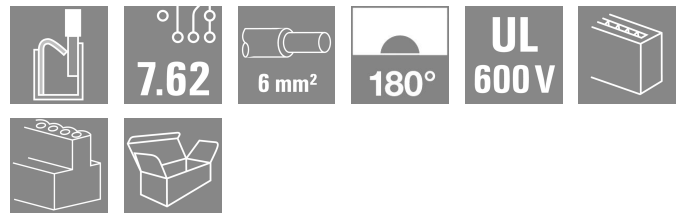


**BVDF 7.62HP/07/180 SN BK BX****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)**Product image**

Bus connector with two connections per pole with the time-saving 6mm<sup>2</sup> PUSH IN connection system.

- The extremely short cross-connection allows you to safely loop through bus currents.
- PUSH IN connection: Solid wires and stranded wires with ferrules need only to be inserted and they are ready.
- The self-locking middle flange reduces the space requirements by one pitch width in comparison with conventional solutions.

**General ordering data**

|              |   |
|--------------|---|
| Version      | PCB plug-in connector, female plug, 7.62 mm, Number of poles: 7, 180°, PUSH IN with actuator, Tension-clamp connection, Clamping range, max. : 10 mm <sup>2</sup> , Box |
| Order No.    | <a href="#">2720470000</a>  |
| Type         | BVDF 7.62HP/07/180 SN BK BX   |
| GTIN (EAN)   | 4050118780987   |
| Qty.         | 15 items  |
| Product data | IEC: 600 V / 46 A / 0.5 - 10 mm <sup>2</sup><br>UL: 600 V / 35 A / AWG 24 - AWG 8   |
| Packaging    | Box   |

## BVDF 7.62HP/07/180 SN BK BX

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Technical data

## Approvals

Approvals



ROHS Conform

UL File Number Search [UL Website](#)

Certificate No. (cURus) E60693

## Dimensions and weights

|            |          |                 |             |
|------------|----------|-----------------|-------------|
| Depth      | 42.55 mm | Depth (inches)  | 1.6752 inch |
| Height     | 35.05 mm | Height (inches) | 1.3799 inch |
| Width      | 69.58 mm | Width (inches)  | 2.7394 inch |
| Net weight | 73.17 g  |                 |             |

## Environmental Product Compliance

RoHS Compliance Status Compliant without exemption

REACH SVHC No SVHC above 0.1 wt%

## System Parameters

|  |   |   |  |
|--|---|---|--|
| Product family                               | OMNIMATE Power - series BV/SV 7.62HP            |   |  |
| Type of connection                           | Field connection                                |   |  |
| Wire connection method                       | PUSH IN with actuator, Tension-clamp connection |   |  |
| Pitch in mm (P)                              | 7.62 mm   |   |  |
| Pitch in inches (P)                          | 0.300 "   |   |  |
| Conductor outlet direction                   | 180°  |   |  |
| Number of poles                              | 7   |   |  |
| L1 in mm                                     | 45.62 mm  |   |  |
| L1 in inches                                 | 1.800 "   |   |  |
| Number of rows                               | 2   |   |  |
| Pin series quantity                          | 1   |   |  |
| Touch-safe protection acc. to DIN VDE 57 106 | Safe from finger touch                          |   |  |
| Touch-safe protection acc. to DIN VDE 0470   | IP 20   |   |  |
| Protection degree                            | IP20  |   |  |
| Volume resistance                            | 4.50 mΩ   |   |  |
| Can be coded                                 | Yes   |   |  |
| Stripping length                             | 12 mm   |   |  |
| Stripping length tolerance                   | min.  | - |  |
|  | max.  | 1 |  |
| Screwdriver blade                            | 0.6 x 3.5                                       |   |  |
| Plugging cycles                              | 25  |   |  |
| Plugging force/pole, max.                    | 12 N  |   |  |
| Pulling force/pole, max.                     | 12 N  |   |  |

## Material data

|                                  |          |                                      |                            |
|----------------------------------|----------|--------------------------------------|----------------------------|
| Insulating material              | PA GF    | Colour                               | black                      |
| Colour chart (similar)           | RAL 9011 | Insulating material group            | I                          |
| Comparative Tracking Index (CTI) | ≥ 600    | Moisture Level (MSL)                 |                            |
| UL 94 flammability rating        | V-0      | Contact material                     | Cu-alloy                   |
| Contact surface                  | tinned   | Layer structure of solder connection | 1...3 µm Ni / 4...10 µm Sn |
| Storage temperature, min.        | -40 °C   | Storage temperature, max.            | 70 °C                      |

