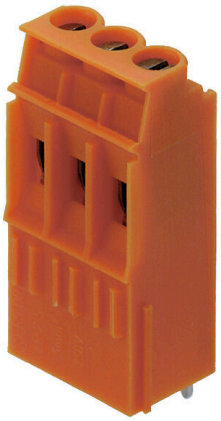
Data sheet

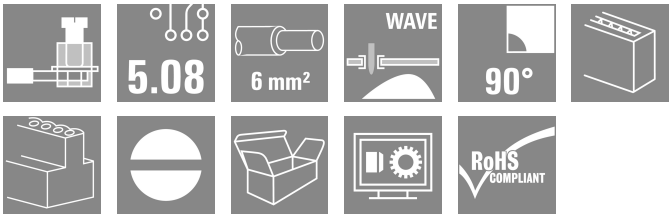
LP1N 5.08/03/90 3.2SN OR BX

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

www.weidmueller.com

Do not use product for new developments





Single- and multi-row 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 mm².

General ordering data

Version	Printed circuit board terminals, 5.08 mm, Number of poles: 3, 90°, Solder pin length (l): 3.2 mm, tinned, orange, Clamping yoke connection, Clamping range, max. : 6 mm², Box
Order No.	1640840000
Type	LP1N 5.08/03/90 3.2SN OR BX
GTIN (EAN)	4008190449926
Qty.	100 items
Product data	IEC: 500 V / 32 A / 0.5 - 6 mm² UL: 300 V / 20 A / AWG 26 - AWG 12
Packaging	Box
Delivery status	This article will no longer be available in the future.
Available until	2022-03-30T00:00:00+02:00
Alternative product	1757080000 LP1N 5.08/03/90 3.2SN OR BX

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Data sheet

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Technical data

Approvals

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

Dimensions and weights

Depth	11.5 mm	Depth (inches)	0.4528 inch
Height	34.2 mm	Height (inches)	1.3465 inch
Height of lowest version	31 mm	Width	15.84 mm
Width (inches)	0.6236 inch	Net weight	6.33 g

Environmental Product Compliance

RoHS Compliance Status	Compliant without exemption
REACH SVHC	No SVHC above 0.1 wt%

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)	0.200 "
Number of poles	3	Pin series quantity	1
Fitted by customer	Yes	Number of rows	1
Max. adjacent poles per row	24	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	10.16 mm	L1 in inches	0.400 "
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	Moisture Level (MSL)	
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

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Data sheet

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Technical data

Conductors suitable for connection

Clamping range, min.	0.13 mm²	Clamping range, max.	6 mm²
Wire connection cross section AWG, min.	AWG 26	Wire connection cross section AWG, max.	AWG 12
Solid, min. H05(07) V-U	0.5 mm²	Solid, max. H05(07) V-U	6 mm²
Flexible, min. H05(07) V-K	0.5 mm²	Flexible, max. H05(07) V-K	4 mm²
w. plastic collar ferrule, DIN 46228 pt 4, min.	0.5 mm²	w. plastic collar ferrule, DIN 46228 pt 4, max.	2.5 mm²
w. wire end ferrule, DIN 46228 pt 1, min.	0.5 mm²	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	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)	28 A	Rated current, min. number of poles (Tu=40°C)	32 A
Rated current, max. number of poles (Tu=40°C)	24 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)	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.		

Rated data acc. to UL 1059

Institute (UR)	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	152.00 mm
VPE width	111.00 mm	VPE height	80.00 mm

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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	• 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

Classifications

ETIM 8.0	EC002643	ETIM 9.0	EC002643
ETIM 10.0	EC002643	ECLASS 14.0	27-46-01-01
ECLASS 15.0	27-46-01-01		

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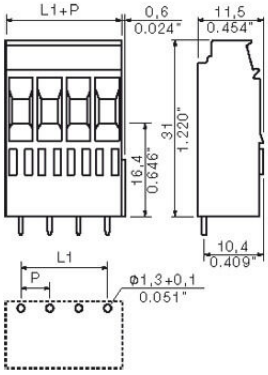
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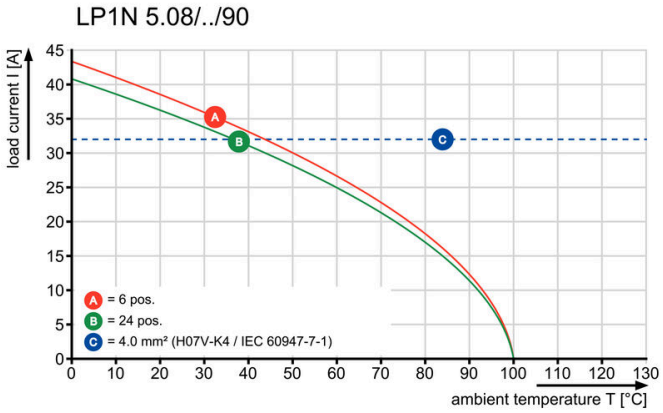
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Drawings

