



## 2.54 mm Power Taps for Backplanes





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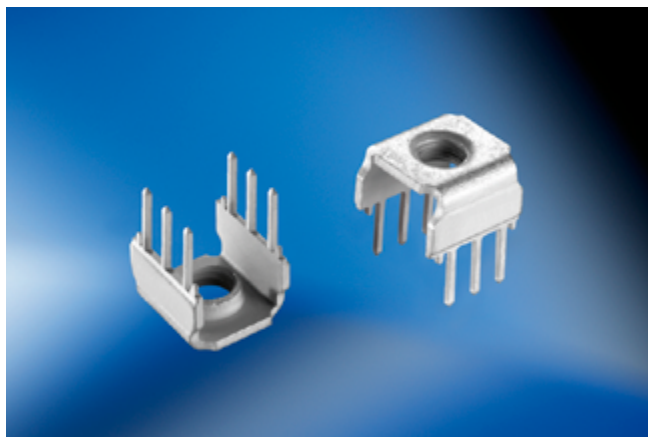
## 2.54 mm Power Taps for Backplanes

### Electrical and Mechanical Characteristics



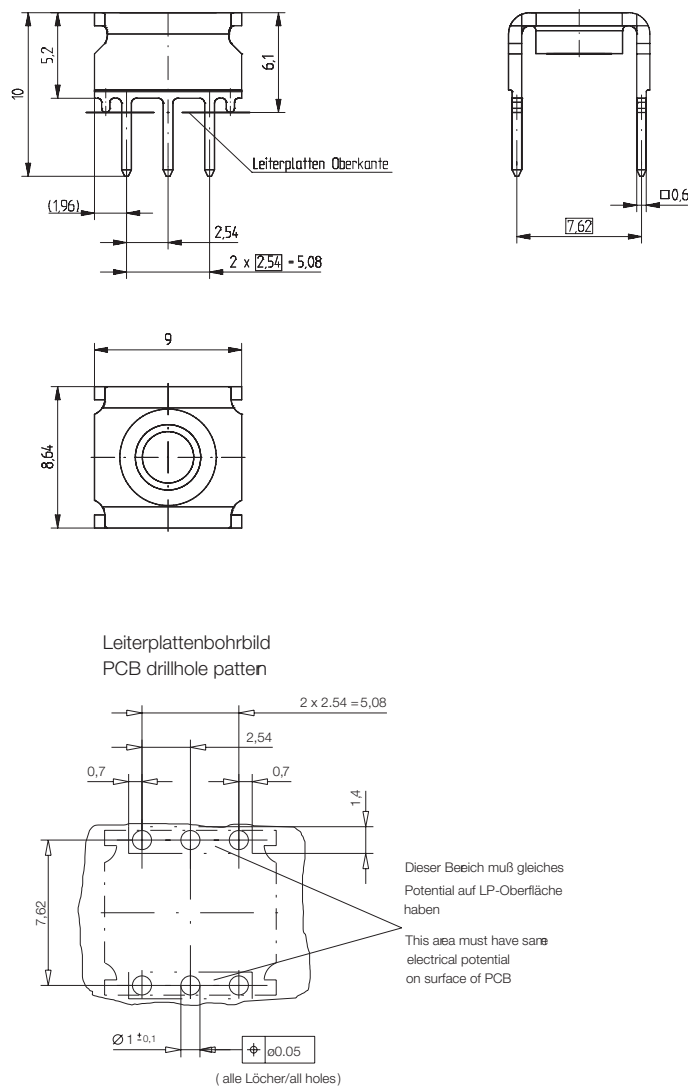
|                                        | Standard              | 6 pin Version                                                                                                                                                      | 10 pin Version                                                                                                                                                     |
|----------------------------------------|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Number of Pins                         |                       | 6                                                                                                                                                                  | 10                                                                                                                                                                 |
| <b>Technical data</b>                  |                       |                                                                                                                                                                    |                                                                                                                                                                    |
| Climate Category                       | DIN EN 60068-1 test b | -55/125/56                                                                                                                                                         | -55/125/56                                                                                                                                                         |
| Bearing and operating temperature area |                       | -55/125 °C                                                                                                                                                         | -55/125 °C                                                                                                                                                         |
| Current rating                         | IEC60512 test 5b      | by ambient temperature:<br>20°C 40 A<br>70°C 24 A<br>100°C 8 A<br><br>The operating current is determined by characteristics of the PCB and the cable termination. | by ambient temperature:<br>20°C 40 A<br>70°C 24 A<br>100°C 8 A<br><br>The operating current is determined by characteristics of the PCB and the cable termination. |
| <b>Process-conditions</b>              |                       |                                                                                                                                                                    |                                                                                                                                                                    |
| Solder temperature max.                | IEC 68-2-20           |                                                                                                                                                                    |                                                                                                                                                                    |
| Hand soldering temperature max.        |                       | 3.5 s at 350 °C                                                                                                                                                    | 3.5 s at 350 °C                                                                                                                                                    |
| Dip soldering temperature max.         |                       | 10 s at 260 °C                                                                                                                                                     | 10 s at 260 °C                                                                                                                                                     |
| Warning                                |                       | Soldering of pressfit connectors not to be recommended.                                                                                                            | Soldering of pressfit connectors not to be recommended.                                                                                                            |
| <b>Contact and mating area</b>         |                       |                                                                                                                                                                    |                                                                                                                                                                    |
| Base material                          |                       | Cu alloy                                                                                                                                                           | Cu alloy                                                                                                                                                           |
| Plating                                |                       | Sn                                                                                                                                                                 | Sn                                                                                                                                                                 |
| <b>Transfer area</b>                   |                       |                                                                                                                                                                    |                                                                                                                                                                    |
| Base material                          |                       | Cu alloy                                                                                                                                                           | Cu alloy                                                                                                                                                           |
| Plating                                |                       | Sn                                                                                                                                                                 | Sn                                                                                                                                                                 |
| <b>Environment compatibility</b>       |                       |                                                                                                                                                                    |                                                                                                                                                                    |
| Recycling                              |                       | Easy recycling                                                                                                                                                     | Easy recycling                                                                                                                                                     |
| <b>Assembly information</b>            |                       |                                                                                                                                                                    |                                                                                                                                                                    |
| Max. tightening torque M3              |                       | 0.5 Nm                                                                                                                                                             | 0.5 Nm                                                                                                                                                             |
| Max. tightening torque M4              |                       | 1.2 Nm                                                                                                                                                             | 1.2 Nm                                                                                                                                                             |
| Max. tightening torque 6-32 UNC        |                       | 0.5 Nm                                                                                                                                                             | 0.5 Nm                                                                                                                                                             |
| Max. tightening torque 8-32 UNC        |                       | 1.2 Nm                                                                                                                                                             | 1.2 Nm                                                                                                                                                             |
|                                        |                       | For assembly scheme see page 14.                                                                                                                                   | For assembly scheme see page 14.                                                                                                                                   |

