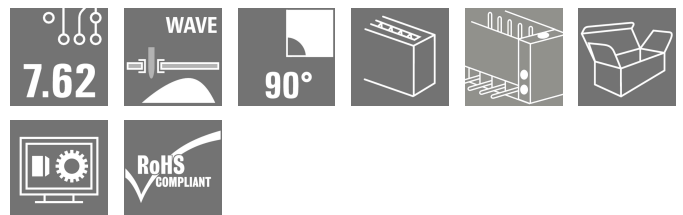
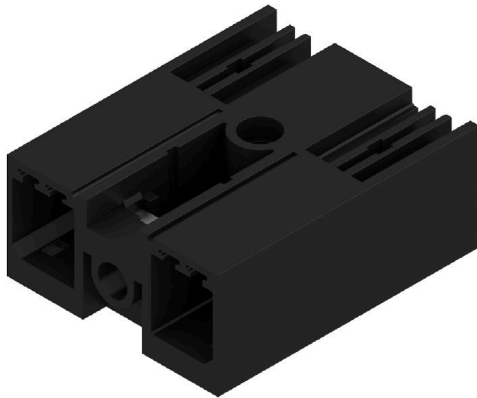


**SV 7.62HP/02/90MF2 3.5SN BK BX****Weidmüller Interface GmbH & Co. KG**Klingenbergstraße 26  
D-32758 Detmold  
Germany[www.weidmueller.com](http://www.weidmueller.com)**Product image**

90° male header with middle flange with a 7.62 pitch.  
Meets the requirements of IEC 61800-5-1 and enables  
UL approval as per UL840 600 V.

Without a female header, the mating profile guarantees  
minimum touch safety of >3 mm with 20 N pressure on  
the test finger.

The automatically locking middle flange which can  
optionally also be screwed, reduces space requirements  
by one pitch width in comparison with conventional solu-  
tions.

On request: available with screw flange or without flange.

**General ordering data**

|              |   |
|--------------|---|
| Version      | PCB plug-in connector, male header, closed side,<br>Middle flange, THT solder connection, 7.62 mm,<br>Number of poles: 2, 90°, Solder pin length (l): 3.5<br>mm, tinned, black, Box |
| Order No.    | <a href="#">1048390000</a>  |
| Type         | SV 7.62HP/02/90MF2 3.5SN BK BX  |
| GTIN (EAN)   | 4032248786633   |
| Qty.         | 78 ST   |
| Product data | IEC: 1000 V / 57 A<br>UL: 300 V / 40.5 A  |
| Packaging    | Box   |

Creation date 03.08.2025 12:29:01 MEZ

Catalogue status / Drawings

## SV 7.62HP/02/90MF2 3.5SN BK BX

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 Klingenbergstraße 26  
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 Germany

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## Technical data

## Approvals

Approvals



|                         |                            |
|-------------------------|----------------------------|
| ROHS                    | Conform                    |
| UL File Number Search   | <a href="#">UL Website</a> |
| Certificate No. (cURus) | E60693                     |

## Dimensions and weights

|                          |          |                 |             |
|--------------------------|----------|-----------------|-------------|
| Depth                    | 28.3 mm  | Depth (inches)  | 1.1142 inch |
| Height                   | 14.9 mm  | Height (inches) | 0.5866 inch |
| Height of lowest version | 11.4 mm  | Width           | 22.86 mm    |
| Width (inches)           | 0.9 inch | Net weight      | 5.12 g      |

## Environmental Product Compliance

|                        |                             |
|------------------------|-----------------------------|
| RoHS Compliance Status | Compliant without exemption |
| REACH SVHC             | No SVHC above 0.1 wt%       |

## System specifications

|   |   |  |  |
|---|---|--|--|
| Product family                                    | OMNIMATE Power - series<br>BV/SV 7.62HP | Type of connection                           | Board connection                           |
| Mounting onto the PCB                             | THT solder connection                   | Pitch in mm (P)                              | 7.62 mm                                    |
| Pitch in inches (P)                               | 0.300 "                                 | Outgoing elbow                               | 90°  |
| Number of poles                                   | 2                                       | Number of solder pins per pole               | 2  |
| Solder pin length (l)                             | 3.5 mm                                  | Solder pin length tolerance                  | +0.1 / -0.3 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                                     | 15.24 mm                                   |
| L1 in inches                                      | 0.600 "                                 | 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                                   | Protection degree                            | IP20, when fully mounted                   |
| Volume resistance                                 | 2.00 mΩ                                 | Can be coded                                 | Yes  |
| Plugging cycles                                   | 25                                      |  |  |

## Material data

|                                       |          |                                       |                                |
|---------------------------------------|----------|---------------------------------------|--------------------------------|
| Insulating material                   | PA GF    | Colour                                | black                          |
| Colour chart (similar)                | RAL 9011 | Insulating material group             | II                             |
| Comparative Tracking Index (CTI)      | ≥ 500    | Moisture Level (MSL)                  |                                |
| 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.             | -40 °C   | Storage temperature, max.             | 70 °C                          |
| 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. number of poles (Tu=20°C) | 57 A |
| Rated current, max. number of poles (Tu=20°C) | 41 A                   | Rated current, min. number of poles (Tu=40°C) | 41 A |

