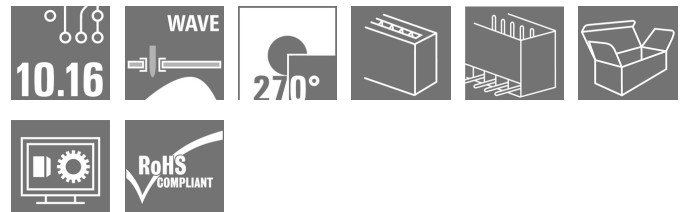


## SU 10.16HP/07/270G 3.5AG BK BX

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergstraße 26  
 D-32758 Detmold  
 Germany

www.weidmueller.com

### Product image



Similar to illustration

Single-row, high-performance male header for side-by-side mounting without sacrificing any poles or with patented flange for fast fixing without tools. Maximum connection and operating reliability thanks to a mating profile that prevents incorrect connection, with unique coding diversity and additional fastening in the flange. 3.5 mm pin length is optimised for wave soldering, plug-in direction 270° to solder pins.

### General ordering data

Version	PCB plug-in connector, male header, closed side, THT solder connection, 10.16 mm, Number of poles: 7, 270°, Solder pin length (l): 3.5 mm, silver-plated, black, Box
Order No.	<a href="#">1813540000</a>
Type	SU 10.16HP/07/270G 3.5AG BK BX
GTIN (EAN)	4032248297757
Qty.	24 pc(s).
Product data	IEC: 1000 V / 78.3 A UL: 300 V / 60 A
Packaging	Box

Creation date March 25, 2021 1:13:57 PM CET

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**Technical data****Dimensions and weights**

Net weight 24.167 g

**System specifications**

Product family		OMNIMATE Power - series BU/SU 10.16HP	Type of connection	Board connection
Mounting onto the PCB		THT solder connection	Pitch in mm (P)	10.16 mm
Pitch in inches (P)		0.4 inch	Outgoing elbow	270°
Number of poles		7	Number of solder pins per pole	3
Solder pin length (l)		3.5 mm	Solder pin length tolerance	+0.1 / -0.3 mm
Solder pin dimensions		1.2 x 1.1 mm	Solder pin dimensions = d tolerance	+0.1 / -0.1 mm
Solder eyelet hole diameter (D)		1.6 mm	Solder eyelet hole diameter tolerance (D)	+ 0,1 mm
L1 in mm		60.96 mm	L1 in inches	2.4 inch
Number of rows		1	Pin series quantity	1
Touch-safe protection acc. to DIN VDE 57 106		Safe from finger touch, plugged	Touch-safe protection acc. to DIN VDE 0470	IP20 plugged
Volume resistance		2.00 mΩ	Can be coded	Yes

**Material data**

Insulating material	PBT GF	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	IIIa
Comparative Tracking Index (CTI)	≥ 200	UL 94 flammability rating	V-0
Contact material	Copper alloy	Contact surface	silver-plated
Layer structure of solder connection	≥ 3 μm Ag	Layer structure of plug contact	≥ 3 μm Ag
Storage temperature, min.	-40 °C	Storage temperature, max.	70 °C
Operating temperature, min.	-50 °C	Operating temperature, max.	120 °C
Temperature range, installation, min.	-25 °C	Temperature range, installation, max.	120 °C

**Rated data acc. to IEC**

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	78.3 A
Rated current, max. number of poles (Tu=20°C)	67.9 A	Rated current, min. number of poles (Tu=40°C)	70.6 A
Rated current, max. number of poles (Tu=40°C)	61.3 A	Rated voltage for surge voltage class / pollution degree II/2	1,000 V
Rated voltage for surge voltage class / pollution degree III/2	1,000 V	Rated voltage for surge voltage class / pollution degree III/3	690 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	6 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	8 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	8 kV	Short-time withstand current resistance	3 x 1s mit 1000 A

**Rated data acc. to CSA**

Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group C / CSA)	300 V
Rated voltage (Use group D / CSA)	600 V	Rated current (Use group B / CSA)	60 A
Rated current (Use group C / CSA)	60 A	Rated current (Use group D / CSA)	5 A

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## Technical data

## Rated data acc. to UL 1059

Institute (cURus)



Certificate No. (cURus)

E60693

Rated voltage (Use group B / UL 1059) 300 V

Rated voltage (Use group C / UL 1059) 300 V

Rated voltage (Use group D / UL 1059) 600 V

Rated current (Use group B / UL 1059) 60 A

Rated current (Use group C / UL 1059) 60 A

Rated current (Use group D / UL 1059) 5 A

Clearance distance, min. 8.9 mm

Creepage distance, min. 10.5 mm

Reference to approval values

Specifications are maximum values, details - see approval certificate.

## Packing

Packaging	Box	VPE length	30 mm
VPE width	50 mm	VPE height	160 mm

## 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

## Important note

IPC conformity Conformity: The products are developed, manufactured and delivered according international recognized standards and norms and comply with the assured properties in the data sheet resp. fulfill decorative properties in accordance with IPC-A-610 "Class 2". Further claims on the products can be evaluated on request.

Notes

- Additional colours on request
- Rated current related to rated cross-section & min. No. of poles.
- P on drawing = pitch
- Rated data refer only to the component itself. Clearance and creepage distances to other components are to be designed in accordance with the relevant application standards.
- Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months

## Approvals

Approvals



ROHS	Conform
UL File Number Search	E60693

## Downloads

Approval/Certificate/Document of Conformity	<a href="#">Declaration of the Manufacturer</a>
Engineering Data	<a href="#">EPLAN, WSCAD</a>

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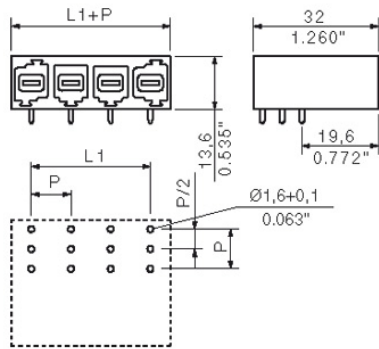
Catalogue status 12.03.2021 / We reserve the right to make technical changes.

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**Drawings****Dimensional drawing**

## Recommended wave soldering profiles

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 Germany  
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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.