## 2.54 mm Power Taps for Backplanes 6 pin with Screw Mount Terminal, Solder



The ERNI Power Tap is designed to bring power to printed circuit board applications. It allows for wire-to-board connections with common terminals. The 6 pin version has three solder pins per row with a two-row PCB layout. The operating current is determined by characteristics of the PCB and the cable termination. This power supply cable can be connected with a screw mount terminal accomodating M3, M4, 6-32UNC or 8-32UNC screws.

### Dimensional Drawings

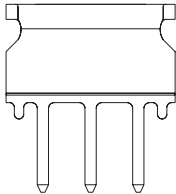
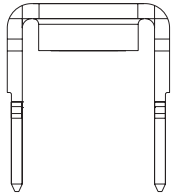


All dimensions in mm

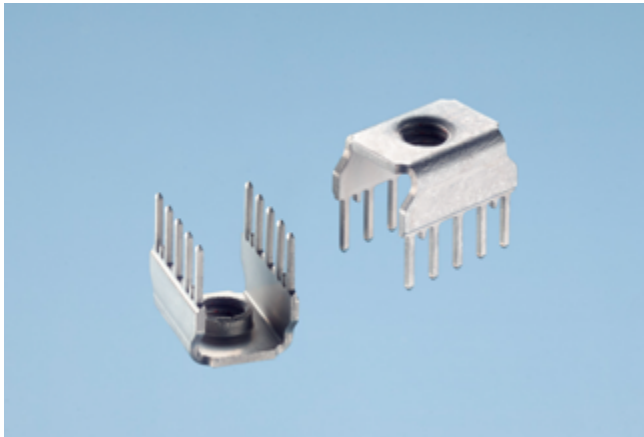
# 2.54 mm Power Taps for Backplanes 6 pin with Screw Mount Terminal, Solder



