

**OMNIMATE-data - USB-uttag**  
**USB3.0A R1V 3.0N2 TY BL****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 16

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Germany

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USB 2.0 och 3.0 (SuperSpeed); Typ A-kontakter  
uppfyller kraven för hög beständighet och ger tillförlitlig  
förbindning.

- Upp till 5000 stickcykler
- Lödningsprocess THT, THR eller SMD
- Finns i utförande 180° (vertikalt/upprätt) eller 90°  
(horisontellt/liggande)
- Förpackad antingen på bricka (TY) eller antistatiskt på  
tape-on-reel (RL)
- Förstärkt guldager för förbättrat korrosionsskydd

**Allmänna beställningsdata**

|                   |                                                                                                                                                                                 |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Typ               | USB3.0A R1V 3.0N2 TY BL                                                                                                                                                         |
| Art.nr.           | <a href="#">1549730000</a>                                                                                                                                                      |
| Artikelbeteckning | Kretskortsstickanslutning, USB-uttag, THT/THR<br>lödanslutning, 2.00 mm, Antal poler: 8, 180°,<br>Lödstiftlängd (l): 3 mm, Guld över nickel, blå,<br>Bricka (manuell montering) |
| GTIN (EAN)        | 4050118356083                                                                                                                                                                   |
| Frp               | 100 Stück                                                                                                                                                                       |
| Förpackning       | Bricka (manuell montering)                                                                                                                                                      |

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**Tekniska data****Mått och vikter**

|                    |           |                 |            |
|--------------------|-----------|-----------------|------------|
| Bredd              | 14,65 mm  | Byggbredd (tum) | 0,577 inch |
| Höjd               | 18,9 mm   | Bygghöjd (tum)  | 0,744 inch |
| Höjd lägstbyggande | 14,95 mm  | Djup            | 7,1 mm     |
| Byggdjup (tum)     | 0,28 inch | Nettovikt       | 2,46 g     |

**Temperaturer**

|                       |       |                       |        |
|-----------------------|-------|-----------------------|--------|
| Drifttemperatur, max  | 85 °C | Drifttemperatur, min. | -40 °C |
| Lagertemperatur, max. | 85 °C | Lagertemperatur, min. | -40 °C |

**Environmental Product Compliance**

|            |                |
|------------|----------------|
| REACH SVHC | Lead 7439-92-1 |
|------------|----------------|

**Systemparametrar**

|                              |                       |                      |                           |
|------------------------------|-----------------------|----------------------|---------------------------|
| Anslutningstyp               | Hylsa                 | Anslutningsvinkel    | 180°                      |
| Antal lödstift per pol       | 1                     | Antal poler          | 8                         |
| Avskärmning                  | Ja                    | Delning i mm (P)     | 2 mm                      |
| Diameter bestyckningshål (D) | 0,7 mm                | Koppling             | Typ A, USB 3.0            |
| Lödstiftlängd (l)            | 3 mm                  | LED                  | Nej                       |
| Montering på kretskortet     | THT/THR lödanslutning | Produktfamilj        | OMNIMATE-data - USB-uttag |
| Skärmmaterial                | Mässing               | Skyddsklass          | IP20                      |
| Skärmarea                    | förnicklad            | Skärmflikar          | ingen                     |
| Stickcykler                  | ≥ 1500                | Överföringshastighet | 5 Gbps                    |

**Elektriska egenskaper**

|                       |           |                                   |          |
|-----------------------|-----------|-----------------------------------|----------|
| Isolationshållfasthet | ≥ 1000 MΩ | Märkström                         | 1,5 A    |
| Märkspänning          | 30 V      | Spänningstålighet kontakt/kontakt | 100 V AC |

**Packaging**

|             |                            |           |     |
|-------------|----------------------------|-----------|-----|
| Förpackning | Bricka (manuell montering) | VPE-längd | 0 m |
| VPE-bredd   | 0 m                        | VPE-höjd  | 0 m |

