

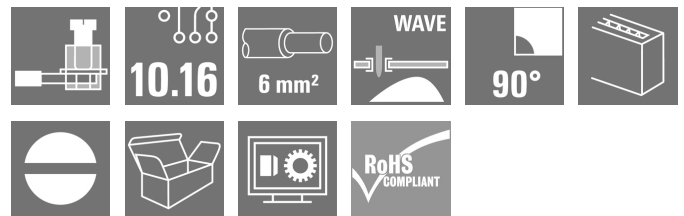
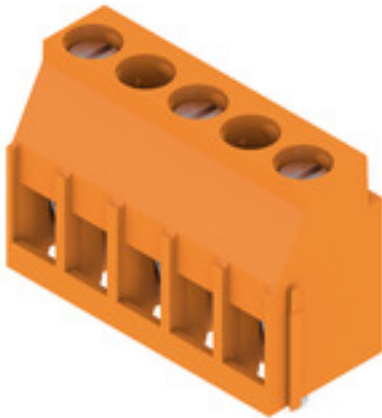
**LL 10.16/03/90 3.2SN OR BX****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

**Product image**

PCB terminal with proven clamping-yoke connection in 10 and 10.16 mm pitches, with 90° wire outlet angle. Suitable for conductor cross-sections up to 6.0 mm<sup>2</sup>.

**General ordering data**

Version	Printed circuit board terminals, 10.16 mm, Number of poles: 3, 90°, Solder pin length (l): 3.2 mm, tinned, orange, Clamping yoke connection, Box
Order No.	<a href="#">2613370000</a>
Type	LL 10.16/03/90 3.2SN OR BX
GTIN (EAN)	4050118674781
Qty.	50 pc(s).
Product data	IEC: 1000 V / 32 A / 0.5 - 6 mm <sup>2</sup> UL: 300 V / 30 A / AWG 26 - AWG 10
Packaging	Box

Creation date October 6, 2024 4:18:26 AM CEST

Catalogue status 28.09.2024 / We reserve the right to make technical changes.

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## Technical data

## Dimensions and weights

Depth	11 mm	Depth (inches)	0.433 inch
Height	20.3 mm	Height (inches)	0.799 inch
Height of lowest version	17.1 mm	Width	25.4 mm
Width (inches)	1 inch	Net weight	5.54 g

## System parameters

Product family	OMNIMATE Signal - series LL	Wire connection method	Clamping yoke connection
Property, clamping point	WireReady	Mounting onto the PCB	THT solder connection
Conductor outlet direction	90°	Pitch in mm (P)	10.16 mm
Pitch in inches (P)	0.4 "	Number of poles	3
Pin series quantity	1	Fitted by customer	Yes
Number of rows	1	Max. adjacent poles per row	12
Solder pin length (l)	3.2 mm	Solder pin dimensions	0.75 x 0.9 mm
Solder eyelet hole diameter (D)	1.3 mm	Solder eyelet hole diameter tolerance (D)+	0,1 mm
Number of solder pins per pole	1	Screwdriver blade	0.6 x 3.5
Screwdriver blade standard	DIN 5264	Tightening torque, min.	0.5 Nm
Tightening torque, max.	0.6 Nm	Clamping screw	M 3
Stripping length	6 mm	L1 in mm	20.32 mm
L1 in inches	0.8 "	Protection degree	IP20

## Material data

Insulating material	Wemid (PA), Wemid	Colour	orange
Colour chart (similar)	RAL 2000	Insulating material group	I
Comparative Tracking Index (CTI)	≥ 600	UL 94 flammability rating	V-0
Contact material	Cu-alloy	Contact surface	tinned
Coating	4-6 µm SN	Tinning type	matt
Layer structure of solder connection	2...4 µm Ni / 4...6 µm Sn	Storage temperature, min.	-40 °C
Storage temperature, max.	70 °C	Operating temperature, min.	-50 °C
Operating temperature, max.	120 °C	Temperature range, installation, min.	-25 °C
Temperature range, installation, max.	120 °C		

