO

Socket board, angular, solder pins single row, with retaining hooks for printed circuit board edge, consecutive placement without loss of pitch

KBW acc. to data sheet 6520 01



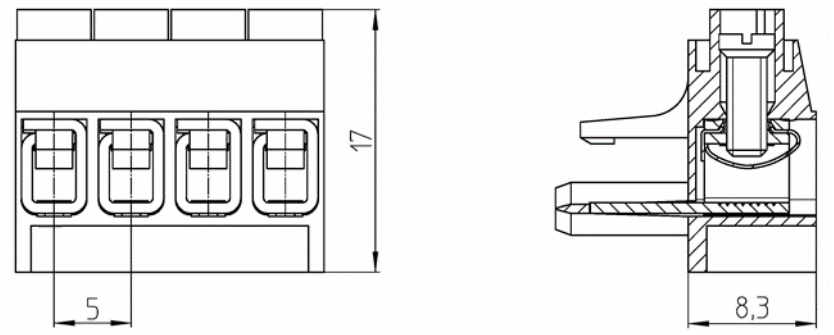
KBWO acc. to data sheet 6530 01



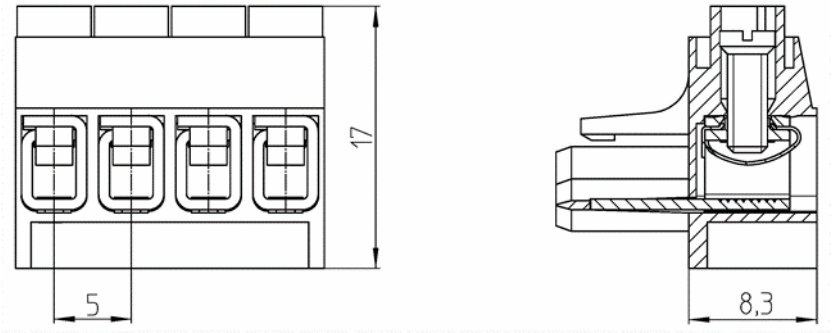
KS / KSC

Pluggable screw terminal block, clamp with wire protection, consecutive placement without loss of pitch

