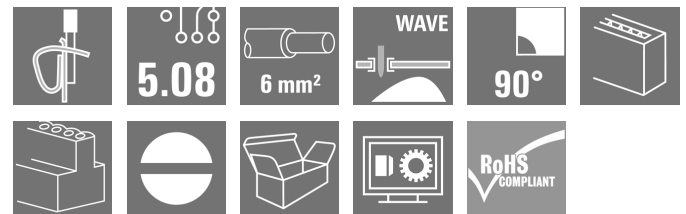


**LPTR 5.08/01/90 4.5SN OR BX****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

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

Disconnect element with test point, PCB terminal with proven clamping yoke connection at 5.08 mm pitch, conductor outlet direction 90°. Suitable for conductor cross-sections up to 6.0 mm<sup>2</sup>.

**General ordering data**

Version	Printed circuit board terminals, 5.08 mm, Number of poles: 1, 90°, Solder pin length (l): 4.5 mm, tinned, orange, Clamping yoke connection, Clamping range, max. : 6 mm <sup>2</sup> , Box
Order No.	<a href="#">1755230000</a>
Type	LPTR 5.08/01/90 4.5SN OR BX
GTIN (EAN)	4032248017188
Qty.	100 pc(s).
Product data	IEC: 500 V / 32 A / 0.5 - 6 mm <sup>2</sup> UL: 300 V / 15 A / AWG 26 - AWG 12
Packaging	Box

Creation date June 10, 2024 8:42:20 PM CEST

Catalogue status 01.06.2024 / We reserve the right to make technical changes.

## LPTR 5.08/01/90 4.5SN OR BX

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Klingenbergstraße 26

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www.weidmueller.com

## Technical data

## Dimensions and weights

Depth	32.6 mm	Depth (inches)	1.283 inch
Height	29.3 mm	Height (inches)	1.154 inch
Height of lowest version	19.6 mm	Width	5.68 mm
Width (inches)	0.224 inch	Net weight	4.51 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)	5.08 mm	Pitch in inches (P)	0.2 "
Number of poles	1	Pin series quantity	1
Fitted by customer	Yes	Number of rows	1
Max. adjacent poles per row	24	Solder pin length (l)	4.5 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	5.08 mm	L1 in inches	0.2 "
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 <sup>2</sup>
Clamping range, max.	6 mm <sup>2</sup>
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 <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. plastic collar ferrule, DIN 46228 pt 4, 0.5 mm <sup>2</sup> min.	
w. plastic collar ferrule, DIN 46228 pt 4, 2.5 mm <sup>2</sup> max.	
w. wire end ferrule, DIN 46228 pt 1, min.	0.5 mm <sup>2</sup>
w. wire end ferrule, DIN 46228 pt 1, max.	2.5 mm <sup>2</sup>

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**Technical data**

Plug gauge in accordance with EN 60999 a x b; ø

2.8 mm x 2.4 mm; 3.0 mm

Clampable conductor

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

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)	20 A	Rated current, min. number of poles (Tu=40°C)	32 A
Rated current, max. number of poles (Tu=40°C)	16 A	Rated voltage for surge voltage class / pollution degree II/2	500 V
Rated voltage for surge voltage class / pollution degree III/2	250 V	Rated voltage for surge voltage class / pollution degree III/3	250 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	4 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	4 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)	15 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 12

## LPTR 5.08/01/90 4.5SN 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) 15 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	131 mm
VPE width	104 mm	VPE height	67 mm

## 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

## 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

- 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.
- 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

Creation date June 10, 2024 8:42:20 PM CEST

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# Technical data

## Downloads

Approval/Certificate/Document of Conformity	<a href="#">Declaration of the Manufacturer</a>
Engineering Data	<a href="#">CAD data – STEP</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>
Brochures	<a href="#">FL DRIVES EN</a> <a href="#">FL ANALO.SIGN.CONV. EN</a> <a href="#">MB DEVICE MANUF. EN</a> <a href="#">FL DRIVES DE</a> <a href="#">FL BUILDING SAFETY EN</a> <a href="#">FL APPL LED LIGHTING EN</a> <a href="#">FL INDUSTR.CONTROLS EN</a> <a href="#">FL MACHINE SAFETY EN</a> <a href="#">FL HEATING ELECTR EN</a> <a href="#">FL APPL INVERTER EN</a> <a href="#">FL_BASE_STATION_EN</a> <a href="#">FL ELEVATOR EN</a> <a href="#">FL POWER SUPPLY EN</a> <a href="#">FL 72H SAMPLE SER EN</a> <a href="#">PO OMNIMATE EN</a>

