

## RJ45C6 T1V 3.0N4N TY

**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)



The product range encompasses the following designs:

- 90°, lying (horizontal) and 180°, standing (vertical)
- latch up / latch down
- THT, THR or SMD soldering processes
- Wide range of different design types, also with integrated LEDs and shield contact tabs
- Performance category Cat. 3 to Cat. 6
- Packed either in a tray (TY) or on a roll (tape-on-reel, RL)
- Compatible with modular RJ45 connector according to ANSI / TIA-1096-A and IEC 60603
- Dielectric strength  $\geq 1500$  V AC RMS (2250 V AC peak value) according to IEEE 802.3
- Dielectric strength  $\geq 1500$  V AC (peak value) or  $\geq 1500$  V DC according to IEC 60603

Properties and advantages:

- Extended temperature range of  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$  for maximum performance
- Reinforced gold layer ( $30\mu\text{m}$ ) for improved corrosion protection
- At least 0.3mm stand-off ensures a perfect soldering result

### General ordering data

|            |  |
|------------|--|
| Version    | PCB plug-in connector, RJ45 jacks, Cat. 6 , THT solder connection, 180°, LED: No, Number of poles: 8, Tray (manual assembly) |
| Order No.  | <a href="#">2626050000</a>   |
| Type       | RJ45C6 T1V 3.0N4N TY   |
| GTIN (EAN) | 4050118630190  |
| Qty.       | 160 pc(s).   |
| Packaging  | Tray (manual assembly)   |

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## Technical data

## Dimensions and weights

|                          |         |                 |            |
|--------------------------|---------|-----------------|------------|
| Depth                    | 16.2 mm | Depth (inches)  | 0.638 inch |
| Height                   | 16.5 mm | Height (inches) | 0.65 inch  |
| Height of lowest version | 16.5 mm | Net weight      | 6.719 g    |
| Width                    | 15.8 mm | Width (inches)  | 0.622 inch |

## System specifications

|                                |                                   |                       |         |
|--------------------------------|-----------------------------------|-----------------------|---------|
| Category                       | Cat. 6                            | LED                   | No      |
| Mounting onto the PCB          | THT solder connection             | Number of poles       | 8       |
| Number of solder pins per pole | 1                                 | Outgoing elbow        | 180°    |
| Performance-Category           | Cat. 6                            | Pitch in mm (P)       | 1.27 mm |
| Product family                 | OMNIMATE Data - RJ45 modular jack | Protection degree     | IP20    |
| Shield surface                 | nickel-plated                     | Shielding             | Yes     |
| Shielding material             | Brass, nickel-plated              | Solder pin length (l) | 3 mm    |
| Soldering process              | Manual soldering, Wave soldering  |                       |         |

## Electrical properties

|  |           |                                       |           |
|--|-----------|---------------------------------------|-----------|
| Dielectric strength, contact / contact | 1000 V DC | Dielectric strength, contact / shield | 1500 V DC |
| Rated voltage                          | 125 V     |                                       |           |

## Material data

|                             |                  |                             |        |
|-----------------------------|------------------|-----------------------------|--------|
| Insulating material         | PA 66            | Colour                      | black  |
| Colour chart (similar)      | RAL 9011         | UL 94 flammability rating   | V-0    |
| Contact surface             | Gold over nickel | Operating temperature, min. | -40 °C |
| Operating temperature, max. | 85 °C            |                             |        |

## Packing

|           |                        |            |     |
|-----------|------------------------|------------|-----|
| Packaging | Tray (manual assembly) | VPE length | 0 m |
| VPE width | 0 m                    | VPE height | 0 m |

## Classifications

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 6.0    | EC002637    | ETIM 7.0    | EC002637    |
| ECLASS 9.0  | 27-44-04-02 | ECLASS 9.1  | 27-44-04-02 |
| ECLASS 10.0 | 27-44-04-02 | ECLASS 11.0 | 27-46-02-01 |

## Approvals

|      |         |
|------|---------|
| ROHS | Conform |
|------|---------|

## Downloads

|                    |  |
|--------------------|--|
| Engineering Data   | <a href="#">STEP</a>                     |
| Brochure/Catalogue | <a href="#">Catalogues in PDF-format</a> |

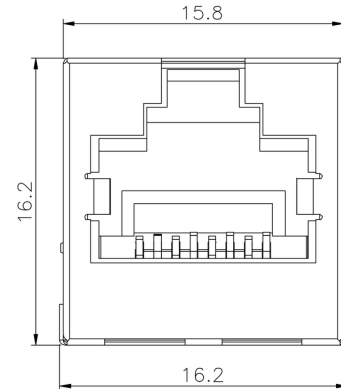
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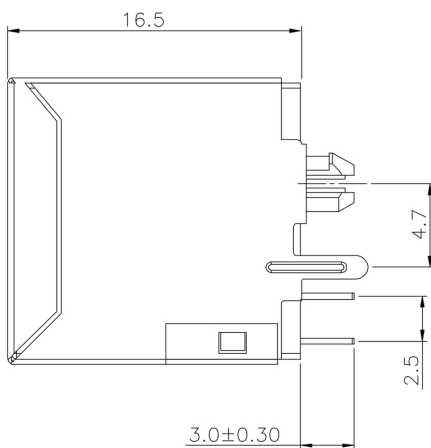
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**Drawings**

