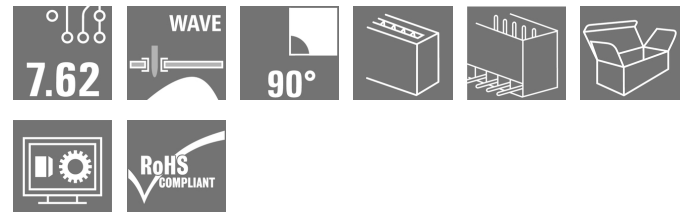


**OMNIMATE Power - series BV/SV 7.62HP
SV 7.62HP/05/90G 3.5SN BK BX**

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com



Single-row, high-current and high-performance male connectors 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 lead-free wave soldering.

General ordering data

| | |
|--------------|--|
| Type | SV 7.62HP/05/90G 3.5SN BK BX |
| Order No. | 1930300000 |
| Version | PCB plug-in connector, male header, closed side, THT solder connection, 7.62 mm, No. of poles: 5, 90°, Solder pin length (l): 3.5 mm, tinned, Black, Box |
| GTIN (EAN) | 4032248580170 |
| Qty. | 48 pc(s). |
| Product data | IEC: 1000 V / 57 A UL: 300 V / 40.5 A |
| Packaging | Box |

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Technical data**Dimensions and weights**

Net weight 9.38 g

System specifications

| | | | |
|--|--|--|-------------------|
| Product family | OMNIMATE Power - series BV/SV 7.62HP | Type of connection | Solder connection |
| Mounting onto the PCB | THT solder connection | Pitch in mm (P) | 7.62 mm |
| Pitch in inches (P) | 0.3 inch | Outgoing elbow | 90° |
| No. of poles | 5 | Number of solder pins per pole | 2 |
| Solder pin length (l) | 3.5 mm | Solder pin length tolerance | +0.1 / -0.3 mm |
| Tolerance of solder pin position | ± 0.1 mm | Solder pin dimensions | 0.8 x 1.0 mm |
| Solder eyelet hole diameter (D) | 1.3 mm | Solder eyelet hole diameter tolerance (D) | + 0,1 mm |
| L1 in mm | 30.48 mm | L1 in inches | 1.2 inch |
| Number of rows | 1 | Pin series quantity | 1 |
| Touch-safe protection acc. to DIN VDE 57 106 | Touch-safe above the printed circuit board | Touch-safe protection acc. to DIN VDE 0470 | IP 20 |
| Volume resistance | 2.00 mΩ | Can be coded | Yes |
| Plugging cycles | 25 | push-in force/pole | 12 N |
| Withdrawal force per pole | 7 N | Packaging | Box |

Material data

| | | | |
|---------------------------------------|----------|---------------------------------------|----------------------------|
| Insulating material | PA GF | Colour | Black |
| Colour chart (similar) | RAL 9011 | Insulating material group | II |
| CTI | ≥ 500 | Insulation resistance | ≥ 10 ⁸ Ω |
| UL 94 flammability rating | V-0 | Contact material | Copper alloy |
| Contact surface | tinned | Layer structure of solder connection | 1-3 μm Ni / 4-6 μm Sn matt |
| Storage temperature, min. | -25 °C | Storage temperature, max. | 55 °C |
| Max. relative humidity during storage | 80 % | Operating temperature, min. | -50 °C |
| Operating temperature, max. | 130 °C | Temperature range, installation, min. | -25 °C |
| Temperature range, installation, max. | 130 °C | | |