KS acc. to data sheet 6550 01
screw size M2,6
without side walls

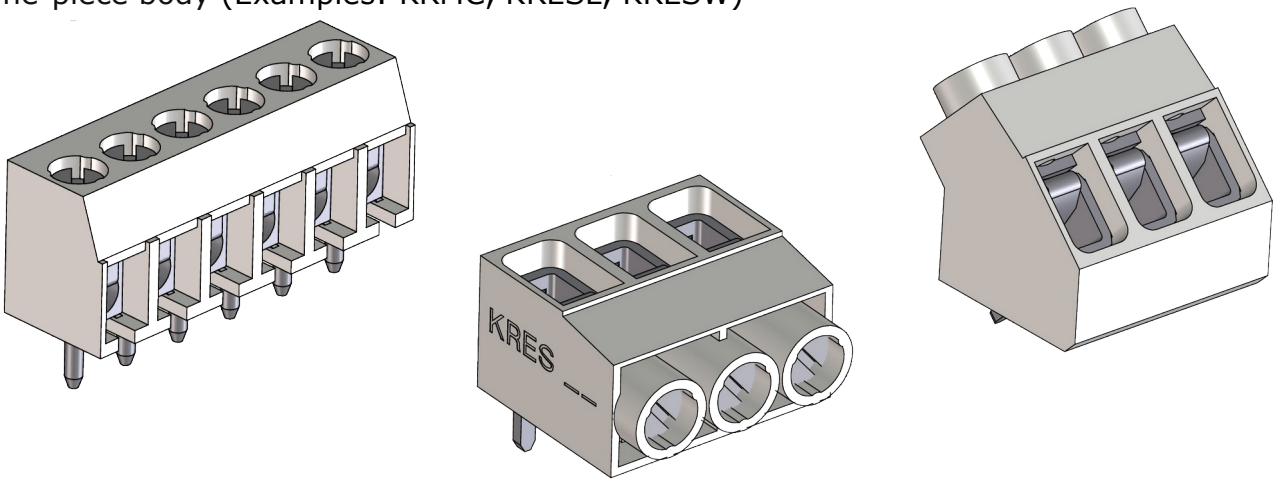


KSC acc. to data sheet 6550 02
screw size M2,6
with side walls

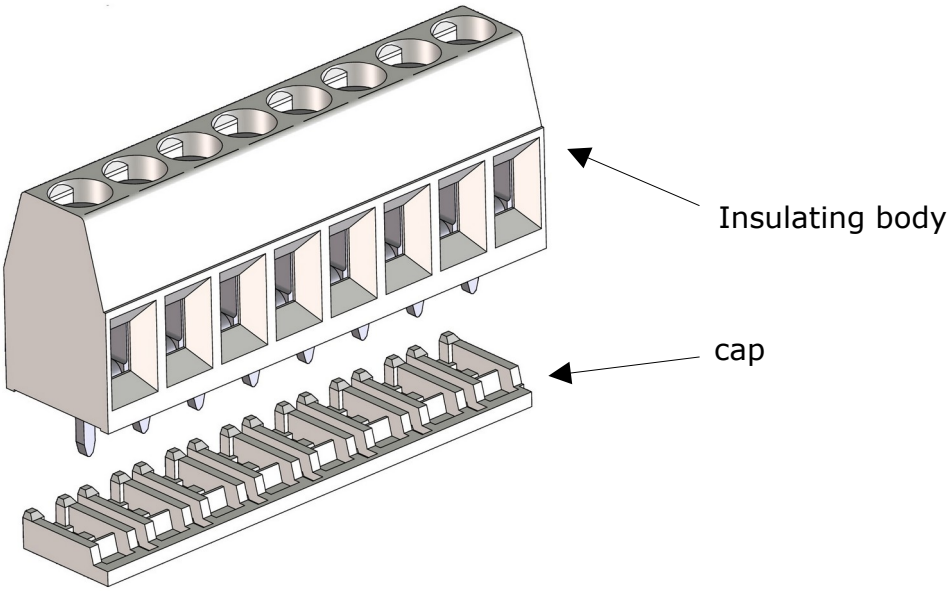