## BVDF 7.62HP/07/180 SN BK BX

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Technical data

|                             |        |                             |        |
|-----------------------------|--------|-----------------------------|--------|
| Operating temperature, min. | -50 °C | Operating temperature, max. | 120 °C |
|-----------------------------|--------|-----------------------------|--------|

## Conductors suitable for connection

|   |                     |
|---|---------------------|
| Clamping range, min.  | 0.5 mm <sup>2</sup> |
| Clamping range, max.  | 10 mm <sup>2</sup>  |
| Wire connection cross section AWG, min.                             | AWG 24              |
| Wire connection cross section AWG, max.                             | AWG 8               |
| Solid, min. H05(07) V-U   | 0.5 mm <sup>2</sup> |
| Solid, max. H05(07) V-U   | 10 mm <sup>2</sup>  |
| Stranded, min. H07V-R   | 1.5 mm <sup>2</sup> |
| Stranded, max. H07V-R   | 6 mm <sup>2</sup>   |
| Flexible, min. H05(07) V-K  | 0.5 mm <sup>2</sup> |
| Flexible, max. H05(07) V-K  | 10 mm <sup>2</sup>  |
| w. plastic collar ferrule, DIN 46228 pt 4, 0.5 mm <sup>2</sup> min. |                     |
| w. wire end ferrule, DIN 46228 pt 1, min.                           | 0.5 mm <sup>2</sup> |
| w. wire end ferrule, DIN 46228 pt 1, max.                           | 6 mm <sup>2</sup>   |

|                     |  |                              |                             |
|---------------------|--|------------------------------|-----------------------------|
| Clampable conductor | Cross-section for conductor connection | nominal                      | 0.5 mm <sup>2</sup>         |
|                     | wire end ferrule                       | Stripping length             | nominal 14 mm               |
|                     |  | Recommended wire-end ferrule | <a href="#">H0.5/12 OR</a>  |
|                     | Cross-section for conductor connection | nominal                      | 0.75 mm <sup>2</sup>        |
|                     | wire end ferrule                       | Stripping length             | nominal 14 mm               |
|                     |  | Recommended wire-end ferrule | <a href="#">H0.75/18 W</a>  |
|                     | Cross-section for conductor connection | nominal                      | 1 mm <sup>2</sup>           |
|                     | wire end ferrule                       | Stripping length             | nominal 15 mm               |
|                     |  | Recommended wire-end ferrule | <a href="#">H1.0/18 GE</a>  |
|                     | Cross-section for conductor connection | nominal                      | 1.5 mm <sup>2</sup>         |
|                     | wire end ferrule                       | Stripping length             | nominal 12 mm               |
|                     |  | Recommended wire-end ferrule | <a href="#">H1.5/12</a>     |
|                     |  | Stripping length             | nominal 15 mm               |
|                     |  | Recommended wire-end ferrule | <a href="#">H1.5/18D SW</a> |
|                     | Cross-section for conductor connection | nominal                      | 2.5 mm <sup>2</sup>         |
|                     | wire end ferrule                       | Stripping length             | nominal 12 mm               |
|                     |  | Recommended wire-end ferrule | <a href="#">H2.5/12</a>     |
|                     |  | Stripping length             | nominal 14 mm               |
|                     |  | Recommended wire-end ferrule | <a href="#">H2.5/19D BL</a> |
|                     | Cross-section for conductor connection | nominal                      | 4 mm <sup>2</sup>           |
|                     | wire end ferrule                       | Stripping length             | nominal 12 mm               |
|                     |  | Recommended wire-end ferrule | <a href="#">H4.0/12</a>     |
|                     |  | Stripping length             | nominal 14 mm               |
|                     |  | Recommended wire-end ferrule | <a href="#">H4.0/20D GR</a> |
|                     | Cross-section for conductor connection | nominal                      | 6 mm <sup>2</sup>           |
|                     | wire end ferrule                       | Stripping length             | nominal 12 mm               |
|                     |  | Recommended wire-end ferrule | <a href="#">H6.0/12</a>     |
|                     |  | Stripping length             | nominal 14 mm               |

## BVDF 7.62HP/07/180 SN BK BX

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Technical data

|                |  |                              |                            |
|----------------|--|------------------------------|----------------------------|
|                |  | Recommended wire-end ferrule | <a href="#">H6.0/20 SW</a> |
|                | Cross-section for conductor connection   | nominal                      | 10 mm <sup>2</sup>         |
| Reference text | The outside diameter of the plastic collar should not be larger than the pitch (P), Length of ferrules is to be chosen depending on the product and the rated voltage. |                              |                            |

