

**SV 7.62IT/04/90MF2 3.5SN BK BX TB****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com



90° male header with soldered flange fastening with 7.62 pitch for 400 V IT power networks according to IEC 61800-5-1.

UL approval as per UL840 600 V.

Meets the extended requirements on 5.5 mm touch safety for IT power networks as per IEC 61800-5-1 for 400 V to earth when combined with female header BVZ 7.62 IT...

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 solutions.

On request: available with screw flange or without flange.

**General ordering data**

|              |                                                                                                                                                                    |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Version      | PCB plug-in connector, male header, closed side, Middle flange, THT solder connection, 7.62 mm, Number of poles: 4, 90°, Solder pin length (l): 3.5 mm, black, Box |
| Order No.    | <a href="#">2544910000</a>                                                                                                                                         |
| Type         | SV 7.62IT/04/90MF2 3.5SN BK BX TB                                                                                                                                  |
| GTIN (EAN)   | 4050118555059                                                                                                                                                      |
| Qty.         | 48 pc(s).                                                                                                                                                          |
| Product data | IEC: 1000 V / 41 A<br>UL: 300 V / 40.5 A                                                                                                                           |
| Packaging    | Box                                                                                                                                                                |

## SV 7.62IT/04/90MF2 3.5SN BK BX TB

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Technical data

## Dimensions and weights

|            |         |
|------------|---------|
| Net weight | 9.931 g |
|------------|---------|

## System specifications

|                                              |                                            |                                            |                  |
|----------------------------------------------|--------------------------------------------|--------------------------------------------|------------------|
| Product family                               | OMNIMATE Power - series BV/SV 7.62IT       | Type of connection                         | Board 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°              |
| Number of poles                              | 4                                          | 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                                   | 30.48 mm         |
| L1 in inches                                 | 1.2 inch                                   | Pin series quantity                        | 2                |
| 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              |

## Material data

|                                       |                                |                                       |                                |
|---------------------------------------|--------------------------------|---------------------------------------|--------------------------------|
| Insulating material                   | PA GF                          | Colour                                | black                          |
| Colour chart (similar)                | RAL 9011                       | Insulating material group             | II                             |
| Comparative Tracking Index (CTI)      | ≥ 500                          | UL 94 flammability rating             | V-0                            |
| Contact material                      | Copper alloy                   | Layer structure of solder connection  | 1...3 µm Ni / 4...6 µm Sn matt |
| Layer structure of plug contact       | 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)                         | 41 A              |
| Rated current, max. number of poles (Tu=20°C)                             | 41 A                   | Rated current, min. number of poles (Tu=40°C)                         | 41 A              |
| Rated current, max. number 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 |

## 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) | 35 A  |
| Rated current (Use group C / CSA) | 35 A  | Rated current (Use group D / CSA) | 5 A   |

## SV 7.62IT/04/90MF2 3.5SN BK BX TB

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Technical data

## Rated data acc. to UL 1059

|                                       |        |                                       |        |
|---------------------------------------|--------|---------------------------------------|--------|
| 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) | 40.5 A |
| Rated current (Use group C / UL 1059) | 40.5 A | Rated current (Use group D / UL 1059) | 5 A    |
| Clearance distance, min.              | 6.9 mm | Creepage distance, min.               | 9.6 mm |

## Packing

|           |        |            |        |
|-----------|--------|------------|--------|
| Packaging | Box    | VPE length | 350 mm |
| VPE width | 135 mm | VPE height | 35 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

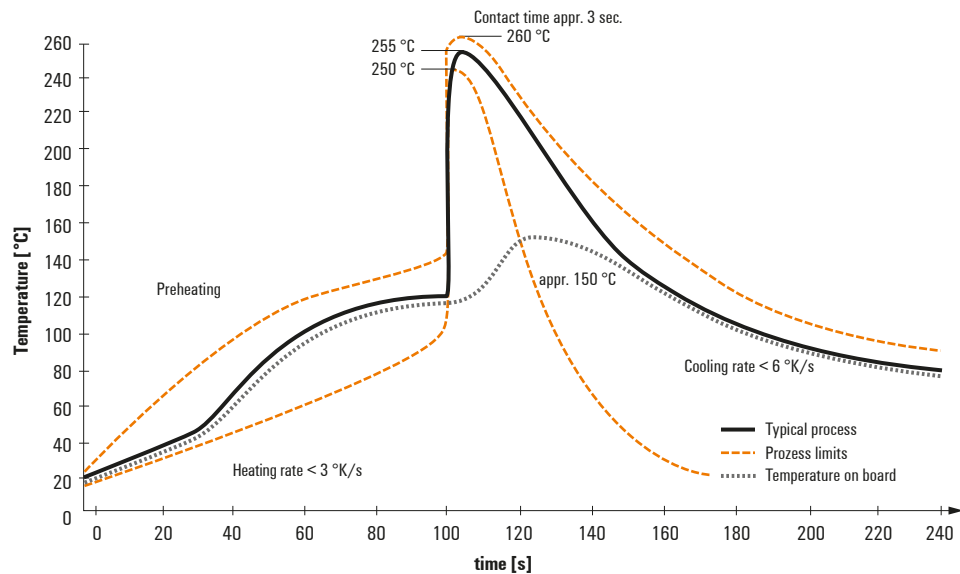
|                |                                                                                                                                                                                                                                                                                                                            |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 | <ul style="list-style-type: none"> <li>• Additional colours 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>• MFX and MSFX: X= Position of the middle flange e.g. MF2, MSF3</li> <li>• Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months</li> </ul> |
|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

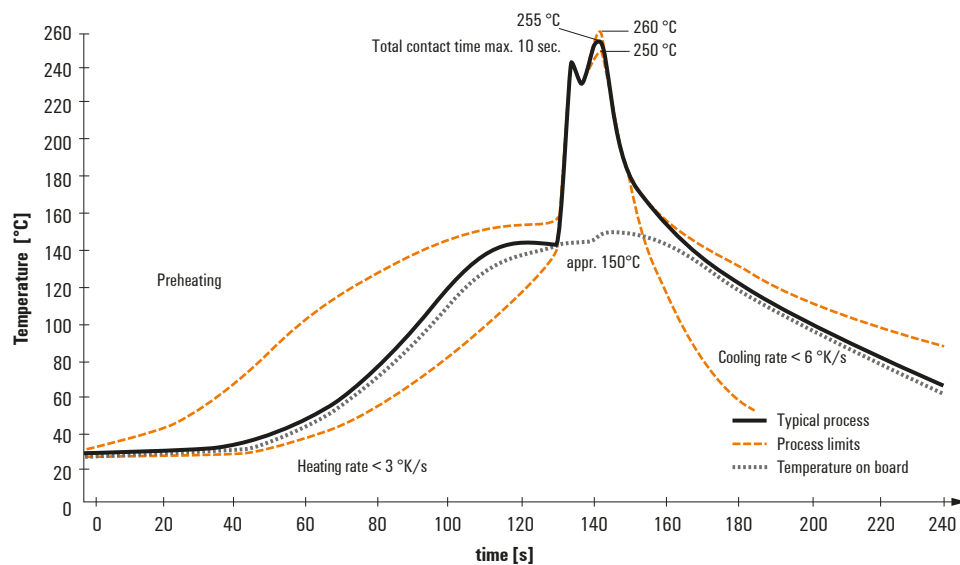
## Recommended wave soldering profiles

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 16  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
[www.weidmueller.com](http://www.weidmueller.com)

### 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.