2. System features

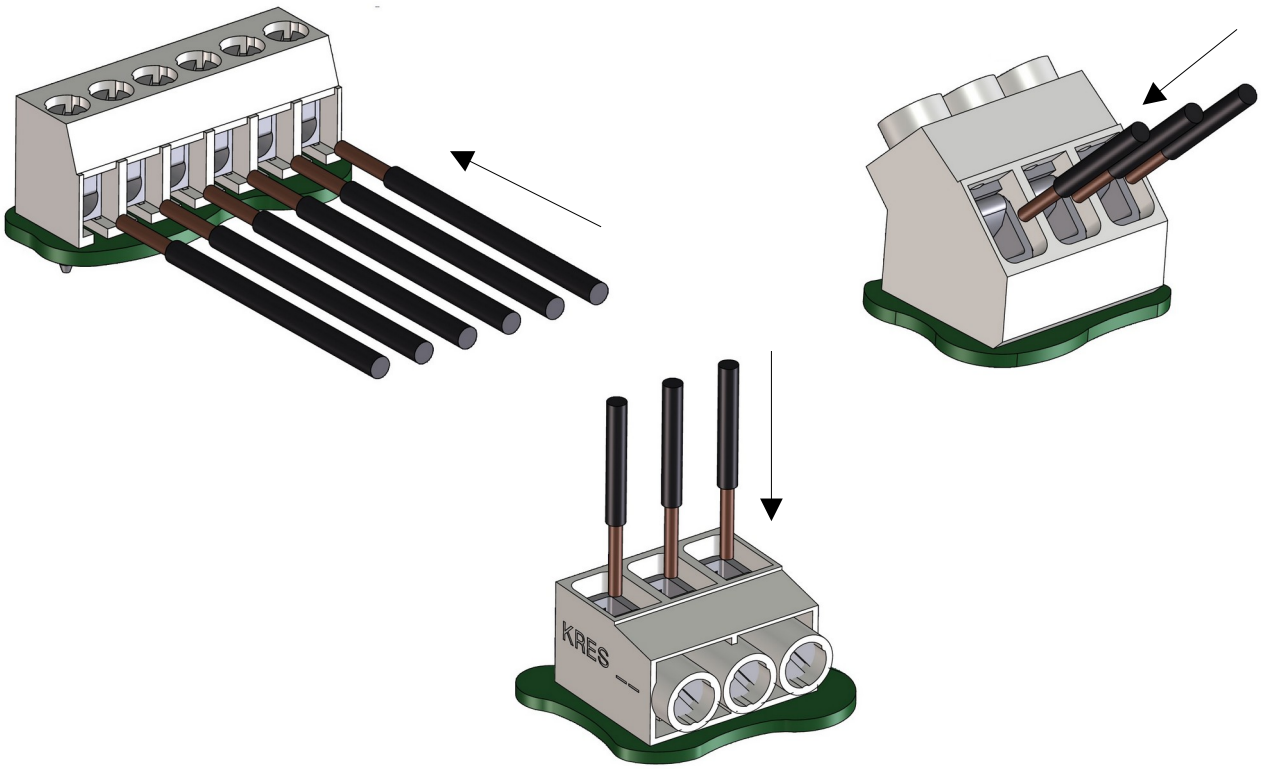
One-piece body (Examples: KRMC, KRESL, KRESW)



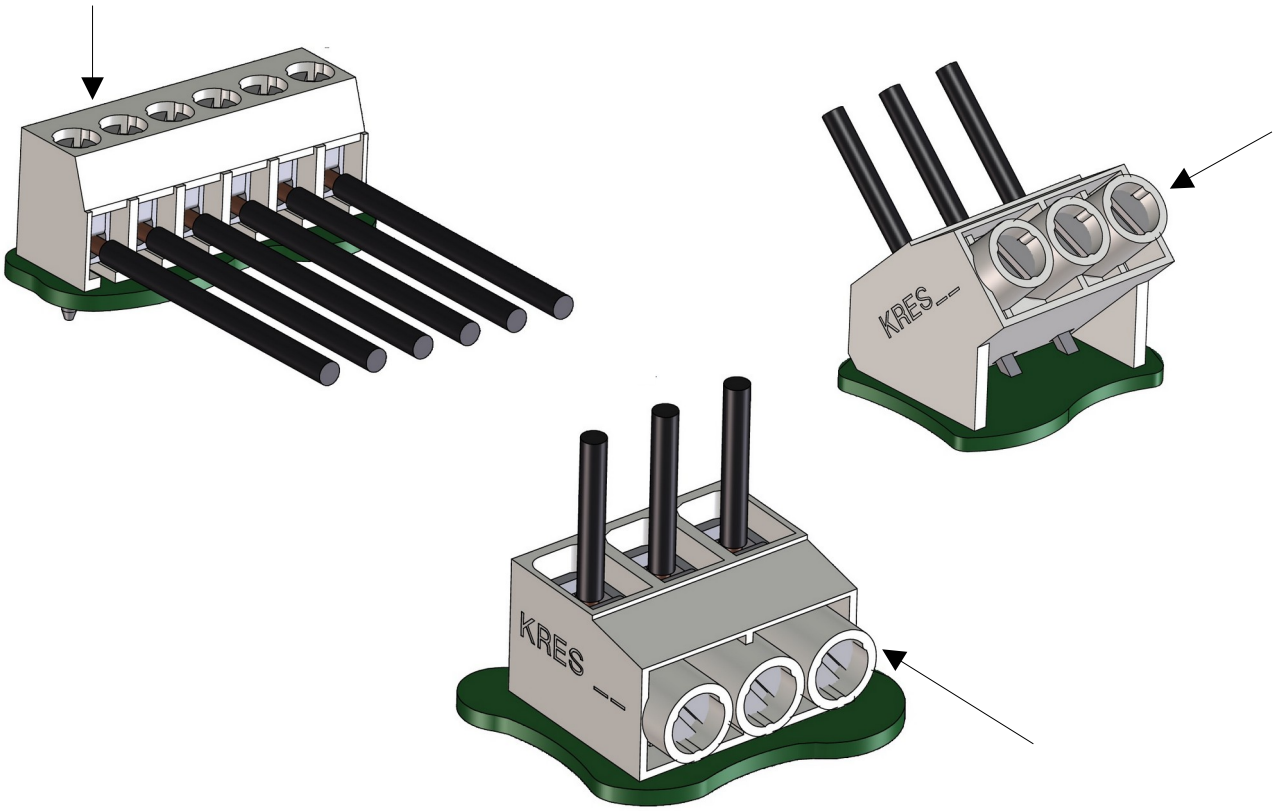
Two-party body (Example: KRE)