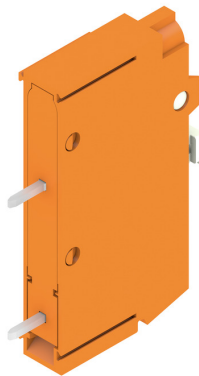
## LPTR 5.08/01/90 4.5SN OR BX

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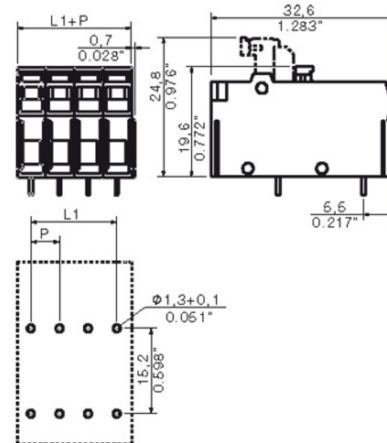
[www.weidmueller.com](http://www.weidmueller.com)

# Drawings

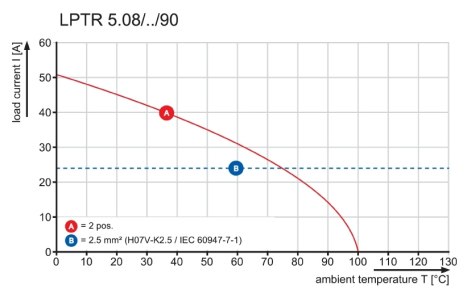
## Product image



## Dimensional drawing



## Graph



## LPTR 5.08/01/90 4.5SN OR BX

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## Accessories

### Function indicators



#### Everything under control:

The function indicator is easy to retrofit and clearly indicates the switching state at the clamping point - also available with large format marking holder. One of the most versatile and efficient terminal printing systems with 5mm pitch: the Weidmüller LP series.

- Holder for 3mm standard LEDs
- Simple installation on the back of SP series terminals.
- Optional marking holder for advanced marking options (WS10/5 and WS12/5, see markings)

The easiest, most reliable way of monitoring switching states.

In brief: minimum effort, maximum reliability.

### General ordering data

Type	LPA FA3 BZ	Version	Product data	Packaging
Order No.	<a href="#">1496260000</a>	Printed circuit board terminals, Accessories, Function indicator, black,		Box
GTIN (EAN)	4008190101862	Number of poles: 3		
Qty.	50 pc(s).			
Type	LPA FA2 BZ	Version	Product data	Packaging
Order No.	<a href="#">1496160000</a>	Printed circuit board terminals, Accessories, Function indicator, black,		Box
GTIN (EAN)	4008190100988	Number of poles: 2		
Qty.	50 pc(s).			
Type	LPA FA2	Version	Product data	Packaging
Order No.	<a href="#">1495960000</a>	Printed circuit board terminals, Accessories, Function indicator, black,		Box
GTIN (EAN)	4008190173500	Number of poles: 2		
Qty.	50 pc(s).			
Type	LPA FA3	Version	Product data	Packaging
Order No.	<a href="#">1496060000</a>	Printed circuit board terminals, Accessories, Function indicator, black,		Box
GTIN (EAN)	4008190062330	Number of poles: 3		
Qty.	50 pc(s).			

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## Accessories

### Intermediate plates



#### The maximum voltage is based on the minimum distance.

Intermediate plates increase the creepage and clearance distances between different potentials and permit higher rated voltages or a clear separation, e.g. between mains and low voltages or different protection zones.

The dovetail joint enables easy installation and guarantees a secure fit. Other characteristics include:

- Pitch extended by 1.27 or 2.54mm - all other combinations possible
- Colour coding ensures visual differentiation
- Different geometries for standard designs.