**Materialdata**

|                                  |                         |                                |                  |
|----------------------------------|-------------------------|--------------------------------|------------------|
| Isoleringsmaterial               | LCP                     | Färgkod                        | blå              |
| Färgtabell (jämförbar)           | RAL 5012                | Isoleringsmaterialgrupp        | II               |
| CTI                              | ≥ 500                   | Isolationshållfasthet          | ≥ 1000 MΩ        |
| Moisture Level (MSL)             | 1                       | Brännbarhetsklass enligt UL 94 | V-0              |
| Kontaktgrundmaterial             | Fosforbrons             | Kontakttyta                    | Guld över nickel |
| Skiktstruktur för stiftkontakten | 30-80 μ" Ni / 30- μ" Au | Lagertemperatur, min.          | -40 °C           |
| Lagertemperatur, max.            | 85 °C                   | Drifttemperatur, min.          | -40 °C           |
| Drifttemperatur, max             | 85 °C                   |                                |                  |

**Klassificeringar**

|            |             |            |             |
|------------|-------------|------------|-------------|
| ETIM 6.0   | EC002637    | eClass 6.2 | 27-25-05-04 |
| eClass 7.1 | 27-25-05-04 | eClass 8.1 | 19-17-01-25 |
| eClass 9.0 | 27-44-04-02 | eClass 9.1 | 27-44-04-02 |

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## Tekniska data

### Godkännanden

Godkännanden



ROHS

Uppfyllelse

### Downloads

Användardokumentation

[MAN IE GUIDE DE](#)

[MAN IE GUIDE EN](#)

Broschyr/Katalog

[MB FREECONTACT EN](#)

[FL FIELDWIRING EN](#)

[PI PROFINET CABLING EN](#)

Teknikuppgifter Data

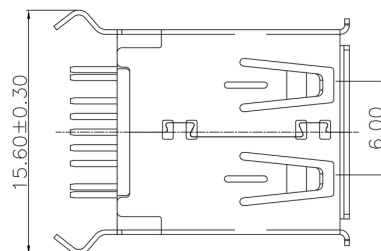
[STEP](#)

## OMNIMATE-data - USB-uttag USB3.0A R1V 3.0N2 TY BL

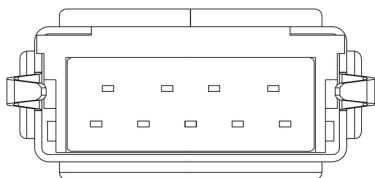
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# Ritningar

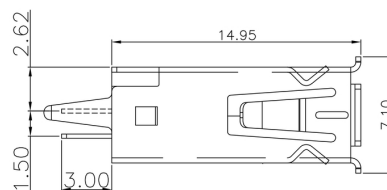
## Profilritning



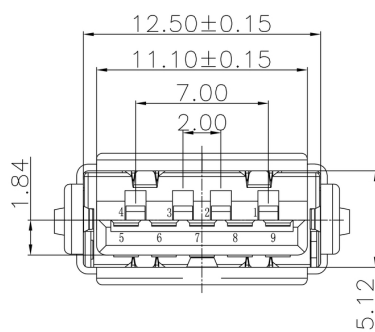
## Profilritning



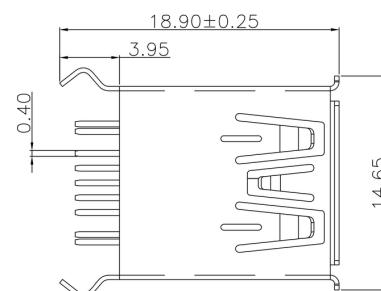
## Profilritning



## Profilritning



## Profilritning



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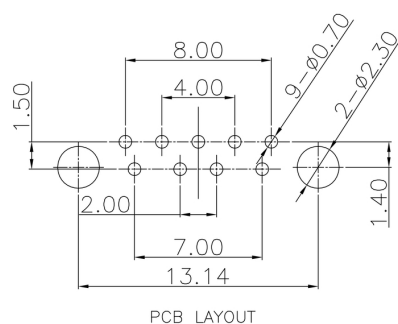
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### Kretskortsdesign