Wire termination (Examples KRMC, KRESL, KRESW)

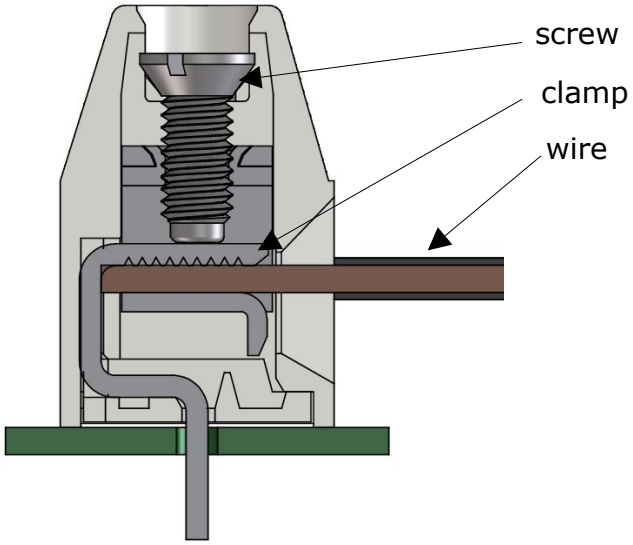


The clamping connection is achieved by tightening the screws
(Examples: KRMC, KRESL, KRESW)



