

45 4580 01 MP T0,8

High-current contact elements



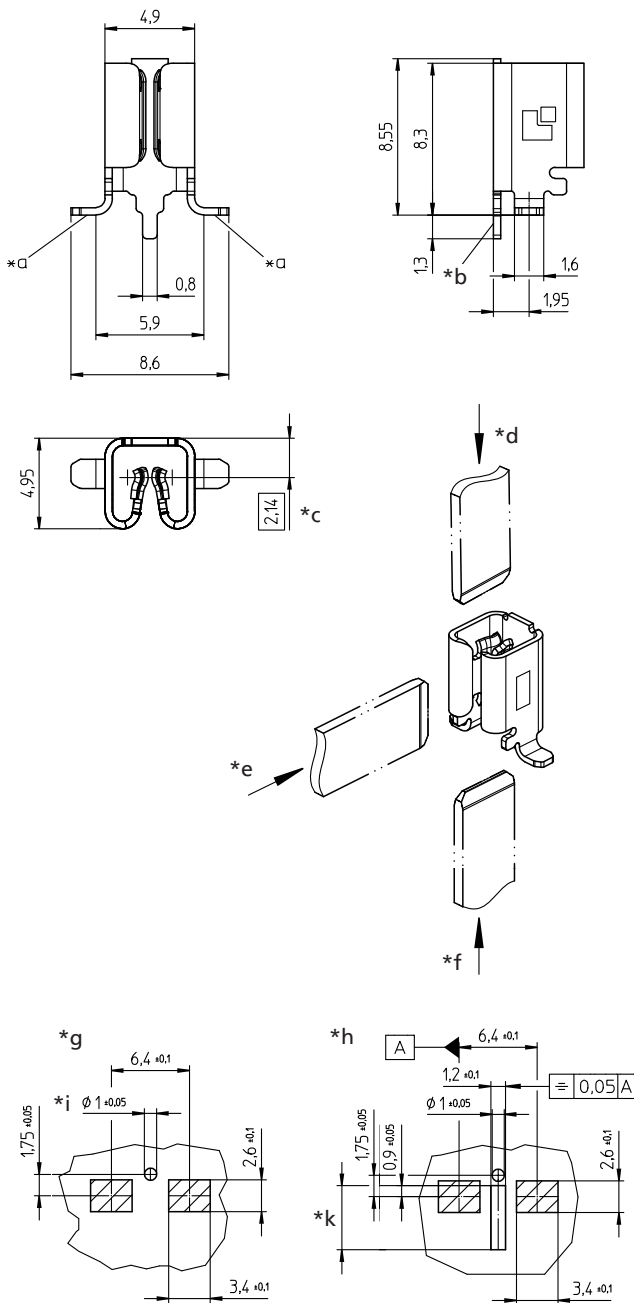
High-current contact bush with positioning peg, in surface mount technology (SMT), mateable from top, bottom or lateral direction, for tab contacts 0.8 mm, for printed circuit boards or busbars

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Approvals: **LV215**

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**Environmental conditions**

Temperature range -40 °C/+120 °C

**Materials**

Contact CuCr alloy, tin-plated

**Mechanical data**

Mating with tab contact 2.8–6.3 mm x 0.8 mm (0.5 mm in preparation)  
applicable for reflow soldering on printed circuit board  
applicable for laser welding on a busbar or lead frame

Mating cycles 5

Insertion force tab contact 0.8 mm  
32 N ± 15 N – top entry  
18 N ± 10 N – lateral entry  
32 N ± 15 N – bottom entry<sup>1</sup>

Withdrawal force tab contact 0.8 mm  
32 N ± 10 N – top entry  
15 N ± 10 N – lateral entry  
32 N ± 10 N – bottom entry<sup>1</sup>

