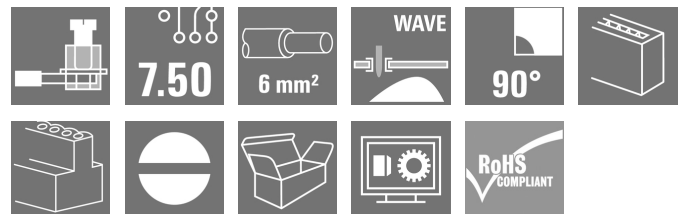


LP 7.50/02/90 3.2SN OR BX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com**Product image**

Similar to illustration

This PCB terminal provides connections for 1000 V, 6 mm² conductor cross-section and 32 A with proven clamping yoke connection at 7.50 mm and 7.62 mm pitch, conductor outlet direction in 90° and 180° design.

General ordering data

Version	Printed circuit board terminals, 7.50 mm, Number of poles: 2, 90°, Solder pin length (l): 3.2 mm, tinned, orange, Clamping yoke connection, Clamping range, max. : 6 mm ² , Box
Order No.	1594420000
Type	LP 7.50/02/90 3.2SN OR BX
GTIN (EAN)	4008190023683
Qty.	100 pc(s).
Product data	IEC: 1000 V / 32 A / 0.5 - 6 mm ² UL: 300 V / 20 A / AWG 26 - AWG 12
Packaging	Box

Creation date July 5, 2024 8:23:43 AM CEST

Catalogue status 29.06.2024 / We reserve the right to make technical changes.

LP 7.50/02/90 3.2SN OR BX

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Technical data

Dimensions and weights

Depth	19 mm	Depth (inches)	0.748 inch
Height	14.2 mm	Height (inches)	0.559 inch
Height of lowest version	11 mm	Width	15.6 mm
Width (inches)	0.614 inch	Net weight	3.51 g

System parameters

Product family	OMNIMATE Signal - series LP	Wire connection method	Clamping yoke connection
Mounting onto the PCB	THT solder connection	Conductor outlet direction	90°
Pitch in mm (P)	7.5 mm	Pitch in inches (P)	0.295 "
Number of poles	2	Pin series quantity	1
Fitted by customer	Yes	Number of rows	1
Max. adjacent poles per row	16	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	7.5 mm	L1 in inches	0.295 "
Touch-safe protection acc. to DIN VDE 0470	IP 20	Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch
Protection degree	IP20	Volume resistance	1.20 mΩ

Material data

Insulating material	PA	Colour	orange
Colour chart (similar)	RAL 2000	Insulating material group	I
Comparative Tracking Index (CTI)	≥ 600	UL 94 flammability rating	V-2
Contact material	Cu-alloy	Contact surface	tinned
Coating	1-3 µm Ni, 4-6 µm SN	Tinning type	matt
Layer structure of solder connection	4...6 µm Ni / 4...6 µm Sn	Storage temperature, min.	-40 °C
Storage temperature, max.	70 °C	Operating temperature, min.	-50 °C
Operating temperature, max.	100 °C	Temperature range, installation, min.	-25 °C
Temperature range, installation, max.	100 °C		

Conductors suitable for connection

Clamping range, min.	0.13 mm ²
Clamping range, max.	6 mm ²
Wire connection cross section AWG, min.	AWG 26
Wire connection cross section AWG, max.	AWG 12
Solid, min. H05(07) V-U	0.5 mm ²
Solid, max. H05(07) V-U	6 mm ²
Stranded, max. H07V-R	6 mm ²
Flexible, min. H05(07) V-K	0.5 mm ²
Flexible, max. H05(07) V-K	4 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, 0.5 mm ² min.	
w. plastic collar ferrule, DIN 46228 pt 4, 2.5 mm ² max.	
w. wire end ferrule, DIN 46228 pt 1, 0.5 mm ² min.	