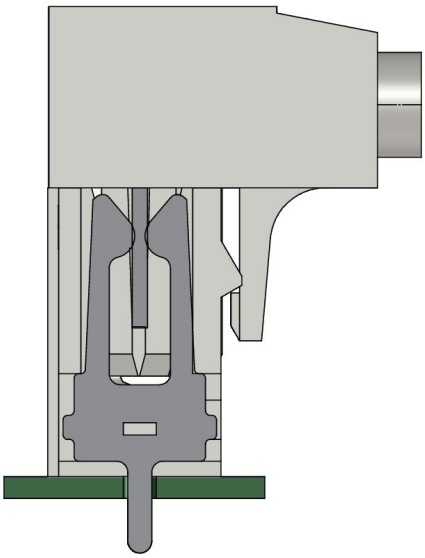
3. Contact principle

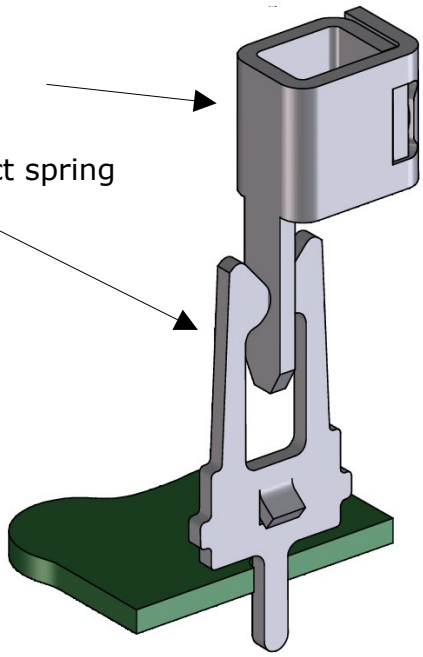
3.1. Screw terminal connection



Example of a contact connection KRE

3.2. Plug connection





Example of a contact connection KB with KSC

4. Processing

The pole count, pin-out assignment and PCB layout must all match.

4.1. Soldering profile

The soldering profiles are available on our website at
www.lumberg.com/wp-content/uploads/Loetprofile_DE-EN.pdf

4.2. Delivery

Screw connection terminal blocks are typically delivered in bulk.

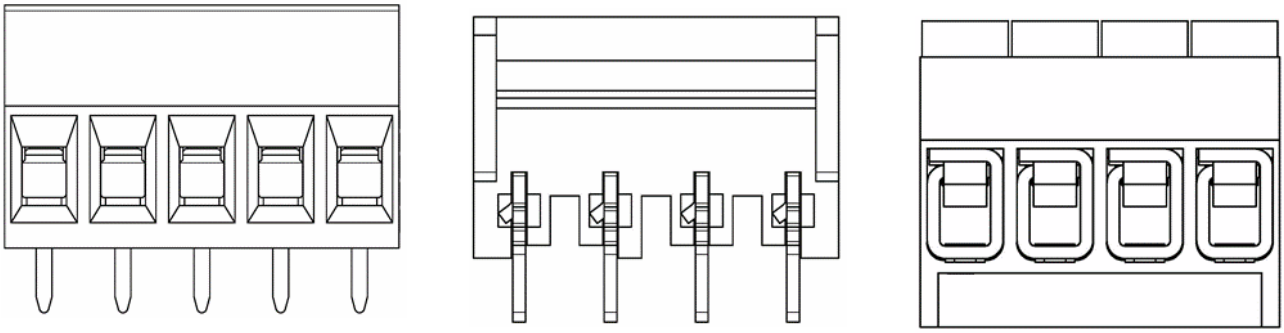
4.3. Hold-down plate

We recommend using a hold-down plate with the components so that they do not rise up. When using lubricants and friction-reducing agents, no residues (contaminants) – particulary on the contacts – are permitted on the screw terminal blocks.

4.4. Clinching

We recommend in principle not to clinch our contacts. If, in case of disregard, clinching is executed it is at the processing organization’s responsibility to ensure correct function of the components.

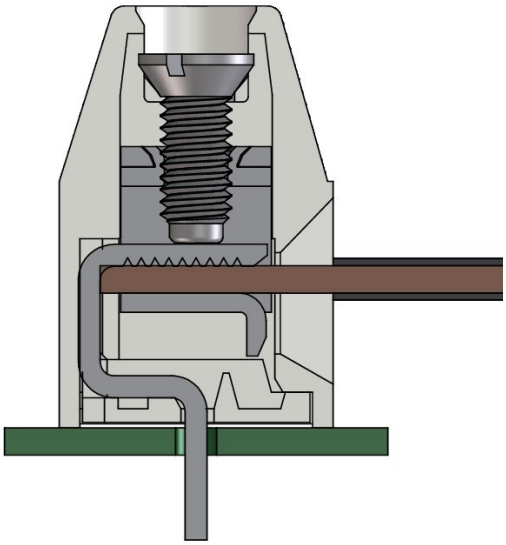
4.5. Housing



(Examples: KRE, KB, KSC)
The housing should not show any visible signs of damage following the assembly or soldering process (using a visual inspection).
Ensure that the contacts are seated correctly in the housing (e.g., by visual inspection).
KB / KBQ / KBW / KBWO / KS / KSC: The mating function must be guaranteed (functional test).