<sup>1</sup> measured with a tin-plated test tab

**Electrical data (at T<sub>amb</sub> 20 °C)**

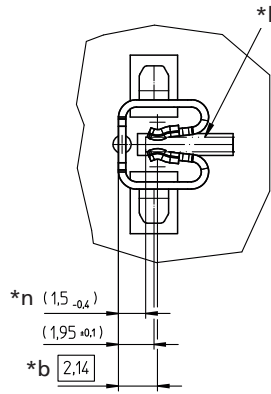
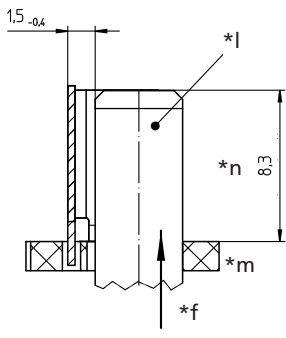
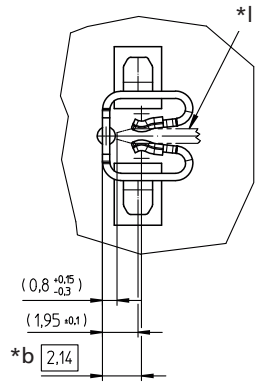
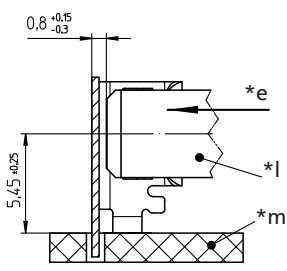
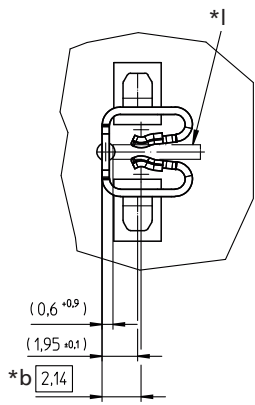
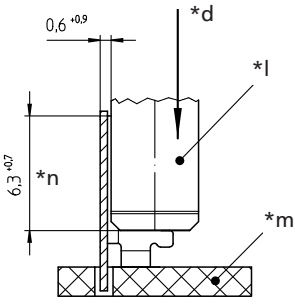
Contact resistance < 1 mΩ

Rated current ≤ 56 A<sup>1</sup>

<sup>1</sup> depending on the connection to the printed circuit board/busbar, installation situation and heat dissipation

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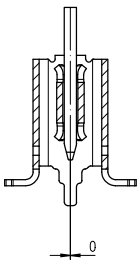
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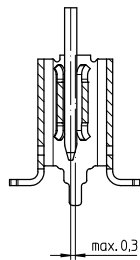
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Assembly tolerances for top and bottom entry  
 - tab dimensions 4.8 mm x 0.8 mm x length 8 mm  
 - larger assembly tolerances possible for lengths > 15 mm

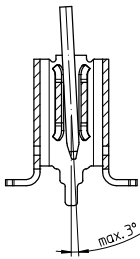
Montagetoleranzen für Steckrichtung von oben und unten  
 - Messerkontaktmaße 4,8 mm x 0,8 mm x Länge 8 mm  
 - bei Länge > 15 mm größere Montagetoleranzen möglich



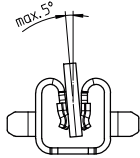
typical mating  
 typische Kontaktierung



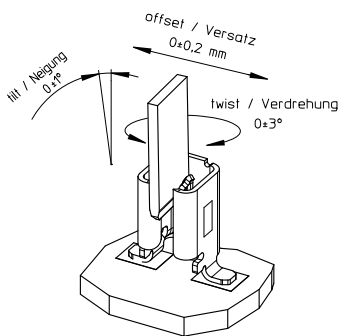
permissible lateral offset  
 zulässiger seitlicher Versatz



permissible tilt  
 zulässige Neigung



permissible twist  
 zulässige Verdrehung



permissible combined tolerances  
 zulässige kombinierte Toleranzen

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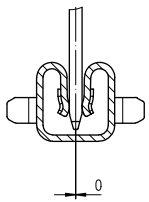
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Assembly tolerances for lateral entry

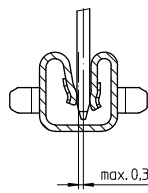
- tab dimensions 4.8 mm x 0.8 mm x length 8 mm
- larger assembly tolerances possible for lengths > 15 mm

Montagetoleranzen für Steckrichtung von der Seite

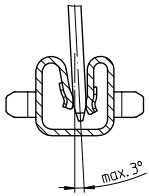
- Messerkontaktmaße 4,8 mm x 0,8 mm x Länge 8 mm
- bei Länge > 15 mm größere Montagetoleranzen möglich



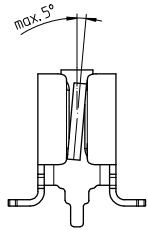
typical mating  
typische Kontaktierung



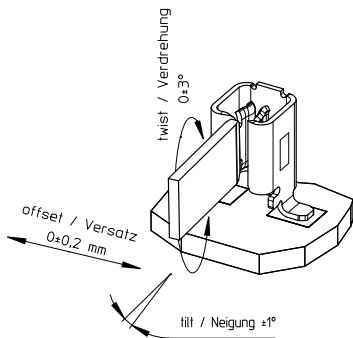
permissible lateral offset  
zulässiger seitlicher Versatz