## Ordering Information

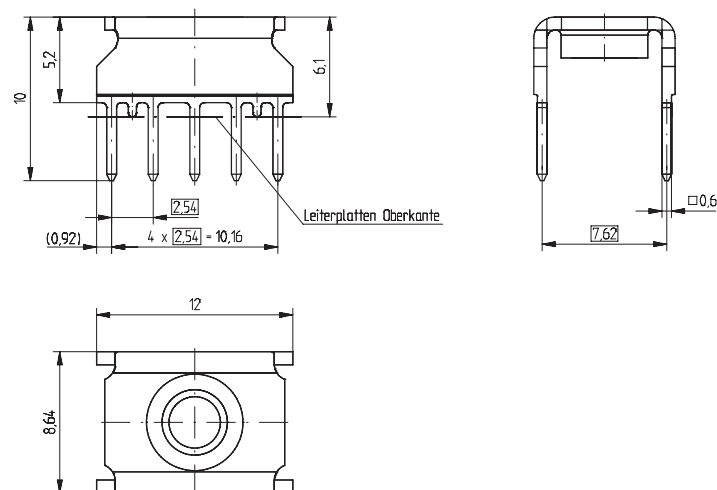
| Configuration                                                                                                                                                                      | Termination | No. of Pins | Height | Part Number |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|--------|-------------|
| <div>   </div> |             |             |        |             |
| 6 pin Version; M3                                                                                                                                                                  | Solder      | 6           | 10 mm  | 214801      |
| 6 pin Version; M4                                                                                                                                                                  | Solder      | 6           | 10 mm  | 214788      |
| 6 pin Version; 6-32UNC                                                                                                                                                             | Solder      | 6           | 10 mm  | 214802      |
| 6 pin Version; 8-32UNC                                                                                                                                                             | Solder      | 6           | 10 mm  | 214803      |

## 2.54 mm Power Taps for Backplanes 10 pin with Screw Mount Terminal, Solder

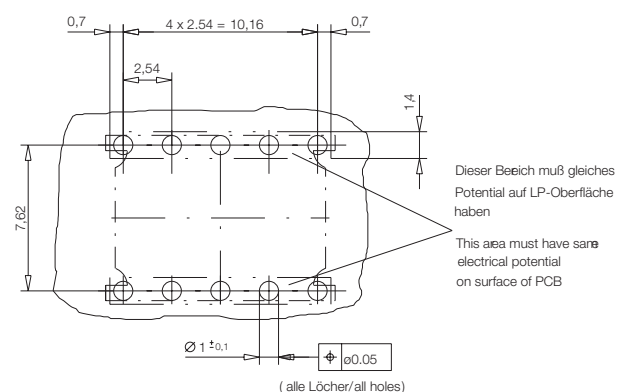


The ERNI Power Tap is designed to bring power to printed circuit board applications. It allows for wire-to-board connections with common terminals. The 10 pin version has five solder pins per row with a two-row PCB layout. The operating current is determined by characteristics of the PCB and the cable termination. This power supply cable can be connected with a screw mount terminal accomodating M3, M4, 6-32UNC or 8-32UNC screws.

### Dimensional Drawings



Leiterplattenbohrbild  
PCB drillhole patten

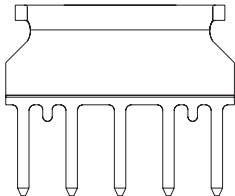
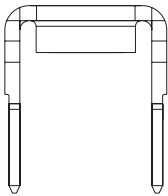