4.6. Wire end position

Proper wire positioning ensures secure contact between the clamping body and the conductor. Make sure the wire is fully inserted. Follow the stripping length specified in point 5 to ensure that the stripped conductor does not protrude from the housing. For stranded wires, check that all strands are inserted. Twisting the strands is not permitted.



5. Wire specification

The wire specification must be kept. Any deviation must be discussed and approved by Lumberg. For further information on connectable wires, please refer to the datasheets.

5.1. Wire specifications for type KREN, KRENG

Solid conductor:	0,2...4,0 mm²
Stranded conductor, fine-wire:	0,2...2,5 mm²
Stranded conductor, fine-wire with furrule:	0,2...2,5 mm²
Stripping length:	7,0 ±0,5 mm

5.2. Wire specifications for type KRE und KREG

Solid conductor:	0,2...4,0 mm²
Stranded conductor, fine-wire:	0,2...4,0 mm²
Stranded conductor, fine-wire with furrule:	0,2...2,5 mm²
Stranded conductor, fine-wire with furrule with plastic collar:	0,2...2,5 mm²
Stripping length:	7,0 ±0,5 mm

5.3. Wire specifications for type KRESS..., KRESW..., KRESL...

Solid conductor:	0,2...2,5 mm²
Stranded conductor, fine-wire:	0,2...2,5 mm²
Stranded conductor, fine-wire with furrule:	0,2...2,5 mm²
Stranded conductor, fine-wire with furrule with plastic collar:	0,2...2,5 mm²
Stripping length:	7,0 ±0,5 mm

5.4. Wire specifications for type KRM, 6320, 6322, 6324

Solid conductor:	0,2...2,5 mm²
Stranded conductor, fine-wire:	0,2...2,5 mm²
Stranded conductor, fine-wire with furrule:	0,2...1,5 mm²
Stranded conductor, fine-wire with furrule with plastic collar:	0,2...1,5 mm²
Stripping length:	7,0 ±0,5 mm

5.5. Wire specifications for type KRMC

Solid conductor:	0,05...1,5 mm²
Stranded conductor, fine-wire:	0,05...1,5 mm²
Stranded conductor, fine-wire with furrule:	0,2...1,5 mm²
Stranded conductor, fine-wire with furrule with plastic collar:	0,2...1,5 mm²
Stripping length:	5,0 ±0,5 mm

5.6. Wire specifications for type KS, KSC

Solid conductor:	0,2...4,0 mm²
Stranded conductor, fine-wire:	0,2...2,5 mm²
Stranded conductor, fine-wire with furrule:	0,2...1,5 mm²
Stranded conductor, fine-wire with furrule with plastic collar:	0,2...1,5 mm²
Stripping length:	7,0 ±0,5 mm

6. 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.

6.1. Quality features

The following quality features must be taken into consideration:

- Wire quality
- Stripping
- Wire end position
- Tightening torque
- Contact insertion depth
- Electrical testing

6.2. Wire quality

The wire must meet Lumberg specification acc. to point 5.
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.

6.3. Stripping

The user must ensure that the individual strands are not damaged during the stripping process. The stripping lengths described in section 5 must be observed. A tolerance of ±0.5 mm must be maintained.

6.4. Wire end position

The wire protrusion acc. to point 4.6 must be kept. A deeper offset of the wire inwards the housing leads to an incorrect connection.

6.5. Tightening torque

Tightening torque M2:	0,3 Nm
Tightening torque M2,5:	0,4 Nm
Tightening torque M2,6:	0,4 Nm
Tightening torque M3:	0,5 Nm

6.6. 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.

7. 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.