## Conductors suitable for connection

Wire connection cross section AWG, min.	AWG 26	Wire connection cross section AWG, max.	AWG 10
Solid, min. H05(07) V-U	0.5 mm <sup>2</sup>	Solid, max. H05(07) V-U	6 mm <sup>2</sup>
Flexible, min. H05(07) V-K	0.5 mm <sup>2</sup>	Flexible, max. H05(07) V-K	4 mm <sup>2</sup>
w. wire end ferrule, DIN 46228 pt 1, min.	2.5 mm <sup>2</sup>	w. wire end ferrule, DIN 46228 pt 1, max.	0.5 mm <sup>2</sup>
Reference text	Length of ferrules is to be chosen depending on the product and the rated voltage. The outside diameter of the plastic collar should not be larger than the pitch (P)		

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## Technical data

## Rated data acc. to IEC

tested acc. to standard

IEC 60664-1, IEC 61984

Rated current, max. number of poles  
(Tu=20°C)

32 A

Rated current, max. number of poles  
(Tu=40°C)

30.5 A

Rated voltage for surge voltage class /  
pollution degree III/2

1,000 V

Rated impulse voltage for surge voltage  
class/ pollution degree II/2

8 kV

Rated impulse voltage for surge voltage  
class/ contamination degree III/3

8 kV

Rated current, min. number of poles  
(Tu=20°C)

32 A

Rated current, min. number of poles  
(Tu=40°C)

32 A

Rated voltage for surge voltage class /  
pollution degree II/2

1,000 V

Rated voltage for surge voltage class /  
pollution degree III/3

630 V

Rated impulse voltage for surge voltage  
class/ pollution degree III/2

8 kV

Short-time withstand current resistance

3 x 1s with 120 A

## Rated data acc. to CSA

Institute (CSA)



Certificate No. (CSA)

200039-1202191

Rated voltage (Use group B / CSA)

300 V

Rated current (Use group B / CSA)

30 A

Wire cross-section, AWG, min.

AWG 26

Reference to approval values

Specifications are maximum values, details - see approval certificate.

Rated voltage (Use group D / CSA)

300 V

Rated current (Use group D / CSA)

10 A

Wire cross-section, AWG, max.

AWG 10

## Rated data acc. to UL 1059

Institute (UR)



Certificate No. (UR)

E60693

Rated voltage (Use group B / UL 1059)

300 V

Rated voltage (Use group D / UL 1059)

300 V

Rated current (Use group D / UL 1059)

10 A

Wire cross-section, AWG, max.

AWG 10

Rated voltage (Use group C / UL 1059)

150 V

Rated current (Use group B / UL 1059)

30 A

Wire cross-section, AWG, min.

AWG 26

Reference to approval values

Specifications are maximum values, details - see approval certificate.

## Packing

Packaging

Box

VPE length

169 mm

VPE width

62 mm

VPE height

47 mm

## Type tests

Test: Durability of markings

Test

mark of origin, type identification, type of material, approval marking UL, approval marking CSA, durability

Evaluation

available

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Test: Clampable cross section	Standard	IEC 60999-1 section 7 and 9.1 / 11.99, IEC 60947-1 section 8.2.4.5.1 / 03.11
	Conductor type	Type of conductor and AWG 26/1 conductor cross-section
		Type of conductor and AWG 26/19 conductor cross-section
		Type of conductor and AWG 12/1 conductor cross-section
		Type of conductor and AWG 12/19 conductor cross-section
	Evaluation	passed
Test for damage to and accidental loosening of conductors	Standard	IEC 60999-1 section 9.4 / 11.99
	Requirement	0.2 kg
	Conductor type	Type of conductor and AWG 26/1 conductor cross-section
		Type of conductor and AWG 26/19 conductor cross-section
	Evaluation	passed
	Requirement	0.3 kg
	Conductor type	Type of conductor and H05V-U0.5 conductor cross-section
		Type of conductor and H05V-K0.5 conductor cross-section
	Evaluation	passed
	Requirement	0.9 kg
	Conductor type	Type of conductor and H07V-U4.0 conductor cross-section
		Type of conductor and H07V-K4.0 conductor cross-section
		Type of conductor and AWG 12/1 conductor cross-section
		Type of conductor and AWG 12/19 conductor cross-section
	Evaluation	passed

