

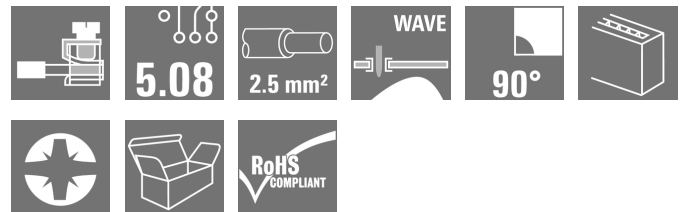
PM 5.08/05/90 3.5SN OR BX TB**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Product image

Similar to illustration

PCB terminal with leaf spring connection at 5.00 and 5.08 mm pitch. Conductor outlet direction 90°. Suitable for conductor cross-sections up to 2.5 mm².

General ordering data

Version	Printed circuit board terminals, 5.08 mm, Number of poles: 5, 90°, tinned, Pressure clamp connection, Clamping range, max.: 2.5 mm ² , Box
Order No.	1516390000
Type	PM 5.08/05/90 3.5SN OR BX TB
GTIN (EAN)	4050118324105
Qty.	100 pc(s).
Product data	IEC: 600 V / 24 A / 0.13 - 2.5 mm ² UL: 300 V / 15 A / AWG 26 - AWG 14
Packaging	Box

Creation date March 24, 2021 4:07:39 AM CET

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Technical data

Dimensions and weights

Depth	8 mm	Depth (inches)	0.315 inch
Height of lowest version	10 mm	Net weight	3.09 g

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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System parameters

Product family	OMNIMATE Signal - series PM	Wire connection method	Pressure clamp 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
Number of poles	5	Pin series quantity	1
Fitted by customer	Yes	Max. adjacent poles per row	24
Solder pin dimensions	d = 1.0 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.	0.4 Nm	Tightening torque, max.	0.5 Nm
Clamping screw	M 2.5	Stripping length	6 mm
Touch-safe protection acc. to DIN VDE 0470	IP 20, above the PCB; with conductor connected	Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch

Material data

Insulating material	Wemid (PA)	Insulating material group	I
Comparative Tracking Index (CTI)	≥ 600	Insulation strength	≥ 10 ⁸ Ω
UL 94 flammability rating	V-0	Contact material	Copper alloy
Contact surface	tinned	Coating	1-3 µm Ni, 4-6 µm SN
Tinning type	matt	Layer structure of solder connection	1.5...3.5 µm Ni / 4...6 µm Sn matt
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

Clamping range, min.	0.13 mm ²
Clamping range, max.	2.5 mm ²
Wire connection cross section AWG, min.	AWG 26
Wire connection cross section AWG, max.	AWG 14
Solid, min. H05(07) V-U	0.13 mm ²
Solid, max. H05(07) V-U	2.5 mm ²
Flexible, min. H05(07) V-K	0.13 mm ²
Flexible, max. H05(07) V-K	2.5 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, 0.25 mm ² min.	
w. plastic collar ferrule, DIN 46228 pt 4, 1.5 mm ² max.	
w. wire end ferrule, DIN 46228 pt 1, 0.25 mm ² min.	
w. wire end ferrule, DIN 46228 pt 1, 1.5 mm ² max.	

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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		
	Cross-section for conductor connection	Type	fine-wired		
		nominal	0.25 mm ²		
	wire end ferrule	Stripping length	nominal	8 mm	
		Recommended wire-end ferrule	H0.25/10 HBL		
		Stripping length	nominal	5 mm	
		Recommended wire-end ferrule	H0.25/5		
	Cross-section for conductor connection	Type	fine-wired		
		nominal	0.34 mm ²		
	wire end ferrule	Stripping length	nominal	8 mm	
		Recommended wire-end ferrule	H0.34/10 TK		
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)	24 A
Rated current, max. number of poles (Tu=20°C)	24 A	Rated current, min. number of poles (Tu=40°C)	24 A
Rated current, max. number of poles (Tu=40°C)	24 A	Rated voltage for surge voltage class / pollution degree II/2	600 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

Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group D / CSA)	300 V
Rated current (Use group B / CSA)	15 A	Rated current (Use group D / CSA)	10 A
Wire cross-section, AWG, min.	AWG 26	Wire cross-section, AWG, max.	AWG 14

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Technical data

Rated data acc. to UL 1059

Institute (cURus)



Certificate No. (cURus)

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 14

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

Packing

Packaging	Box	VPE length	50 mm
VPE width	90 mm	VPE height	150 mm

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

- 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
- The data given under CSA relates to a cUL approval - E60693
- 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 average humidity 70%, 36 months