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Technical data

w. wire end ferrule, DIN 46228 pt 1, max. 2.5 mm²

Plug gauge in accordance with EN 60999 a x b; ø 2.8 mm x 2.4 mm; 3.0 mm


Clampable conductor	Cross-section for conductor connection	Type	fine-wired	
		nominal	0.5 mm ²	
	wire end ferrule	Stripping length	nominal	8 mm
		Recommended wire-end ferrule	H0.5/12 OR	
		Stripping length	nominal	6 mm
		Recommended wire-end ferrule	H0.5/6	
	Cross-section for conductor connection	Type	fine-wired	
		nominal	0.75 mm ²	
	wire end ferrule	Stripping length	nominal	8 mm
		Recommended wire-end ferrule	H0.75/12 W	
		Stripping length	nominal	6 mm
		Recommended wire-end ferrule	H0.75/6	
	Cross-section for conductor connection	Type	fine-wired	
		nominal	1 mm ²	
	wire end ferrule	Stripping length	nominal	8 mm
		Recommended wire-end ferrule	H1.0/12 GE	
		Stripping length	nominal	6 mm
		Recommended wire-end ferrule	H1.0/6	

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)

Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	32 A
Rated current, max. number of poles (Tu=20°C)	32 A	Rated current, min. number of poles (Tu=40°C)	32 A
Rated current, max. number of poles (Tu=40°C)	30.5 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 120 A

Rated data acc. to CSA

Institute (CSA)		Certificate No. (CSA)	200039-1202191
Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group D / CSA)	300 V
Rated current (Use group B / CSA)	20 A	Rated current (Use group D / CSA)	10 A
Wire cross-section, AWG, min.	AWG 26	Wire cross-section, AWG, max.	AWG 12
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

LP 7.50/02/90 3.2SN OR BX

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Technical data

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 B / UL 1059) 20 A

Rated current (Use group D / UL 1059) 10 A

Wire cross-section, AWG, min. AWG 26

Wire cross-section, AWG, max. AWG 12

Reference to approval values
Specifications are maximum values, details - see approval certificate.

Packing

Packaging Box

VPE length 117 mm

VPE width 102 mm

VPE height 65 mm

Type tests

Test: Durability of markings

Test

mark of origin, type identification, rated voltage, rated cross-section, pitch, approval marking SEV, durability

Evaluation

available

Test: Clampable cross section

Standard

DIN EN 60947-1 section 8.2.4.5.1 / 07.98

Conductor type

Type of conductor and solid 0.14 mm² conductor cross-sectionType of conductor and stranded 0.14 mm² conductor cross-sectionType of conductor and solid 6 mm² conductor cross-section

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

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Technical data

Test for damage to and accidental loosening of conductors

Standard	DIN EN 60999 section 8.4 / 04.94
Requirement	0.2 kg
Conductor type	Type of conductor and AWG 24/1 conductor cross-section
	Type of conductor and AWG 24/19 conductor cross-section
Evaluation	passed
Requirement	0.3 kg
Conductor type	Type of conductor and solid 0.5 mm ² conductor cross-section
	Type of conductor and stranded 0.5 mm ² conductor cross-section
Evaluation	passed
Requirement	0.9 kg
Conductor type	Type of conductor and AWG 12/1 conductor cross-section
	Type of conductor and AWG 12/19 conductor cross-section
Evaluation	passed
Requirement	1.4 kg
Conductor type	Type of conductor and solid 6 mm ² conductor cross-section
Evaluation	passed

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Technical data

Pull-out test	Standard	DIN EN 60999 section 8.5 / 04.94
	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	≥30 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-K4 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
	Requirement	≥80 N
	Conductor type	Type of conductor and H07V-U6 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

Environmental Product Compliance

REACH SVHC

/

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Germany

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Technical data

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"> • Additional variants on request • Rated current related to rated cross-section & min. No. of poles. • Wire end ferrule without plastic collar to DIN 46228/1 • Wire end ferrule with plastic collar to DIN 46228/4 • P on drawing = pitch • 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. • It is necessary to hold the insulating body of the one or two pole terminal when tightening the screw • Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months

Approvals

Approvals



ROHS	Conform
UL File Number Search	UL Website
Certificate No. (UR)	E60693

Downloads

Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Engineering Data	CAD data – STEP
Product Change Notification	PCN_2016_273_PL32_Loss_of_nickel_LL_LP_Family_EN PCN_2016_273_PL32_Wegfall_Unternickelung_LL_LP_Familie_DE 20230111 Änderung des Schriftfeldes an der LP 7.xx 20230111 Modification of the text field at the LP 7.xx
Catalogues	Catalogues in PDF-format
Brochures	FL DRIVES EN FL ANALO.SIGN.CONV. EN MB DEVICE MANUF. EN FL DRIVES DE FL BUILDING SAFETY EN FL APPL LED LIGHTING EN FL INDUSTR.CONTROLS EN FL MACHINE SAFETY EN FL HEATING ELECTR EN FL APPL INVERTER EN FL BASE STATION EN FL ELEVATOR EN FL POWER SUPPLY EN FL 72H SAMPLE SER EN PO OMNIMATE EN PO OMNIMATE EN

