

**OMNIMATE Signal - series LP
LPTR 5.08/01/90 4.5SN BK BX**

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com



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 mm².

- 0.20 - 6.0mm² (IEC) / 26 - 12 AWG (UL)
- 500 V (IEC) / 300 V (UL)
- 32 A (IEC) / 15 A (UL)

General ordering data

Type	LPTR 5.08/01/90 4.5SN BK BX
Order No.	1755190000
Version	PCB terminal, 5.08 mm, No. of poles: 1, 90°, Solder pin length (l): 4.5 mm, tinned, Black, Clamping yoke connection, Clamping range, max. : 6 mm ² , Box
GTIN (EAN)	4032248017157
Qty.	100 pc(s).
Product data	IEC: 500 V / 32 A / 0.5 - 6 mm ² UL: 300 V / 15 A / AWG 26 - AWG 12
Packaging	Box

**OMNIMATE Signal - series LP
LPTR 5.08/01/90 4.5SN BK BX**

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Technical data**Dimensions and weights**

Net weight 4.52 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 inch
No. of poles	1	Fitted by customer	Yes
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 inch
Touch-safe protection acc. to DIN VDE 0470	IP 20	Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch
Volume resistance	1.20 mΩ		

Material data

Insulating material	PA	Colour	Black
Colour chart (similar)	RAL 9011	Insulating material group	I
CTI	≥ 600	Insulation resistance	≥ 10 ⁸ Ω
UL 94 flammability rating	V-2	Contact material	Copper 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.	-25 °C	Storage temperature, max.	55 °C
Max. relative humidity during storage	75 %	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
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, min.	0.5 mm ²	w. plastic collar ferrule, DIN 46228 pt 4, max.	2.5 mm ²
w. wire end ferrule, DIN 46228 pt 1, min.	0.5 mm ²	w. wire end ferrule, DIN 46228 pt 1, max.	2.5 mm ²
Plug gauge acc. to EN 60999 a x b; Ø	2.8 mm x 2.4 mm; 3.0 mm		


**OMNIMATE Signal - series LP
LPTR 5.08/01/90 4.5SN BK BX**

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 16
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com


Technical data**Rated data acc. to IEC**

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. no. of poles (Tu=20°C)	32 A
Rated current, max. no. of poles (Tu=20°C)	20 A	Rated current, min. no. of poles (Tu=40°C)	32 A
Rated current, max. no. 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)	300 V	Rated voltage (use group D)	300 V
Rated current (use group B)	15 A	Rated current (use group D)	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)		Certificate No. (UR)	E60693
Rated voltage (use group B)	300 V	Rated voltage (use group D)	300 V
Rated current (use group B)	15 A	Rated current (use group D)	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.		

Classifications

ETIM 3.0	EC001284	ETIM 4.0	EC002643
ETIM 5.0	EC002643	ETIM 6.0	EC002643
UNSPSC	30-21-18-01	eClass 6.2	27-26-11-01
eClass 7.1	27-44-04-01	eClass 8.1	27-44-04-01
eClass 9.0	27-44-04-01	eClass 9.1	27-44-04-01

Data sheet

**OMNIMATE Signal - series LP
LPTR 5.08/01/90 4.5SN BK BX**

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Technical data

Notes

Notes	<ul style="list-style-type: none"> • Additional colours 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.
IPC conformity	The products are developed, manufactured and delivered according to the internationally recognised IPC-A-610 standard, category "permissible". More extensive demands on the products can be evaluated on request.

Approvals

Approvals



ROHS

Conform

Downloads

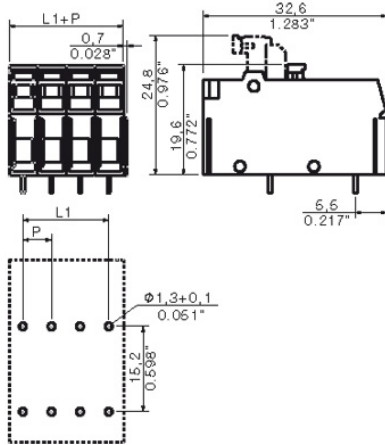
Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Brochure/Catalogue	FL DRIVES EN FL ANALO.SIGN.CONV. EN MB DEVICE MANUF. EN FL DRIVES DE FL BUILDING SAFETY EN FL APPL LED LIGHTING EN FLIndustr.CONTROLS EN FL MACHINE SAFETY EN FL HEATING ELECTR EN FL APPL INVERTER EN FL_BASE_STATION_EN FL ELEVATOR EN FL POWER SUPPLY EN FL 72H SAMPLE SER EN PO OMNIMATE EN
Engineering Data	EPLAN_WSCAD