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# Ritningar

### Bildförklaring

| USB | 3.0A | R | 1 | V | 3.0A | N | 4 | TY | BL | USB3.0A R1V 3.0N4 TY BL          |                                                  |                                                                                                                                                                                                                                                         |
|-----|------|---|---|---|------|---|---|----|----|----------------------------------|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     |      |   |   |   |      |   |   |    |    | <b>Colour / Special Option</b>   | <b>BL</b><br><b>BK</b><br><b>WH</b><br><b>SO</b> | blue (plastic)<br>black (plastic)<br>white (plastic)<br>customized product                                                                                                                                                                              |
|     |      |   |   |   |      |   |   |    |    | <b>Packaging</b>                 | <b>TY</b><br><b>RL</b><br><b>TU</b>              | <b>Tray</b> in box (manual assembly)<br><b>Tape on Reel</b> (automated assembly)<br><b>Tube</b>                                                                                                                                                         |
|     |      |   |   |   |      |   |   |    |    | <b>Contact surface thickness</b> | <b>4</b>                                         | 1 = 3μ, 2 = 6μ, 3 = 15μ, 4 = 30μ, 5 = 50μ                                                                                                                                                                                                               |
|     |      |   |   |   |      |   |   |    |    |                                  | <b>N</b>                                         | no use                                                                                                                                                                                                                                                  |
|     |      |   |   |   |      |   |   |    |    | <b>Solder Pin length</b>         | <b>1.6</b><br><b>3.2</b><br><b>D</b>             | 3.2 mm<br>1.6 mm<br>SHD                                                                                                                                                                                                                                 |
|     |      |   |   |   |      |   |   |    |    | <b>Direction</b>                 | <b>H</b><br><b>U</b><br><b>V</b>                 | <b>Horizontal</b> (90°, side entry)<br><b>Horizontal, Upright</b> 90°<br><b>Vertical</b> (180°, top entry)                                                                                                                                              |
|     |      |   |   |   |      |   |   |    |    | <b>Number of Ports</b>           | <b>1</b><br><b>21; 41; ...</b>                   | 1 Port<br>multi ports about each other, Multilevel                                                                                                                                                                                                      |
|     |      |   |   |   |      |   |   |    |    | <b>Assembly on PCB</b>           | <b>R</b><br><b>S</b><br><b>T</b>                 | <b>Through Hole Reflow - THR</b><br><b>Soldering process:</b> Wave or Reflow soldering<br><b>Surface Mount Technology - SMT</b><br><b>Soldering process:</b> Reflow soldering<br><b>Through Hole Technology - THT</b><br><b>Soldering process:</b> Wave |
|     |      |   |   |   |      |   |   |    |    | <b>Type / Performance</b>        | <b>2.0A</b><br><b>3.0A</b>                       | <b>USB 2.0 Type A</b><br><b>USB 3.0 Type A</b>                                                                                                                                                                                                          |

## Recommended wave soldering profiles

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### Single Wave:



### Double Wave:



### Wave soldering profiles

Wired connection elements should be processed in accordance with the DIN EN 61760-1 standard. We have included two recommendations for practical wave soldering profiles, with which Weidmüller PCB terminals and connectors are qualified.

When choosing a suitable profile for your application, the following factors also need to be considered:

- PCB thickness
- Proportion of Cu in the layers
- Single/double-sided assembly
- Product range
- Heating and cooling rates

The single and double wave profiles each indicate the recommended operating range, including the maximum soldering temperature of 260°C. In practice, the maximum soldering temperature is quite often well below the above maximum profile.

We reserve the right to make technical changes.

## Recommended reflow soldering profile

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### Reflow soldering profile

The perfect soldering profile for SMT Surface Mount Technology is one the most exiting question in SMT production. But there are more than one correct answer: The diagram of temperature-on-time is related to processing features of solder paste and to maximum load of components.

We have to consider the following parameters:

- Time for pre heating
- Maximum temperature
- Time above melting point
- Time for cooling
- Maximum heating rate
- Maximum cooling rate

We recommend a typical solder profile with associated process limits. With preheating components and board are prepared smoothly for the solder phase. Heating rate is typically  $\leq +3\text{K/s}$ . In parallel the solder paste is 'activated'. The time above melting point of 217°C the paste gets liquid and components and boards begin to connect. The maximum temperature of 245°C to 254°C should stay between 10 and 40 seconds. In the cooling phase at  $\geq -6\text{K/s}$  solder is cured. Board and components cool down while avoiding cold cracks.