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## Technical data

Pull-out test	Standard	IEC 60999-1 section 9.5 / 11.99
	Requirement	≥10 N
	Conductor type	Type of conductor and AWG 26/1 conductor cross-section
		Type of conductor and AWG 26/19 conductor cross-section
	Evaluation	passed
	Requirement	≥20 N
	Conductor type	Type of conductor and H05V-U0.5 conductor cross-section
		Type of conductor and H05V-K0.5 conductor cross-section
	Evaluation	passed
	Requirement	≥60 N
	Conductor type	Type of conductor and H07V-U4.0 conductor cross-section
		Type of conductor and H07V-K4.0 conductor cross-section
		Type of conductor and AWG 12/1 conductor cross-section
		Type of conductor and AWG 12/19 conductor cross-section
	Evaluation	passed

## Classifications

ETIM 6.0	EC002643	ETIM 7.0	EC002643
ETIM 8.0	EC002643	ETIM 9.0	EC002643
ECLASS 9.0	27-44-04-01	ECLASS 9.1	27-44-04-01
ECLASS 10.0	27-44-04-01	ECLASS 11.0	27-46-01-01
ECLASS 12.0	27-46-01-01	ECLASS 13.0	27-46-01-01
ECLASS 14.0	27-46-01-01		

## Environmental Product Compliance

REACH SVHC	/
RoHS Compliance Status	Compliant without exemption

## 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>Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months</li> </ul>

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[www.weidmueller.com](http://www.weidmueller.com)**Technical data****Approvals**

Approvals



ROHS Conform

UL File Number Search UL Website

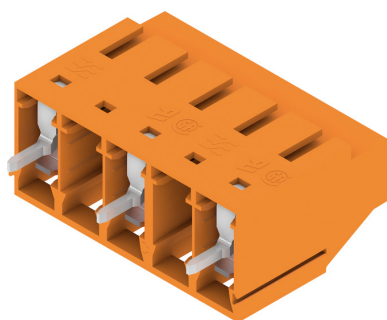
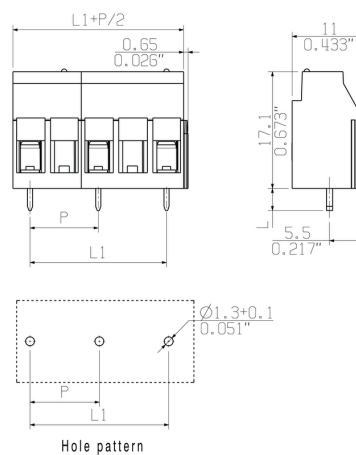
Certificate No. (UR) E60693

**Downloads**Engineering Data [CAD data – STEP](#)Catalogues [Catalogues in PDF-format](#)

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**Drawings****Product image****Dimensional drawing**

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[www.weidmueller.com](http://www.weidmueller.com)**Accessories****Slotted screwdriver**

Slotted screwdriver with rounded blade SD DIN 5265, ISO 2380/2, output to DIN 5264, ISO 2380/1. ChromTop tip, SoftFinish grip

**General ordering data**

Type	SDS 0.6X3.5X200	Version
Order No.	<a href="#">9010110000</a>	Screwdriver, Screwdriver
GTIN (EAN)	4032248300754	
Qty.	1 pc(s).	
Type	SDS 0.6X3.5X100	Version
Order No.	<a href="#">9008330000</a>	Screwdriver, Screwdriver
GTIN (EAN)	4032248056286	
Qty.	1 pc(s).	

**Slotted screwdriver**

VDE insulated slot-head screwdriver, SDI DIN 7437, ISO 2380/2, drive output acc. to DIN 5264, ISO 2380/1. SoftFinish grip

**General ordering data**

Type	SDIS 0.6X3.5X100	Version
Order No.	<a href="#">9008390000</a>	Screwdriver, Screwdriver
GTIN (EAN)	4032248056354	
Qty.	1 pc(s).	



## Recommended wave soldering profiles

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

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