permissible tilt  
zulässige Neigung



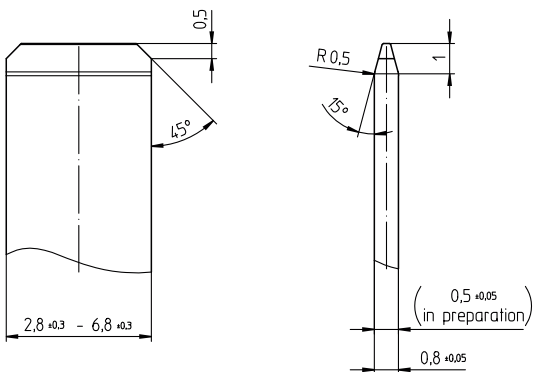
permissible twist  
zulässige Verdrehung



permissible combined tolerances  
zulässige kombinierte Toleranzen

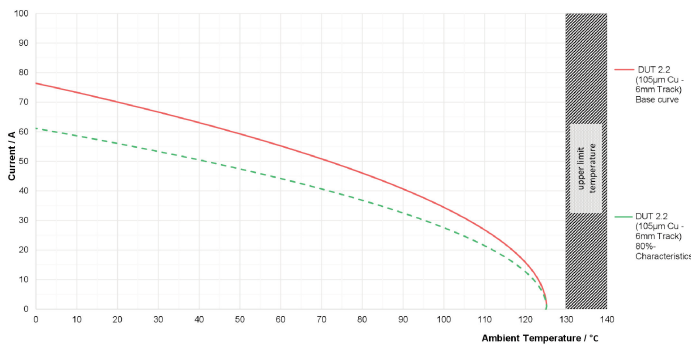
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**Geometry of the mating tab contact  
Geometrie des Kontaktmessers**



Material to be coordinated with Lumberg.  
Das Material ist mit Lumberg abzustimmen.

**Derating diagram  
Derating-Diagramm**



Test setup: application example of a closed system, no air circulation, no heat dissipation

- tab contact: CuZn37, tin-plated, 4,8 mm x 0,8 mm (corresponding to a cross section of 4 mm<sup>2</sup>)
  - connected wire: section 6 mm<sup>2</sup>
  - PCB: double-sided, conductor thickness 105 µm, track width 6 mm
  - ambient temperature: 20 °C
- Further test configurations and details upon request.

Testaufbau: Anwendungsbeispiel eines geschlossenen Systems, keine Luftzirkulation, keine Wärmeabfuhr

- Messerkontakt: CuZn37, verzinkt, 4,8 mm x 0,8 mm (entspricht einem Querschnitt von 4 mm<sup>2</sup>)
- angeschlossene Leitung: Querschnitt 6 mm<sup>2</sup>
- Leiterplatte: doppelseitig, Leiterbahndicke 105 µm, -breite 6 mm
- Umgebungstemperatur: 20 °C

Weitere Testaufbauten und -details auf Anfrage.

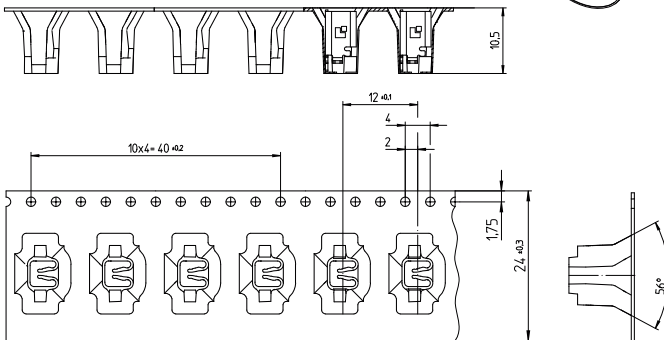
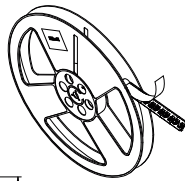
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**Packaging**

reel: 330 mm/110 mm/24,5 mm  
leader: 408 mm, 34 empty cavities  
trailer: 168 mm, 14 empty cavities

**Verpackung**

Rolle: 330 mm/110 mm/24,5 mm  
Vorlauf: 408 mm, 34 Leerfächer  
Nachlauf: 168 mm, 14 Leerfächer



- \*a SMT solder area
- \*b positioning peg
- \*c contact point
- \*d mating from top direction
- \*e mating from lateral direction
- \*f mating from bottom direction
- \*g printed circuit board layout (example) for mating from top or lateral direction
- \*h printed circuit board layout (example) for mating from bottom direction
- \*i bore hole for positioning peg
- \*k slot in the printed circuit board min. 0.5 mm wider than tab
- \*k printed circuit board
- \*l contact tab
- \*m printed circuit board
- \*n insertion depth

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Designation	Pole Number	PU (Pieces)	MDQ (Pieces)
4580 01 MP T0,8 V12VP12	1	500	

**Packaging:**

on reel