## Rated data acc. to IEC

|   |                        |   |                   |
|---|------------------------|---|-------------------|
| tested acc. to standard   | IEC 60664-1, IEC 61984 | Rated current, min. number of poles (Tu=20°C)                         | 46 A              |
| Rated current, max. number of poles (Tu=20°C)                             | 41 A                   | Rated current, min. number of poles (Tu=40°C)                         | 38 A              |
| Rated current, max. number of poles (Tu=40°C)                             | 37.5 A                 | Rated voltage for surge voltage class / pollution degree II/2         | 600 V             |
| Rated voltage for surge voltage class / pollution degree III/2            | 600 V                  | Rated voltage for surge voltage class / pollution degree III/3        | 600 V             |
| Rated impulse voltage for surge voltage class/ pollution degree II/2      | 4 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 400 A |
| Creepage distance, min.   | 11.03 mm               | Clearance, min.   | 10.36 mm          |

## Rated data acc. to UL 1059

|                                       |  |                                       |        |
|---------------------------------------|--|---------------------------------------|--------|
| Institute (cURus)                     | CURUS  | Certificate No. (cURus)               | E60693 |
| Rated voltage (Use group B / UL 1059) | 600 V  | Rated voltage (Use group C / UL 1059) | 600 V  |
| Rated voltage (Use group D / UL 1059) | 600 V  | Rated current (Use group B / UL 1059) | 35 A   |
| Rated current (Use group C / UL 1059) | 35 A   | Rated current (Use group D / UL 1059) | 35 A   |
| Wire cross-section, AWG, min.         | AWG 24   | Wire cross-section, AWG, max.         | AWG 8  |
| Reference to approval values          | Specifications are maximum values, details - see approval certificate. |                                       |        |

## Packing

|           |           |            |           |
|-----------|-----------|------------|-----------|
| Packaging | Box       | VPE length | 338.00 mm |
| VPE width | 130.00 mm | VPE height | 54.00 mm  |

## Type tests

|                               |                |  |           |
|-------------------------------|----------------|--|-----------|
| Test: Durability of markings  | Standard       | IEC 61984 section 7.3.2 / 10.08 Taking pattern from IEC 60068-2-70 / 12.95         |           |
|                               | Test           | mark of origin, type identification, pitch, durability                             |           |
|                               | Evaluation     | available  |           |
| Test: Clampable cross section | Standard       | DIN EN 60999-1 section 7 and 9.1 / 12.00, DIN EN 60947-1 section 8.2.4.5.1 / 04.08 |           |
|                               | Conductor type | Type of conductor and conductor cross-section                                      | H05V-U0.5 |
|                               |                | Type of conductor and conductor cross-section                                      | H05V-K0.5 |
|                               |                | Type of conductor and conductor cross-section                                      | H07V-K6   |
|                               |                | Type of conductor and conductor cross-section                                      | H07V-K10  |

## BVDF 7.62HP/07/180 SN BK BX

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Technical data

|   |                |   |           |
|---|----------------|---|-----------|
| Test for damage to and accidental loosening of conductors |                | Type of conductor and conductor cross-section | AWG 24/1  |
|   |                | Type of conductor and conductor cross-section | AWG 24/19 |
|   |                | Type of conductor and conductor cross-section | AWG 8/19  |
|   | Evaluation     | passed  |           |
|   | Standard       | IEC 60999-1 section 9.4 / 11.99               |           |
|   | Requirement    | 0.2 kg  |           |
|   | Conductor type | Type of conductor and conductor cross-section | AWG 24/1  |
|   |                | Type of conductor and conductor cross-section | AWG 24/19 |
|   | Evaluation     | passed  |           |
|   | Requirement    | 0.3 kg  |           |
|   | Conductor type | Type of conductor and conductor cross-section | H05V-U0.5 |
|   |                | Type of conductor and conductor cross-section | H05V-K0.5 |
|   | Evaluation     | passed  |           |
|   | Requirement    | 1.4 kg  |           |
|   | Conductor type | Type of conductor and conductor cross-section | H07V-K6   |
|   |                | Type of conductor and conductor cross-section | H07V-U10  |
| Pull-out test   |                | Type of conductor and conductor cross-section | AWG 8/19  |
|   | Evaluation     | passed  |           |
|   | Standard       | IEC 60999-1 section 9.5 / 11.99               |           |
|   | Requirement    | ≥10 N   |           |
|   | Conductor type | Type of conductor and conductor cross-section | AWG 24/1  |
|   |                | Type of conductor and conductor cross-section | AWG 24/19 |
|   | Evaluation     | passed  |           |
|   | Requirement    | ≥20 N   |           |
|   | Conductor type | Type of conductor and conductor cross-section | H05V-U0.5 |
|   |                | Type of conductor and conductor cross-section | H05V-K0.5 |
|   | Evaluation     | passed  |           |
|   | Requirement    | ≥80 N   |           |
|   | Conductor type | Type of conductor and conductor cross-section | H07V-K6   |
|   |                | Type of conductor and conductor cross-section | H07V-U10  |
|   | Evaluation     | passed  |           |
|   | Requirement    | ≥ 90N   |           |