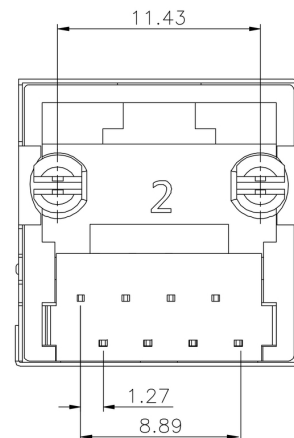
**Dimensioned drawing**



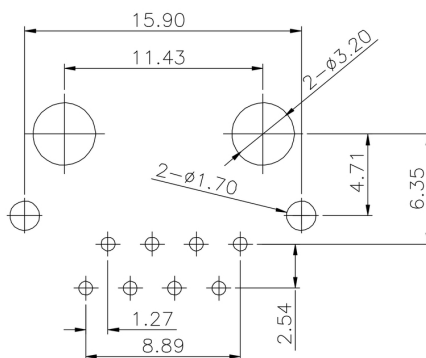
**Dimensioned drawing**



**Dimensioned drawing**



**PCB design**



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Drawings

| Code                             | Value              | Description                                    |
|----------------------------------|--------------------|--|
| RJ45                             | G1                 | RJ45G1   |
| R1                               | R1                 | R1U  |
| U                                | U                  | U  |
| 3.2                              | 3.2                | 3.2E   |
| E4                               | E4                 | E4   |
| GY/GY                            | GY/GY              | GY/GY  |
| TY                               | TY                 | TY   |
| <b>RJ45G1 R1U 3.2E4GY/GY TY</b>  |                    |  |
| <b>Packaging</b>                 | <b>TY</b>          | Tray in box (manual assembly)                  |
|                                  | <b>RL</b>          | Tape on Reel (automated assembly)              |
| <b>LED</b>                       | <b>Y/G</b>         | Yellow/Green                                   |
|                                  | <b>G/Y</b>         | Green/Yellow (standard)                        |
|                                  | <b>GY/GY</b>       | Green-Yellow/Green-Yellow                      |
|                                  | <b>O/G</b>         | Orange/Green                                   |
|                                  | <b>R/O</b>         | Red/Orange                                     |
|                                  | <b>...</b>         | ... (further combinations possible)            |
|                                  | <b>N</b>           | without LED                                    |
| <b>Contact surface thickness</b> | <b>4</b>           | 1 = 3µ", 2 = 6µ", 3 = 15µ", 4 = 30µ", 5 = 50µ" |
| <b>EMI tabs (ground fingers)</b> | <b>E</b>           | E = with EMI tabs                              |
|                                  | <b>N</b>           | N = without EMI tabs                           |
| <b>Solder Pin length</b>         | <b>3.2</b>         | 3.2 mm   |
|                                  | <b>1.6</b>         | 1.6 mm   |
|                                  | <b>D</b>           | SMD  |
| <b>Direction, latch style</b>    | <b>U</b>           | Horizontal (90°, side entry), latch up         |
|                                  | <b>D</b>           | Horizontal (90°, side entry), latch down       |
|                                  | <b>V</b>           | Vertical (180°, top entry)                     |
|                                  | <b>Y</b>           | Diagonal (45°), latch up                       |
| <b>Number of Ports</b>           | <b>1</b>           | 1 Port   |
|                                  | <b>12; 14; ...</b> | multi ports side by side, Multiport            |
|                                  | <b>21; 41; ...</b> | multi ports about each other, Multilevel       |
| <b>Assembly on PCB</b>           | <b>R</b>           | Through Hole Reflow - THR                      |
|                                  | <b>S</b>           | Soldering process: Wave or Reflow soldering    |
|                                  | <b>S</b>           | Surface Mount Technology - SMT                 |
|                                  | <b>T</b>           | Soldering process: Reflow soldering            |
|                                  | <b>T</b>           | Through Hole Technology - THT                  |
|                                  | <b>T</b>           | Soldering process: Wave                        |
| <b>Performance Category</b>      | <b>C5</b>          | Category 5                                     |
|                                  | <b>C6</b>          | Category 6                                     |
|                                  | <b>C6A</b>         | Category 6A                                    |
|                                  | <b>C5e</b>         | Category 5e                                    |
|                                  | <b>M</b>           | 10/100 Mbit                                    |
|                                  | <b>G1</b>          | 10/100/1000 Mbit                               |
|                                  | <b>G10</b>         | 10 Gbit  |
|                                  | <b>U</b>           | Unshielded                                     |
|                                  | <b>MP</b>          | 10/100 Mbit with POE                           |
|                                  | <b>MP+</b>         | 10/100 Mbit with POE+                          |

Legend

## 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.