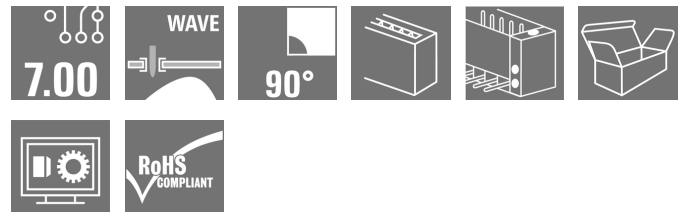


## OMNIMATE Power - series STV STV S 10 LS90

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 26  
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Germany  
Fon: +49 5231 14-0  
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### Product image



Similar to illustration

Tried-and-tested power connector system with TOP or leaf spring system. Versatile use.

### General ordering data

Type	STV S 10 LS90
Order No.	<a href="#">1612640000</a>
Version	PCB plug-in connector, male header, Flange, THT solder connection, 7.00 mm, Number of poles: 10, 90°, Solder pin length (l): 3.2 mm, silver-plated, Pebble grey, Box
GTIN (EAN)	4008 190199364
Qty.	10 pc(s).
Product data	IEC: 1000 V UL:
Packaging	Box

Creation date May 3, 2020 9:28:58 PM CEST

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

Net weight	29.768 g
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**System specifications**

Product family		Type of connection	
OMNIMATE Power - series STV			Board connection
Mounting onto the PCB	THT solder connection	Pitch in mm (P)	7 mm
Pitch in inches (P)	0.276 inch	Outgoing elbow	90°
Number of poles	10	Number of solder pins per pole	1
Solder pin length (l)	3.2 mm	Tolerance of solder pin position	± 0.15 mm
Solder eyelet hole diameter (D)	1.6 mm	Solder eyelet hole diameter tolerance (D)	+ 0,1 mm
L1 in mm	63 mm	L1 in inches	2.48 inch
Number of rows	1	Pin series quantity	1
Touch-safe protection acc. to DIN VDE 57 106	Safe from back-of-hand touch	Touch-safe protection acc. to DIN VDE 0470	IP 10
Volume resistance	2.70 mΩ	Can be coded	Yes
Plugging force/pole, max.	4 N	Pulling force/pole, max.	4 N


**Material data**

Insulating material		Colour	
Wemid (PA)			Pebble grey
Colour chart (similar)	RAL 7032	Insulating material group	I
Comparative Tracking Index (CTI)	≥ 600	Insulation strength	≥ 10 <sup>8</sup> Ω
UL 94 flammability rating	V-0	Contact material	CuZn
Contact surface	silver-plated	Storage temperature, min.	-25 °C
Storage temperature, max.	50 °C	Max. relative humidity during storage	70 %
Operating temperature, min.	-50 °C	Temperature range, installation, min.	-25 °C

**Rated data acc. to IEC**

tested acc. to standard		Rated current, max. number of poles (Tu=20°C)	
IEC 60664-1, IEC 61984			18 A
Rated current, max. number of poles (Tu=40°C)	15 A	Rated voltage for surge voltage class / pollution degree II/2	1,000 V
Rated voltage for surge voltage class / pollution degree III/2	500 V	Rated voltage for surge voltage class / pollution degree III/3	500 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 180 A

**Rated data acc. to CSA**

Institute (CSA)		Certificate No. (CSA)	
			12400-343
Rated voltage (Use group D / CSA)	600 V	Rated current (Use group D / CSA)	14 A
Reference to approval values	Specifications are maximum values, details - see approval certificate.		


**Data sheet**

**OMNIMATE Power - series STV  
STV S 10 LS90**


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**Technical data**

**Rated data acc. to UL 1059**

Institute (UR)		Certificate No. (UR)	E92202
Rated voltage (Use group D / UL 1059)	600 V	Rated current (Use group D / UL 1059)	14 A
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

**Rated data acc. to UL 1977**

Institute (UR)		Certificate No. (UR)	E92202
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

**Packing**

Packaging	Box	VPE length	67 mm
VPE width	106 mm	VPE height	136 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	UNSPSC	30-21-18-10

**Notes**

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> </ul>
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.

**Approvals**

Approvals	
ROHS	Conform

**Data sheet****OMNIMATE Power - series STV  
STV S 10 LS90**

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**Technical data****Downloads**

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Approval/Certificate/Document of Conformity	<a href="#">Declaration of the Manufacturer</a>
Brochure/Catalogue	<a href="#">MB DEVICE MANUF. EN</a> <a href="#">FL 72H SAMPLE SER EN</a> <a href="#">PO OMNIMATE EN</a>
Engineering Data	<a href="#">EPLAN, WSCAD</a>
White paper UL 600 V	<a href="#">Download Whitepaper</a>

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## Data sheet

### OMNIMATE Power - series STV STV S 10 LS90

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## Accessories

### Coding elements



**Only connects what is supposed to be connected:  
the right connection at the right place.**

Coding elements and locking devices clearly assign connecting elements during the manufacturing process and operation

The coding elements and locking devices are inserted prior to assembly or during the cable assembly phase. The Weidmüller alternative: configure online using the variant configurator to precode prior to delivery.

Incorrect assembly on the circuit board and incorrect plugging of connecting elements is no longer possible. The advantage: no troubleshooting during manufacture and no operational errors by the user.

### General ordering data

Type	STV S KO	Version	Product data	Packaging
Order No.	<a href="#">1613800000</a>	PCB plug-in connector, Accessories, Coding element, black		Box
GTIN (EAN)	4008190198923			
Qty.	50 pc(s).			

## Recommended wave soldering profiles

**Weidmüller Interface GmbH & Co. KG**  
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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.