All dimensions in mm

# 2.54 mm Power Taps for Backplanes 10 pin with Screw Mount Terminal, Solder



## Ordering Information

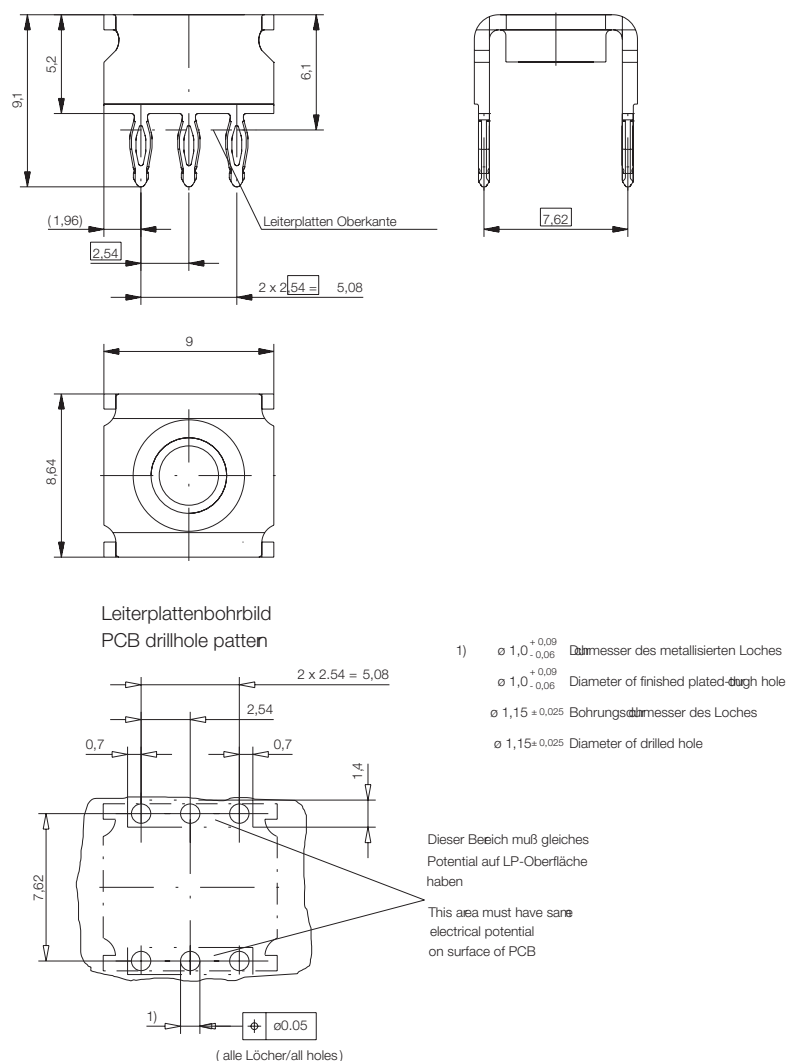
| Configuration                                                                     | Termination | No. of Pins | Height                                                                              | Part Number |
|-----------------------------------------------------------------------------------|-------------|-------------|-------------------------------------------------------------------------------------|-------------|
|  |             |             |  |             |
| 10 pin Version; M3                                                                | Solder      | 10          | 10 mm                                                                               | 214785      |
| 10 pin Version; M4                                                                | Solder      | 10          | 10 mm                                                                               | 214786      |
| 10 pin Version; 6-32UNC                                                           | Solder      | 10          | 10 mm                                                                               | 214784      |
| 10 pin Version; 8-32UNC                                                           | Solder      | 10          | 10 mm                                                                               | 214783      |

## 2.54 mm Power Taps for Backplanes 6 pin with Screw Mount Terminal, Pressfit



The ERNI Power Tap is designed to bring power to printed circuit board applications. It allows for wire-to-board connections with common terminals. The 6 pin version has three pressfit pins per row with a two-row PCB layout. The operating current is determined by characteristics of the PCB and the cable termination. This power supply cable can be connected with a screw mount terminal accomodating M3, M4, 6-32UNC or 8-32UNC screws.

### Dimensional Drawings

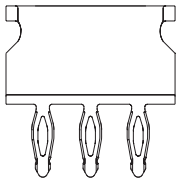
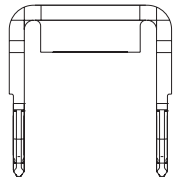