Dimensional drawing



Graph



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Accessories

Intermediate plates



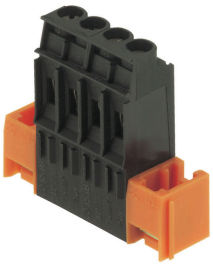
The maximum voltage is based on the minimum distance. Intermediate plates increase the creepage and clearance distances between different potentials and permit higher rated voltages or a clear separation, e.g. between mains and low voltages or different protection zones.
The dovetail joint enables easy 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	LPZP1N 2.54 OR	Version
Order No.	1747470000	Printed circuit board terminals, Accessories, Intermediate plate,
GTIN (EAN)	4008190992156	orange, Number of poles: 1
Qty.	100 ST	
Type	LPZP1N 2.54 SW	Version
Order No.	1747520000	Printed circuit board terminals, Accessories, Intermediate plate, black,
GTIN (EAN)	4008190992200	Number of poles: 1
Qty.	100 ST	

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 MU OR	Version
Order No.	1747530000	Printed circuit board terminals, Accessories, Mounting block, orange,
GTIN (EAN)	4008190992217	Number of poles: 1
Qty.	100 ST	
Type	LPBB OR	Version
Order No.	1747540000	Printed circuit board terminals, Accessories, Mounting block, orange,
GTIN (EAN)	4008190992224	Number of poles: 1
Qty.	100 ST	

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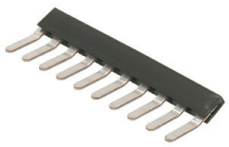
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Accessories

Cross-connections



Large potential for small terminals.
For efficient electrical distribution directly at the connection:
- Isolated comb rail
- Available with the most standard pole numbers
- Easy to shorten

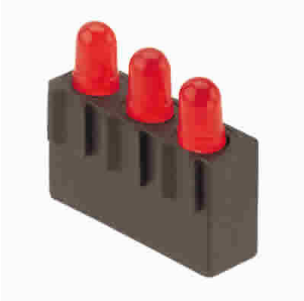
Simply reduce in size to match the number of poles and connect with the conductor in a single working procedure.
For retrofitting or deliberate reduction of the thermal load on the PCB.

General ordering data

Type	LPA QB 2	Version
Order No.	1472200000	Printed circuit board terminals, Accessories, Cross-connector, Number
GTIN (EAN)	4008190096298	of poles: 2
Qty.	50 ST	

Type	LPA QB 3	Version
Order No.	1472300000	Printed circuit board terminals, Accessories, Cross-connector, Number
GTIN (EAN)	4008190093914	of poles: 3
Qty.	50 ST	

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 FA2	Version
Order No.	1495960000	Printed circuit board terminals, Accessories, Function indicator, black,
GTIN (EAN)	4008190173500	Number of poles: 2
Qty.	50 ST	

Type	LPA FA3	Version
Order No.	1496060000	Printed circuit board terminals, Accessories, Function indicator, black,
GTIN (EAN)	4008190062330	Number of poles: 3
Qty.	50 ST	

Type	LPA FA2 BZ	Version
Order No.	1496160000	Printed circuit board terminals, Accessories, Function indicator, black,
GTIN (EAN)	4008190100988	Number of poles: 2
Qty.	50 ST	

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Accessories

Type	LPA FA3 BZ	Version
Order No.	1496260000	Printed circuit board terminals, Accessories, Function indicator, black,
GTIN (EAN)	4008190101862	Number of poles: 3
Qty.	50 ST	

Marker holder



Finds space on the smallest terminal:
The marking holder is easy to retrofit and provides a large additional labelling space - the Weidmüller LP series is one of the most versatile and efficient terminal printing systems with 5mm pitch.
3 steps to clear, legible labels:
Mark "dekafix" designation strips manually or automatically Reduce designation strips in size and insert in the "dekafix" rail profile Simply clip the marking holder onto the terminal!
The most professional, convenient method of marking clamping points direct on the module - no confusion between clamping points and no incorrect wiring connections.
Minimum effort, maximum effect.

General ordering data

Type	LPA BZ2	Version
Order No.	1497260000	Printed circuit board terminals, Accessories, Marker holder, black,
GTIN (EAN)	4008190027902	Number of poles: 2
Qty.	100 ST	
Type	LPA BZ3	Version
Order No.	1497360000	Printed circuit board terminals, Accessories, Marker holder, black,
GTIN (EAN)	4008190127022	Number of poles: 3
Qty.	100 ST	

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