Rated data acc. to IEC

| | | | |
|---|------------------------|---|-------------------|
| tested acc. to standard | IEC 60664-1, IEC 61984 | Rated current, min. no. of poles (Tu=20°C) | 57 A |
| Rated current, max. no. of poles (Tu=20°C) | 41 A | Rated current, min. no. of poles (Tu=40°C) | 41 A |
| Rated current, max. no. of poles (Tu=40°C) | 41 A | Rated voltage for surge voltage class / pollution degree II/2 | 1,000 V |
| Rated voltage for surge voltage class / pollution degree III/2 | 630 V | Rated voltage for surge voltage class / pollution degree III/3 | 630 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 | 6 kV |
| Rated impulse voltage for surge voltage class/ contamination degree III/3 | 6 kV | Short-time withstand current resistance | 3 x 1s with 420 A |
| Clearance, min. | 6.9 mm | Creepage distance, min. | 9.6 mm |


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Technical data
Rated data acc. to CSA

| | | | |
|------------------------------|---|-----------------------------|----------------|
| Institute (CSA) |  | Certificate No. (CSA) | 200039-1121690 |
| Rated voltage (Use group B) | 300 V | Rated voltage (Use group C) | 300 V |
| Rated voltage (use group D) | 600 V | Rated current (use group B) | 35 A |
| Rated current (use group C) | 35 A | Rated current (use group D) | 5 A |
| Reference to approval values | Specifications are maximum values, details - see approval certificate. | | |

Rated data acc. to UL 1059

| | | | |
|------------------------------|---|-----------------------------|--------|
| Institute (cURus) |  | Certificate No. (cURus) | E60693 |
| Rated voltage (use group B) | 300 V | Rated voltage (use group C) | 300 V |
| Rated voltage (use group D) | 600 V | Rated current (use group B) | 40.5 A |
| Rated current (use group C) | 40.5 A | Rated current (use group D) | 5 A |
| Clearance distance, min. | 6.9 mm | Creepage distance, min. | 9.6 mm |
| Reference to approval values | Specifications are maximum values, details - see approval certificate. | | |

Classifications

| | | | |
|------------|-------------|------------|-------------|
| ETIM 4.0 | EC002637 | ETIM 5.0 | EC002637 |
| ETIM 6.0 | EC002637 | UNSPSC | 30-21-18-10 |
| eClass 5.1 | 27-26-07-04 | eClass 6.2 | 27-26-07-04 |
| eClass 7.1 | 27-44-04-02 | eClass 8.1 | 27-44-04-02 |
| eClass 9.0 | 27-44-04-02 | eClass 9.1 | 27-44-04-02 |

Notes

| | |
|----------------|--|
| Notes | <ul style="list-style-type: none"> • 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. • Diameter of solder eyelet D = 1.4+0.1 mm starting with 8-pole |
| 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. |

Data sheet

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Technical data

Approvals

Approvals



ROHS

Conform

Downloads

Approval/Certificate/Document of
Conformity

[Declaration of the Manufacturer](#)

Brochure/Catalogue

- [FL DRIVES EN](#)
- [MB DEVICE MANUF. EN](#)
- [FL DRIVES DE](#)
- [CAT 2 PORTFOLIOGUIDE EN](#)
- [FL HEATING ELECTR EN](#)
- [FL APPL INVERTER EN](#)
- [FL_BASE_STATION_EN](#)
- [FL ELEVATOR EN](#)
- [FL POWER SUPPLY EN](#)
- [FL 72H SAMPLE SER EN](#)
- [PO OMNIMATE EN](#)

Engineering Data

[EPLAN, WSCAD](#)

Engineering Data

[SV.zip](#)

Motion controllers white paper

[Download Whitepaper](#)

White Paper UL 600 V

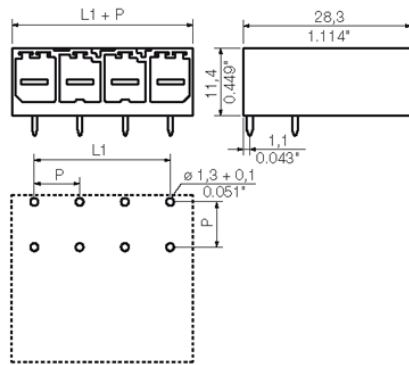
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Drawings

Dimensional drawing



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.