All dimensions in mm

# 2.54 mm Power Taps for Backplanes 6 pin with Screw Mount Terminal, Pressfit



## Ordering Information

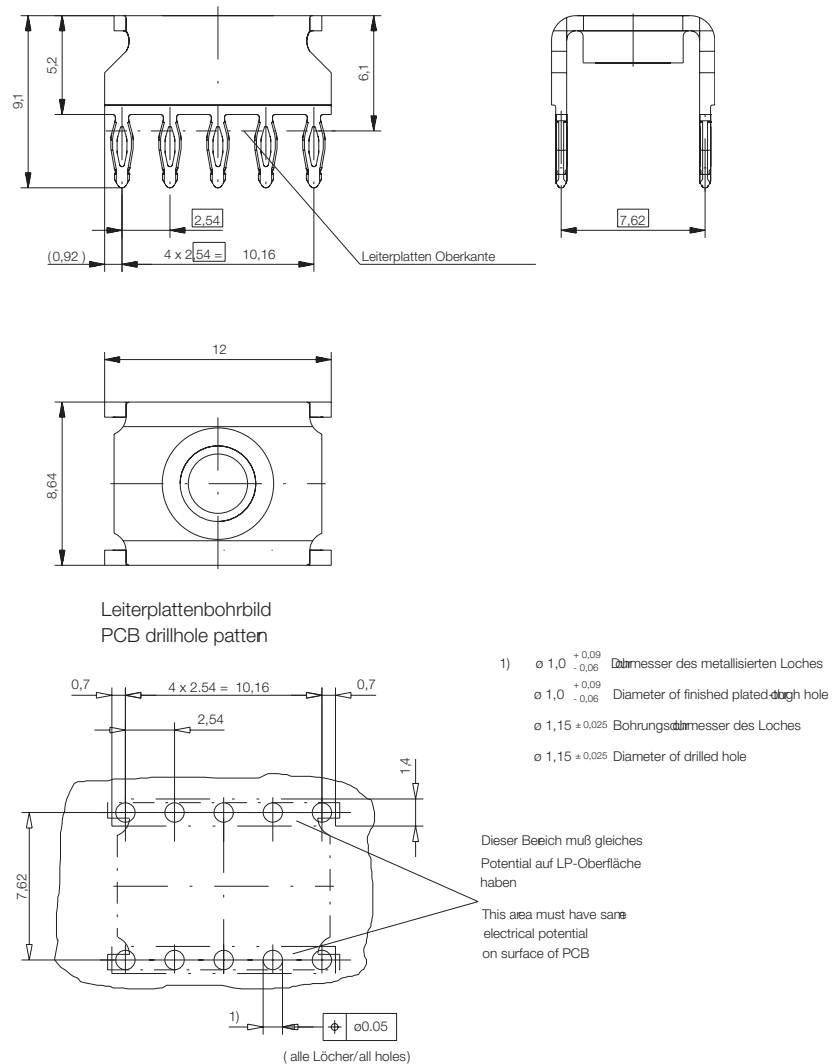
| Configuration                                                                     | Termination | No. of Pins                                                                         | Height | Part Number |
|-----------------------------------------------------------------------------------|-------------|-------------------------------------------------------------------------------------|--------|-------------|
|  |             |  |        |             |
| 6 pin Version; M3                                                                 | Pressfit    | 6                                                                                   | 9.1 mm | 214796      |
| 6 pin Version; M4                                                                 | Pressfit    | 6                                                                                   | 9.1 mm | 214787      |
| 6 pin Version; 6-32UNC                                                            | Pressfit    | 6                                                                                   | 9.1 mm | 214797      |
| 6 pin Version; 8-32UNC                                                            | Pressfit    | 6                                                                                   | 9.1 mm | 214798      |

## 2.54 mm Power Taps for Backplanes 10 pin with Screw Mount Terminal, Pressfit



The ERNI Power Tap is designed to bring power to printed circuit board applications. It allows for wire-to-board connections with common terminals. The 10 pin version has five pressfit pins per row with a two-row PCB layout. The operating current is determined by characteristics of the PCB and the cable termination. This power supply cable can be connected with a screw mount terminal accomodating M3, M4, 6-32UNC or 8-32UNC screws.

### Dimensional Drawings

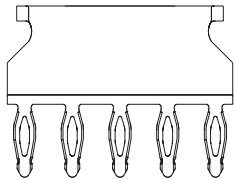
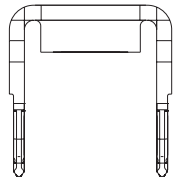


All dimensions in mm

# 2.54 mm Power Taps for Backplanes 10 pin with Screw Mount Terminal, Pressfit



## Ordering Information

| Configuration                                                                     | Termination | No. of Pins | Height                                                                              | Part Number |
|-----------------------------------------------------------------------------------|-------------|-------------|-------------------------------------------------------------------------------------|-------------|
|  |             |             |  |             |
| 10 pin Version; M3                                                                | Pressfit    | 10          | 9.1 mm                                                                              | 214781      |
| 10 pin Version; M4                                                                | Pressfit    | 10          | 9.1 mm                                                                              | 214782      |
| 10 pin Version; 6-32UNC                                                           | Pressfit    | 10          | 9.1 mm                                                                              | 214780      |
| 10 pin Version; 8-32UNC                                                           | Pressfit    | 10          | 9.1 mm                                                                              | 214779      |