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## Technical data

|  |        |  |                    |
|--|--------|--|--------------------|
| Rated current, max. number of poles<br>( $T_u=40^{\circ}\text{C}$ )          | 41 A   | Rated voltage for surge voltage class /<br>pollution degree II/2         | 1000 V             |
| Rated voltage for surge voltage class /<br>pollution degree III/2            | 630 V  | Rated voltage for surge voltage class /<br>pollution degree III/3        | 630 V              |
| Rated impulse voltage for surge voltage<br>class/ pollution degree II/2      | 6 kV   | Rated impulse voltage for surge voltage<br>class/ pollution degree III/2 | 6 kV               |
| Rated impulse voltage for surge voltage<br>class/ contamination degree III/3 | 6 kV   | Short-time withstand current resistance                                  | 3 x 1 s with 420 A |
| Creepage distance, min.  | 9.6 mm | Clearance, min.  | 6.9 mm             |

## Rated data acc. to CSA

|                                   |  |                                   |                 |
|-----------------------------------|--|-----------------------------------|-----------------|
| Institute (CSA)                   | CSA  | Certificate No. (CSA)             | 200039-112 1690 |
| 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) | 35 A            |
| Rated current (Use group C / CSA) | 35 A   | Rated current (Use group D / CSA) | 5 A             |
| Reference to approval values      | Specifications are maximum values, details - see approval certificate. |                                   |                 |

## Rated data acc. to UL 1059

|                                       |  |                                       |        |
|---------------------------------------|--|---------------------------------------|--------|
| Institute (cURus)                     | 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 voltage (Use group F / UL 1059) | 744 V  |
| Rated current (Use group B / UL 1059) | 40.5 A   | Rated current (Use group C / UL 1059) | 40.5 A |
| Rated current (Use group D / UL 1059) | 5 A  | Rated current (Use group F / UL 1059) | 40.5 A |
| Creepage distance, min.               | 9.6 mm   | Clearance distance, min.              | 6.9 mm |
| Reference to approval values          | Specifications are maximum values, details - see approval certificate. |                                       |        |

## Packing

|           |           |            |           |
|-----------|-----------|------------|-----------|
| Packaging | Box       | VPE length | 350.00 mm |
| VPE width | 135.00 mm | VPE height | 39.00 mm  |

## 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          | <ul style="list-style-type: none"> <li>• Additional variants on request</li> <li>• Rated current related to rated cross-section &amp; min. No. of poles.</li> <li>• P on drawing = pitch</li> <li>• 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.</li> <li>• In accordance with IEC 61984, OMNIMATE-connectors are connectors without breaking capacity (COC). During designated use, connectors are not allowed to be engaged or disengaged when live or under load</li> <li>• Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months</li> </ul> |  |  |

## Classifications

|            |             |             |             |
|------------|-------------|-------------|-------------|
| ETIM 6.0   | EC002637    | ETIM 7.0    | EC002637    |
| ETIM 8.0   | EC002637    | ETIM 9.0    | EC002637    |
| ETIM 10.0  | EC002637    | ECLASS 9.0  | 27-44-04-02 |
| ECLASS 9.1 | 27-44-04-02 | ECLASS 10.0 | 27-44-04-02 |

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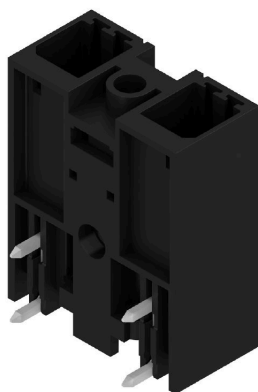
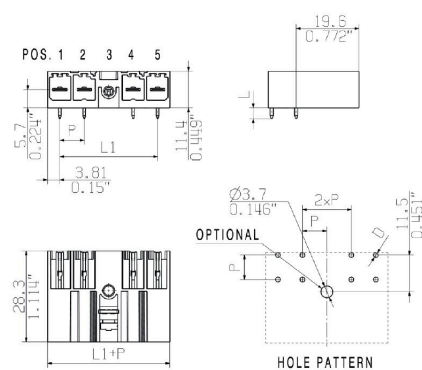
## Technical data

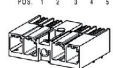
|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ECLASS 11.0 | 27-46-02-01 | ECLASS 12.0 | 27-46-02-01 |
| ECLASS 13.0 | 27-46-02-01 | ECLASS 14.0 | 27-46-02-01 |
| ECLASS 15.0 | 27-46-02-01 |             |             |

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**Drawings**
**Product image**

**Dimensional drawing**


|                |                                  |   |   |   |   |   |   |   |
|----------------|----------------------------------|---|---|---|---|---|---|---|
| 6              | M(S)F6                           | o   | o | o | o | o | X | o |
| 6              | M(S)F5                           | o   | o | o | o | X | o | o |
| 6              | M(S)F4                           | o   | o | o | X | o | o | o |
| 6              | M(S)F3                           | o   | o | X | o | o | o | o |
| 6              | M(S)F2                           | o   | X | o | o | o | o | o |
| 5              | M(S)F5                           | o   | o | o | o | X | o | o |
| 5              | M(S)F4                           | o   | o | o | X | o | o | o |
| 5              | M(S)F3                           | o   | o | X | o | o | o | o |
| 5              | M(S)F2                           | o   | X | o | o | o | o | o |
| 4              | M(S)F4                           | o   | o | o | X | o | o | o |
| 4              | M(S)F3                           | o   | o | X | o | o | o | o |
| 4              | M(S)F2                           | o   | X | o | o | o | o | o |
| 3              | M(S)F3                           | o   | o | X | o | o | o | o |
| 3              | M(S)F2                           | o   | X | o | o | o | o | o |
| 2              | M(S)F2                           | o   | X | o | o | o | o | o |
| NO OF<br>POLES | X = MIDDLE<br>FLANGE<br>POSITION | 1   | 2 | 3 | 4 | 5 | 6 | 7 |
|                |                                  |  |   |   |   |   |   |   |