Incomplete individual assemblies avoided because separate terminal blocks combine to form a single holistic unit. Ready-assembled on request.

The advantages: efficient processing, increased stability, improved reliability.

### General ordering data

Type	Version	Product data	Packaging
LPZP 1.27/90 OR			
Order No. <a href="#">1747490000</a>	Printed circuit board terminals, Accessories, Intermediate plate,		Box
GTIN (EAN) 4008190992170	orange, Number of poles: 1		
Qty. 100 pc(s).			
Type	Version	Product data	Packaging
LPZP1N 2.54 OR			
Order No. <a href="#">1747470000</a>	Printed circuit board terminals, Accessories, Intermediate plate,		Box
GTIN (EAN) 4008190992156	orange, Number of poles: 1		
Qty. 100 pc(s).			
Type	Version	Product data	Packaging
LPZP1N 2.54 SW			
Order No. <a href="#">1747520000</a>	Printed circuit board terminals, Accessories, Intermediate plate, black,		Box
GTIN (EAN) 4008190992200	Number of poles: 1		
Qty. 100 pc(s).			
Type	Version	Product data	Packaging
LPZP 2.54/135 SW			
Order No. <a href="#">1753750000</a>	Printed circuit board terminals, Accessories, Intermediate plate, black,		Box
GTIN (EAN) 4032248058655	Number of poles: 1		
Qty. 100 pc(s).			
Type	Version	Product data	Packaging
LPZP 1.27/90 SW			
Order No. <a href="#">1747510000</a>	Printed circuit board terminals, Accessories, Intermediate plate, black,		Box
GTIN (EAN) 4008190992194	Number of poles: 1		
Qty. 100 pc(s).			
Type	Version	Product data	Packaging
LPZP 2.54/90 OR			
Order No. <a href="#">1747480000</a>	Printed circuit board terminals, Accessories, Intermediate plate,		Box
GTIN (EAN) 4008190992163	orange, Number of poles: 1		
Qty. 100 pc(s).			
Type	Version	Product data	Packaging
LPHP 7.XX OR			
Order No. <a href="#">1753440000</a>	Printed circuit board terminals, Accessories, Intermediate plate,		Box
GTIN (EAN) 4032248053780	orange, Number of poles: 1		
Qty. 100 pc(s).			
Type	Version	Product data	Packaging
LPHP 7.XX SW			
Order No. <a href="#">1753450000</a>	Printed circuit board terminals, Accessories, Intermediate plate, black,		Box
GTIN (EAN) 4032248053797	Number of poles: 1		
Qty. 100 pc(s).			



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## Accessories

Type	LPZP 2.54/135 OR	Version	Product data	Packaging
Order No.	<a href="#">1753740000</a>	Printed circuit board terminals, Accessories, Intermediate plate,		Box
GTIN (EAN)	4032248058648	orange, Number of poles: 1		
Qty.	100 pc(s).			
Type	LPZP 2.54/90 SW	Version	Product data	Packaging
Order No.	<a href="#">1747500000</a>	Printed circuit board terminals, Accessories, Intermediate plate, black,		Box
GTIN (EAN)	4008190992187	Number of poles: 1		
Qty.	100 pc(s).			

### 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 0.6X3.5X100	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).	

## LPTR 5.08/01/90 4.5SN OR BX

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## Accessories

### 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 OR	Version	Product data	Packaging
Order No.	<a href="#">1747540000</a>	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.	<a href="#">1747550000</a>	Printed circuit board terminals, Accessories, Mounting block, black,		Box
GTIN (EAN)	4008190992231	Number of poles: 1		
Qty.	100 pc(s).			
Type	LPBB SW	Version	Product data	Packaging
Order No.	<a href="#">1747560000</a>	Printed circuit board terminals, Accessories, Mounting block, black,		Box
GTIN (EAN)	4008190992248	Number of poles: 1		
Qty.	100 pc(s).			
Type	LPBB MU OR	Version	Product data	Packaging
Order No.	<a href="#">1747530000</a>	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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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.