## 2.54 mm Power Taps for Backplanes 10 pin with Screw Mount and angled Slip-on Terminals, Pressfit



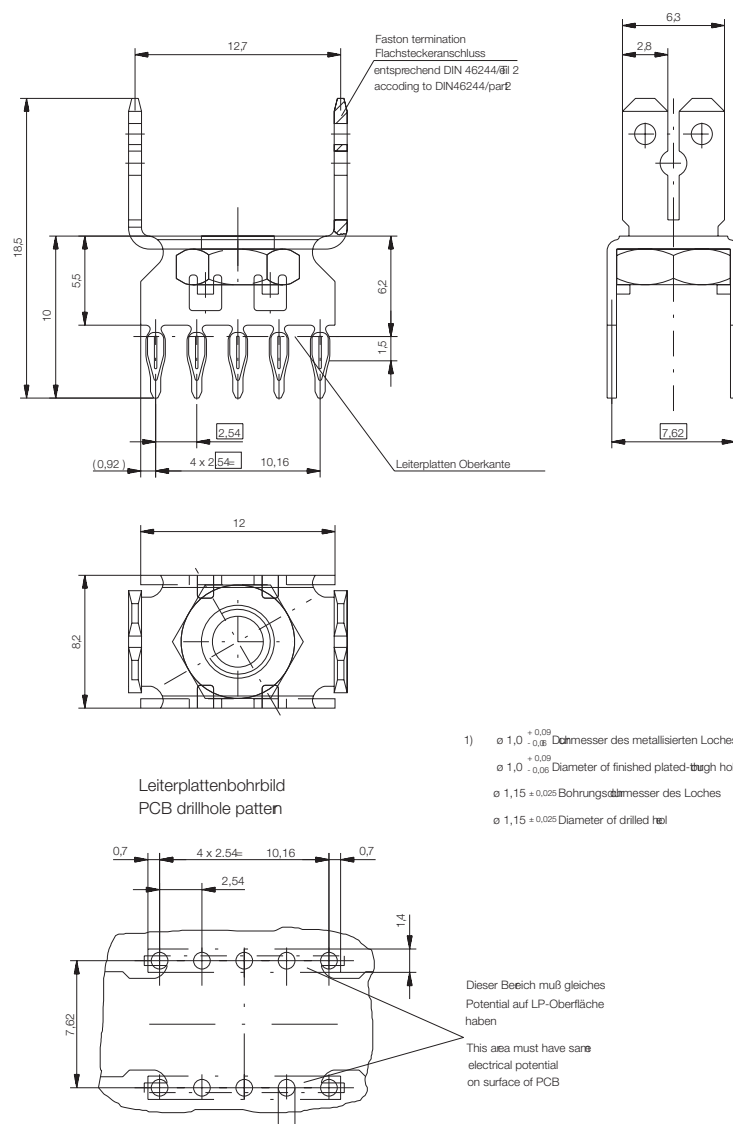
The ERNI Power Tap is designed to bring power to printed circuit board applications. It allows for wire-to-board connections with common terminals. The 10 pin version has five pressfit pins per row with a two-row PCB layout.

The operating current is determined by characteristics of the PCB and the cable termination. This power supply cable can be connected through either slip-on pluggable terminals or a screw mount terminal.

The slip-on terminal is designed for two terminal sizes: 6.3 x 0.8 mm or 2.8 x 0.8 mm, per DIN 46244. The screw mount terminal accommodates an M4 screw.

