

USB2.0B T1H 2.8N4 TY BK**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

USB as a reliable data interface for your device in industrial use. Due to the many advantages, USB sockets are always used most in the electrical industry.

The extensive portfolio of USB-A, -B - C and -Micro components enables future-proof device design with speeds of up to 10 Gbit/s. Our USB PCB sockets support the robust standards USB 2.0, 3.0 and 3.1 for fast and easy data transfer.

The individual connectors meet the requirements for high durability and offer reliable connectivity.

- Up to 10.000 plugging cycles
- THT, THR or SMD soldering processes
- Available in design types 180° (vertical/upright) or 90° (horizontal/flat-lying)
- Packed either in a tray (TY) or on a roll (tape-on-reel, RL)
- Reinforced gold layer for improved corrosion protection
- USB 3.1 sockets support data rates of 10 Gbit/s for fast data transfer
- USB-C sockets enable error-free plugging due to a symmetrical design
- Robust plug & play operation - connect and disconnect without shutting down or restarting the system

General ordering data

Version	OMNIMATE Data - USB jack, female header, Type B, 480 Mbps, THT solder connection, 90°, ≥ 1500, Pitch in mm (P): 2.50 mm, Number of poles: 4, PBT, black, Tray (manual assembly)
Order No.	2698610000
Type	USB2.0B T1H 2.8N4 TY BK
GTIN (EAN)	4050118740912
Qty.	100 pc(s).
Packaging	Tray (manual assembly)

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Technical data

Dimensions and weights

Depth	16 mm	Depth (inches)	0.63 inch
Height	11.05 mm	Height (inches)	0.435 inch
Width	12.04 mm	Width (inches)	0.474 inch
Net weight	3.61 g		

System specifications

Mounting onto the PCB	THT solder connection	Number of poles	4
Number of solder pins per pole	1	Outgoing elbow	90°
Performance-Category	480 Mbps	Pitch in inches (P)	0.098 "
Pitch in mm (P)	2.5 mm	Plugging cycles	≥ 1500
Plugging force/pole, max.	35 N	Product family	OMNIMATE Data - USB jack
Pulling force / pole, min.	10 N	Shield surface	nickel-plated
Shielding	Yes	Shielding material	Brass
Solder pin dimensions	Octagonal	Solder pin length (l)	2.84 mm
Soldering process	Manual soldering, Wave soldering	Tolerance of solder pin position	± 0.1 mm
Transmission rate	480 Mbps	Type of connection	Socket connector

Electrical properties

Dielectric strength, contact / contact	500 V AC	Insulation strength	≥ 1000 MΩ
Rated voltage	30 V		

Material data

Insulating material	PBT	Colour	black
Colour chart (similar)	RAL 9011	Insulation strength	≥ 1000 MΩ
UL 94 flammability rating	V-0	Contact base material	Copper alloy
Contact material	Cu-alloy	Contact surface	Gold over nickel
Storage temperature, min.	-40 °C	Storage temperature, max.	70 °C
Operating temperature, min.	-40 °C	Operating temperature, max.	60 °C

Packing

Packaging	Tray (manual assembly)	VPE length	270 mm
VPE width	221 mm	VPE height	20 mm

Classifications

ETIM 6.0	EC002637	ETIM 7.0	EC002637
ETIM 8.0	EC002637	ETIM 9.0	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
ECLASS 12.0	27-46-02-01	ECLASS 13.0	27-46-02-01

Environmental Product Compliance

REACH SVHC	/
RoHS Compliance Status	Compliant

Approvals

ROHS	Conform
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Creation date July 25, 2024 7:28:16 PM CEST

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Technical data

Downloads

Engineering Data

[CAD data – STEP](#)

Catalogues

[Catalogues in PDF-format](#)

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Drawings

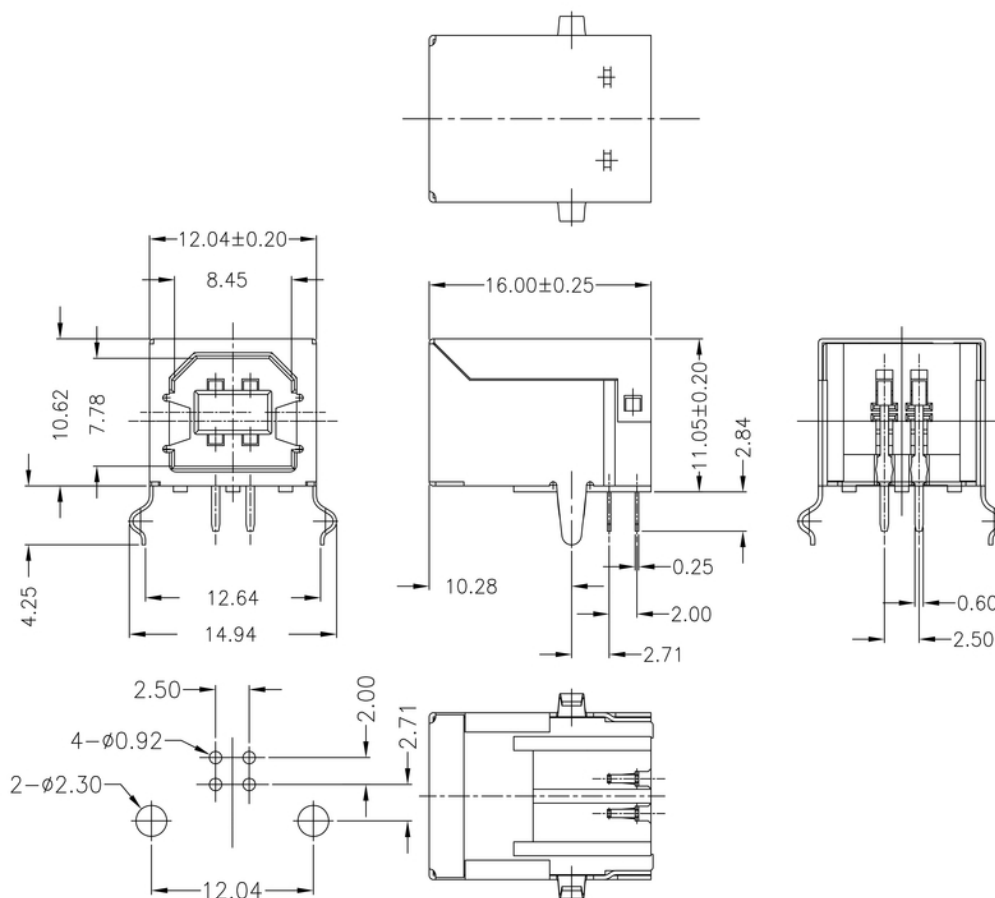
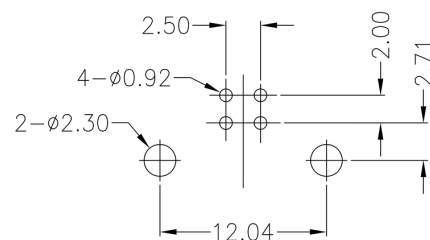


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www.weidmueller.com**Drawings**

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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.