## BVDF 7.62HP/07/180 SN BK BX

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Technical data

|  |                |   |          |
|--|----------------|---|----------|
|  | Conductor type | Type of conductor and conductor cross-section | H07V-K10 |
|  |                | Type of conductor and conductor cross-section | AWG 8/19 |
|  | Evaluation     | passed  |          |

## 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>• Wire end ferrule with plastic collar to DIN 46228/4</li> <li>• Wire end ferrule without plastic collar to DIN 46228/1</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 8.0    | EC002638    | ETIM 9.0    | EC002638    |
| ETIM 10.0   | EC002638    | ECLASS 14.0 | 27-46-02-02 |
| ECLASS 15.0 | 27-46-02-02 |             |             |

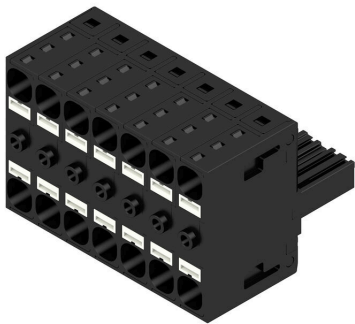
**BVDF 7.62HP/07/180 SN BK BX**

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

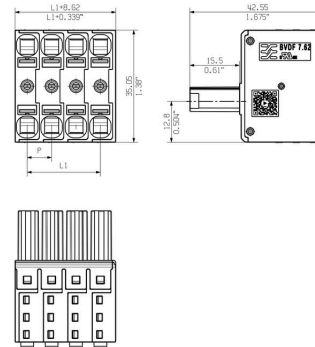
[www.weidmueller.com](http://www.weidmueller.com)