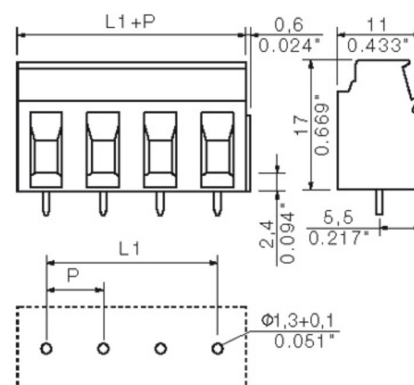
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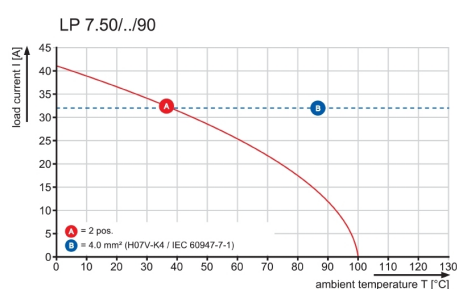
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Drawings

Dimensional drawing



Graph



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Accessories

Isolating elements



Efficient isolation - safe inspections:

The isolating element isolates the current circuits directly at the clamping point and is easy to retrofit - one of the most versatile and efficient terminal printing systems with 5mm pitch: the LP-series by Weidmüller.

Suitable for direct installation on the back of terminals.

- Enclosed safe from finger touch
- 2 in 1 - marking holder for labelling circuit numbers and fuses
- Attachment profile for Dekafix markers

Clear assignment of isolating elements to the correct conductor outlet enables thorough maintenance and inspections.

Safety in compact form - for the service technician and application components.

General ordering data

Type	LPA TR STI3.2 OR	Version	Product data	Packaging
Order No.	1495460000	Printed circuit board terminals, Accessories, Spacer, orange, Number	IEC: 500 V / 13 A	Box
GTIN (EAN)	4008190044688	of poles: 1	UL:	
Qty.	100 pc(s).			

Type	LPA TR STI4.5 OR	Version	Product data	Packaging
Order No.	1495560000	Printed circuit board terminals, Accessories, Spacer, orange, Number	IEC: 500 V / 13 A	Box
GTIN (EAN)	4008190156732	of poles: 1	UL:	
Qty.	100 pc(s).			

Mounting blocks



Minor component, major effect:

Clip-on attachment elements increase the mechanical resilience of the circuit board terminals.

Clip-on or pre-assembled - always the right solution:

- Hard-wearing, precise fitting dovetail joint
- Hard-wearing metal threaded inserts
- Suitable for all outlet directions

Maximum stability, minimum effort:

- Extremely resilient for frequent fastening operations
- Complete set for easy selection

The result: soldering points, contacts and overall module are more resilient against mechanical stress such as vibrations and tensile loads.

General ordering data

Type	LPBB SW	Version	Product data	Packaging
Order No.	1747560000	Printed circuit board terminals, Accessories, Mounting block, black,		Box
GTIN (EAN)	4008190992248	Number of poles: 1		
Qty.	100 pc(s).			

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www.weidmueller.com**Accessories**

Type	LPBB OR	Version	Product data	Packaging
Order No.	1747540000	Printed circuit board terminals, Accessories, Mounting block, orange,		Box
GTIN (EAN)	4008190992224	Number of poles: 1		
Qty.	100 pc(s).			
Type	LPBB MU SW	Version	Product data	Packaging
Order No.	1747550000	Printed circuit board terminals, Accessories, Mounting block, black,		Box
GTIN (EAN)	4008190992231	Number of poles: 1		
Qty.	100 pc(s).			
Type	LPBB MU OR	Version	Product data	Packaging
Order No.	1747530000	Printed circuit board terminals, Accessories, Mounting block, orange,		Box
GTIN (EAN)	4008190992217	Number of poles: 1		
Qty.	100 pc(s).			

Recommended wave soldering profiles

Weidmüller Interface GmbH & Co. KG
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Fon: +49 5231 14-0
Fax: +49 5231 14-292083
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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.

We reserve the right to make technical changes.