### Dimensional Drawings

#### 90° angled Slip-on



All dimensions in mm

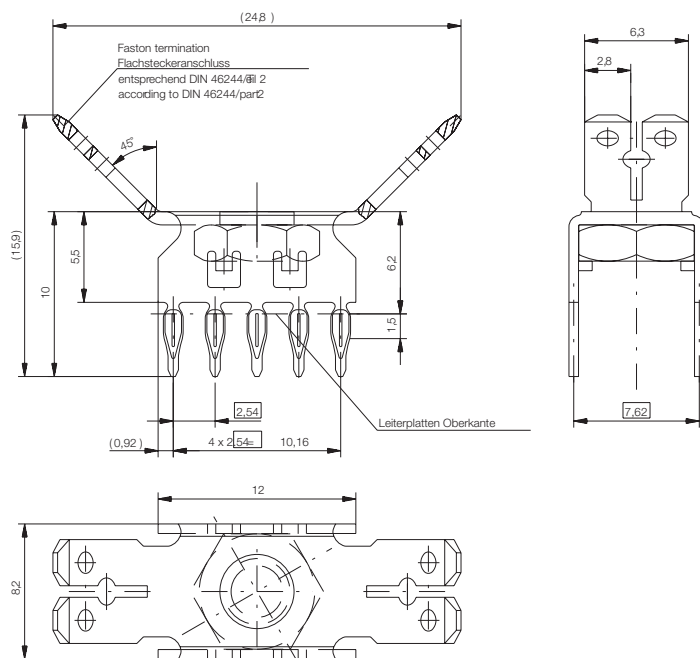
## 2.54 mm Power Taps for Backplanes

### 10 pin with Screw Mount and angled Slip-on Terminals, Pressfit

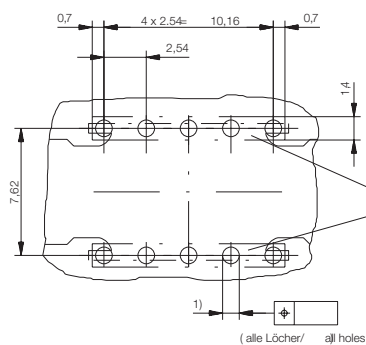


## Dimensional Drawings

### 45° angled Slip-on



Leiterplattenbohrbild  
PCB drillhole patten



- 1)  $\varnothing 1,0 \begin{smallmatrix} +0,09 \\ -0,08 \end{smallmatrix}$  Durchmesser des metallisierten Loches  
 $\varnothing 1,0 \begin{smallmatrix} +0,09 \\ -0,06 \end{smallmatrix}$  Diameter of finished plated through hole  
 $\varnothing 1,15 \pm 0,025$  Bohrungsdurchmesser des Loches  
 $\varnothing 1,15 \pm 0,025$  Diameter of drilled hole

Dieser Bereich muß gleiches Potential auf LP-Oberfläche haben

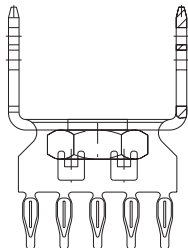
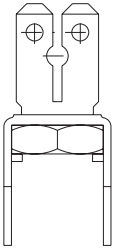
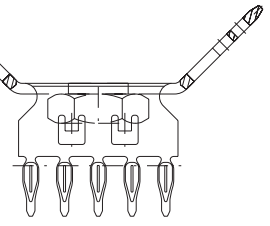
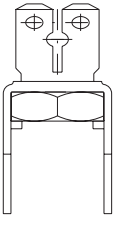
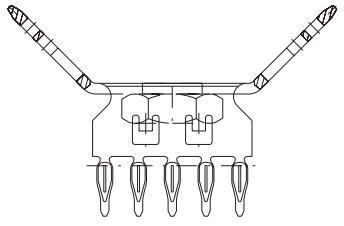
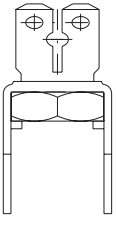
➤ This area must have same electrical potential on surface of PCB