## Drawings

### Product image

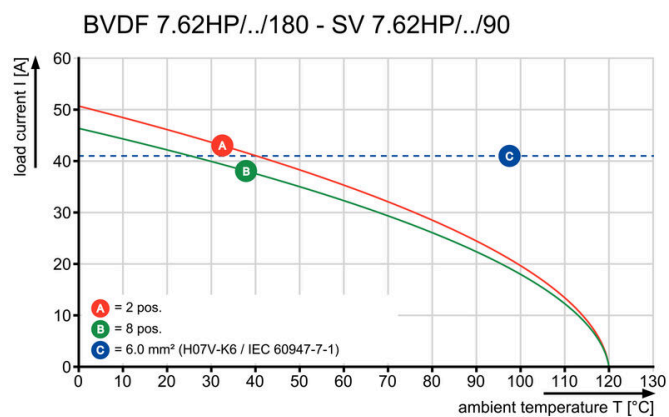


## Dimensional drawing

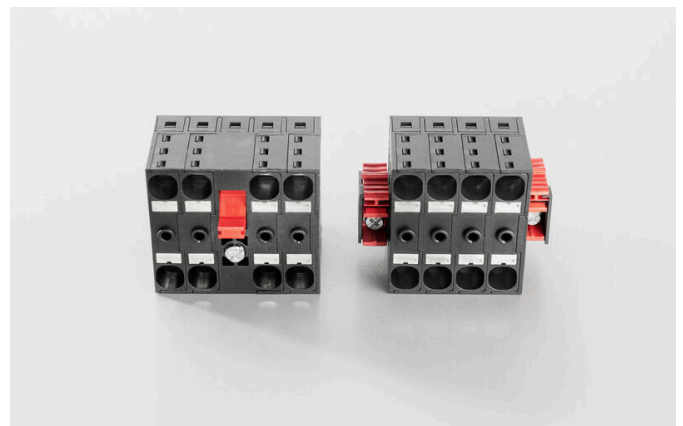


Similar to illustration

### Derating curve



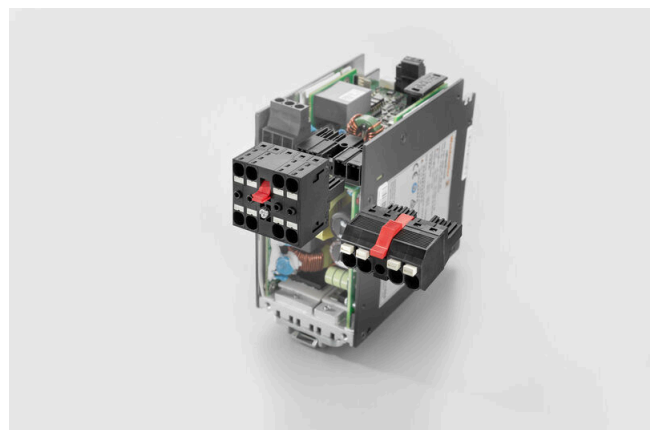
## Product benefits



## Product benefits



## Product benefits



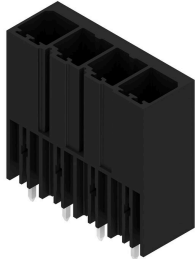
## BVDF 7.62HP/07/180 SN BK BX

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

www.weidmueller.com

## Counterpart

## SV 7.62HP 180G SN

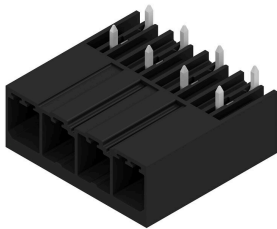


Single-row, high-performance male header for side-by-side mounting without sacrificing any poles or with patented flange for fast fixing without tools. Maximum connection and operating reliability thanks to a mating profile that prevents incorrect connection, with unique coding diversity and additional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

## General ordering data

|            |                            |   |
|------------|----------------------------|---|
| Type       | SV 7.62HP/07/180G 3.5SN... | Version   |
| Order No.  | <a href="#">1930650000</a> | PCB plug-in connector, male header, closed side, THT solder           |
| GTIN (EAN) | 4032248580620              | connection, 7.62 mm, Number of poles: 7, 180°, Solder pin length (l): |
| Qty.       | 30 ST                      | 3.5 mm, tinned, black, Box  |

## SV 7.62HP 270G SN



Single-row, high-current and high-performance male headers for side-by-side mounting without sacrificing any poles or with flange for fast fixing without tools. Maximum connection and operating reliability thanks to a mating profile that prevents incorrect connection, unique coding diversity and additional fastening in the flange.

## General ordering data

|            |                            |   |
|------------|----------------------------|---|
| Type       | SV 7.62HP/07/270G 3.5SN... | Version   |
| Order No.  | <a href="#">1931310000</a> | PCB plug-in connector, male header, closed side, THT solder           |
| GTIN (EAN) | 4032248580347              | connection, 7.62 mm, Number of poles: 7, 270°, Solder pin length (l): |
| Qty.       | 30 ST                      | 3.5 mm, tinned, black, Box  |

## SV 7.62HP 90G SN



Single-row, high-current and high-performance male headers for side-by-side mounting without sacrificing any poles or with flange for fast fixing without tools. Maximum connection and operating reliability thanks to a mating profile that prevents incorrect connection, unique coding diversity and additional fastening in the flange.

## General ordering data

|            |                            |  |
|------------|----------------------------|--|
| Type       | SV 7.62HP/07/90G 3.5SN ... | Version  |
| Order No.  | <a href="#">1930320000</a> | PCB plug-in connector, male header, closed side, THT solder          |
| GTIN (EAN) | 4032248580194              | connection, 7.62 mm, Number of poles: 7, 90°, Solder pin length (l): |
| Qty.       | 30 ST                      | 3.5 mm, tinned, black, Box   |



**BVDF 7.62HP/07/180 SN BK BX**

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

[www.weidmueller.com](http://www.weidmueller.com)

**Counterpart****SVZ 7.62HP 180 SN**

High-performance male header with the proven, 100% maintenance-free Weidmüller steel clamping yoke. Side-by-side mounting without sacrificing any poles or with patented multifunction flange for secure, fast fixing without tools. Maximum connection and operating reliability thanks to a mating profile that prevents incorrect connection, unique coding diversity, incorrect wiring protection. Suitable for labelling.

**General ordering data**

|            |                            |   |
|------------|----------------------------|---|
| Type       | SVZ 7.62HP/07/180G SN B... | Version   |
| Order No.  | <a href="#">1931680000</a> | PCB plug-in connector, male plug, 7.62 mm, Number of poles: 7,    |
| GTIN (EAN) | 4032248581672              | 180°, Clamping yoke connection, Clamping range, max. : 6 mm², Box |
| Qty.       | 25 ST                      |   |