**OMNIMATE Signal - series LP
LPTR 5.08/01/90 4.5SN BK BX**

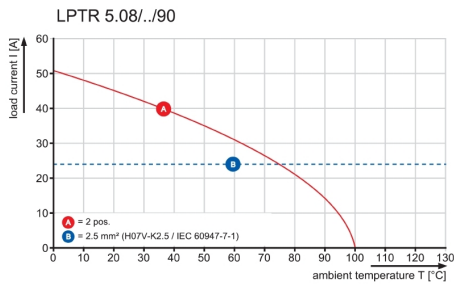
Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Drawings

Dimensional drawing



Graph



**OMNIMATE Signal - series LP
LPTR 5.08/01/90 4.5SN BK BX**

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 16
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

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	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
LPA FA3 BZ	1496260000	PCB terminal, Accessories, Function indicator, Black, No. of poles: 3	4008190101862	50 pc(s).	UL:	Box
LPA FA2	1495960000	PCB terminal, Accessories, Function indicator, Black, No. of poles: 2	4008190173500	50 pc(s).	UL:	Box
LPA FA2 BZ	1496160000	PCB terminal, Accessories, Function indicator, Black, No. of poles: 2	4008190100988	50 pc(s).	UL:	Box
LPA FA3	1496060000	PCB terminal, Accessories, Function indicator, Black, No. of poles: 3	4008190062330	50 pc(s).	UL:	Box

OMNIMATE Signal - series LP LPTR 5.08/01/90 4.5SN BK BX

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 16
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

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	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
LPBB MU OR	1747530000	PCB terminal, Accessories, Mounting block, Orange, No. of poles: 1	4008190992217	100 pc(s).	UL:	Box
Discontinued	2010-05-12T00:00:00+02:00	LPBB SW	1747560000	PCB terminal, Accessories, Mounting block, Black, No. of poles: 1	4008190992248	100 pc(s).
LPBB OR	1747540000	PCB terminal, Accessories, Mounting block, Orange, No. of poles: 1	4008190992224	100 pc(s).	UL:	Box
Discontinued	2014-05-20T00:00:00+02:00	LPBB MU SW	1747550000	PCB terminal, Accessories, Mounting block, Black, No. of poles: 1	4008190992231	100 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	Order No.	Version	GTIN (EAN)	Qty.
SDIS 0.6X3.5X100	9008390000	Screwdriver, Blade width (B): 3.5 mm, Blade length:	4032248056354	1 pc(s).

Creation date March 15, 2018 2:48:48 PM CET

**OMNIMATE Signal - series LP
LPTR 5.08/01/90 4.5SN BK BX**

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Accessories

100 mm, Blade thickness
(A): 0.6 mm

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

Delivery status	Available until	Type	Order No.	Version	GTIN (EAN)	Qty.
Discontinued	2014-05-20T00:00:00+02:00	LPHP 7.XX OR	1753440000	PCB terminal, Accessories, Intermediate plate, Orange, No. of poles: 1	4032248053780	100 pc(s).
		LPZP 2.54/90 OR	1747480000	PCB terminal, Accessories, Intermediate plate, Orange, No. of poles: 1	UL:	Box
Discontinued	2010-05-12T00:00:00+02:00	LPHP 7.XX SW	1753450000	PCB terminal, Accessories, Intermediate plate, Black, No. of poles: 1	4032248053797	100 pc(s).
		LPZP 2.54/90 SW	1747500000	PCB terminal, Accessories, Intermediate plate, Black, No. of poles: 1	UL:	Box
		LPZP 1.27/90 OR	1747490000	PCB terminal, Accessories, Intermediate plate, Orange, No. of poles: 1	UL:	Box
		LPZP1N 2.54 OR	1747470000	PCB terminal, Accessories, Intermediate plate, Orange, No. of poles: 1	UL:	Box
Discontinued	2016-04-08T00:00:00+02:00	LPZP 1.27/90 SW	1747510000	PCB terminal, Accessories, Intermediate plate, Black, No. of poles: 1	4008190992194	100 pc(s).

Data sheet

OMNIMATE Signal - series LP LPTR 5.08/01/90 4.5SN BK BX

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Accessories

Discontinued	2016-04-08T00:00:00+02:00	LPZP1N 2.54 SW	1747520000	PCB terminal, Accessories, Intermediate plate, Black, No. of poles: 1	4008190992200	100 pc(s).
LPZP 2.54/135 OR	1753740000	PCB terminal, Accessories, Intermediate plate, Orange, No. of poles: 1	4032248058648	100 pc(s).	UL:	Box
Discontinued	2014-05-20T00:00:00+02:00	LPZP 2.54/135 SW	1753750000	PCB terminal, Accessories, Intermediate plate, Black, No. of poles: 1	4032248058655	100 pc(s).

Tools



Tools for removing the sheathing of uncut power cables and outgoing feeders, plus screwdrivers for installing FieldPower components.

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.
SDS 0.6X3.5X100	9008330000	Screwdriver, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade thickness (A): 0.6 mm	4032248056286	1 pc(s).

Recommended wave soldering profiles

Weidmüller Interface GmbH & Co. KG
 Klängenbergstraße 16
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 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.