All dimensions in mm

## 2.54 mm Power Taps for Backplanes 10 pin with Screw Mount and angled Slip-on Terminals, Pressfit



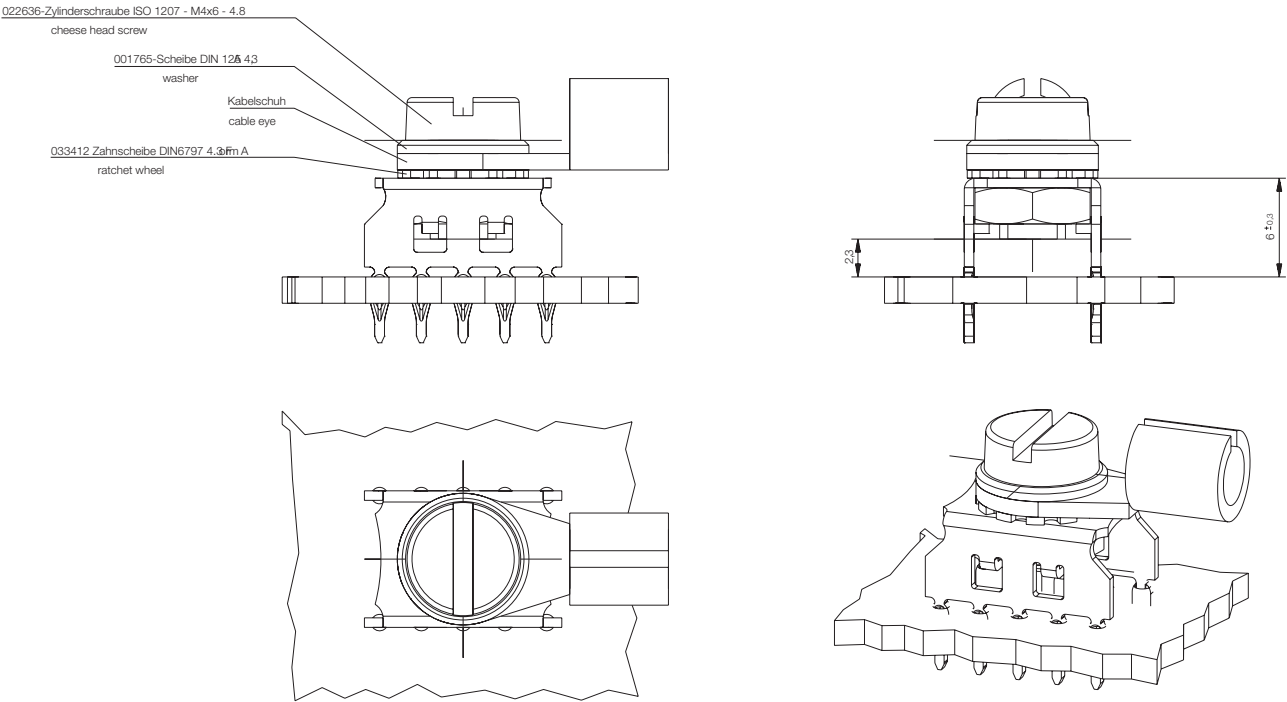
### Ordering Information

| Configuration                                                                      | Termination | No. of Pins | Height                                                                               | Part Number |
|------------------------------------------------------------------------------------|-------------|-------------|--------------------------------------------------------------------------------------|-------------|
|   | Pressfit    | 10          |   |             |
|                                                                                    |             |             |                                                                                      | 134989      |
| 10 pin Version; without nut / 90° angled Slip-on                                   | Pressfit    | 10          | 18.5 mm                                                                              | 134989      |
|  | Pressfit    | 10          |  |             |
|                                                                                    |             |             |                                                                                      | 134990      |
| 10 pin Version; M4 / 90° angled Slip-on                                            | Pressfit    | 10          | 18.5 mm                                                                              | 134990      |
|  | Pressfit    | 10          |  |             |
|                                                                                    |             |             |                                                                                      | 134999      |
| 10 pin Version; M4 / 45° angled Slip-on                                            | Pressfit    | 10          | 15.9 mm                                                                              | 134999      |

# 2.54 mm Power Taps for Backplanes Accessories



## Assembly Scheme



## Ordering Information

| Description                           | Part Number |
|---------------------------------------|-------------|
| Cheese head screw M4x6 - 4.8 ISO 1207 | 022636      |
| Washer A 4.3 DIN 125                  | 001765      |
| Star Washer A 4,3 DIN 6797            | 033412      |

## Press-In-Tooling

## Ordering Information

| Description | Comment           | Part Number |
|-------------|-------------------|-------------|
| Upper Tool  | With Quick Change | 471870      |
| Lower Tool  | With Quick Change | 220140      |



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| 214780 ..... | 10   |
| 214781 ..... | 10   |
| 214782 ..... | 10   |
| 214783 ..... | 6    |
| 214784 ..... | 6    |
| 214785 ..... | 6    |
| 214786 ..... | 6    |
| 214787 ..... | 8    |
| 214788 ..... | 4    |
| 214796 ..... | 8    |
| 214797 ..... | 8    |
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| 214801 ..... | 4    |
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| 220140 ..... | 14   |
| 471870 ..... | 14   |



A series of 25 horizontal lines spanning the width of the page, providing a template for technical drawings or notes.



Member





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