Approvals

Approvals



ROHS Conform

UL File Number Search E60693

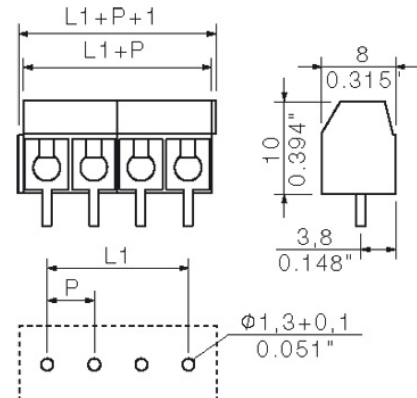
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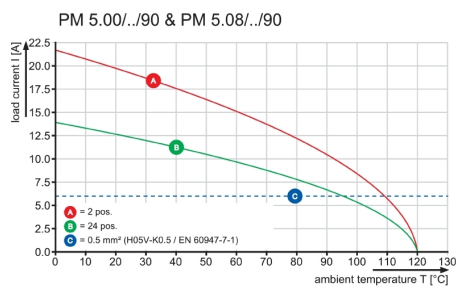
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Drawings

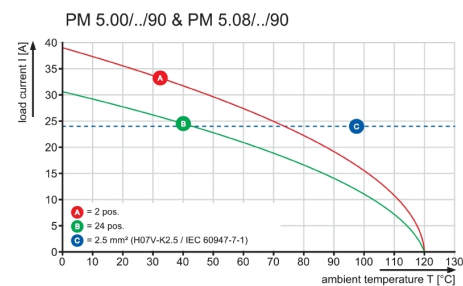
Dimensional drawing



Graph



Graph

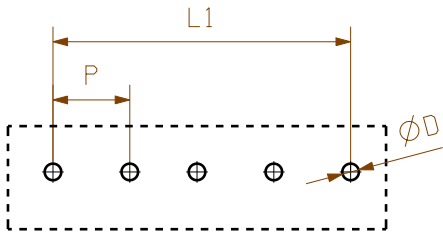
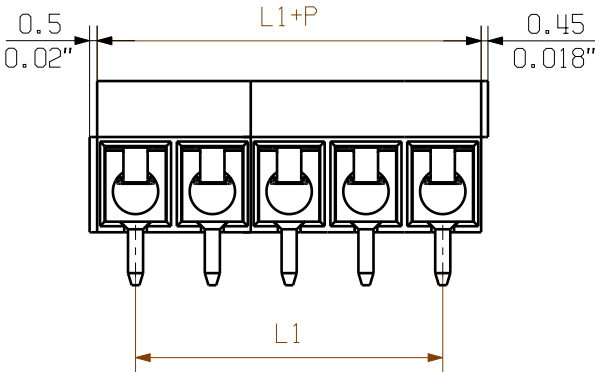
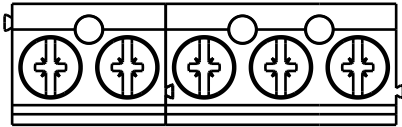


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WEIDMUELLER INTERFACE GmbH & Co.KG

MASSE OHNE TOLERANZ SIND KEINE PRUEFMASSE
DIMS. WITHOUT TOLERANCE ARE NOT CONTROL DIMS.

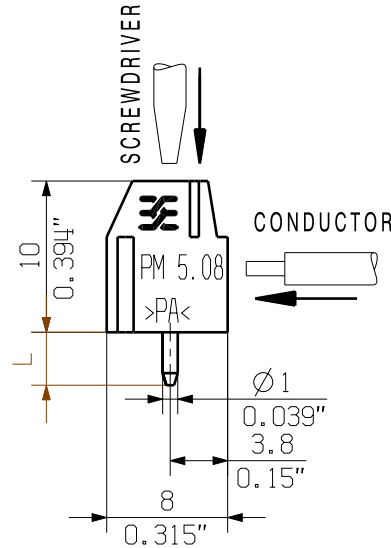
07



PCB LAYOUT

For the mounting of PCBs, it should be noted that the rated data stated in the catalog relates only to the PCB components alone.
The necessary creepage and clearance paths must be observed in connection with the respective applicant in accordance with IEC 664 / VDE 0110.
The current-carrying capacity and pitch tolerance is to be determined according to DIN IEC 326 part 3 very fine.

Weidmüller PCB components are tested to the DIN EN 61984 standard, and are valid for its field of application.
Provided that the components are used to the intended purpose, all requirements with respect to the occurring of electrical, mechanical, thermic and corrosive stress will be satisfied.



KUNDENZEICHNUNG
CUSTOMER DRAWING

12	55.88	2.200
11	50.80	2.000
10	45.72	1.800
9	40.64	1.600
8	35.56	1.400
7	30.48	1.200
6	25.40	1.000
5	20.32	0.800
4	15.24	0.600
3	10.16	0.400
2	5.08	0.200
N	L1 [mm]	L1 [inch]

MAX. NRN./NOS. ?		52513/5 19.10.10 GE_G 01		CAT.NO.: .	
MODIFICATION		Weidmüller		C 41741 07	
DRAWN 14.03.2005 HE_J		RESPONSIBLE GE_G		DRAWING NO. SHEET 02 OF 03 SHEETS	
SCALE: 2/1		CHECKED 19.10.2010 LI_J		PM 5.08/.../90 ... LEITERPLATTENKLEMME PCB TERMINAL	
SUPERSEDES: .		APPROVED XU_S		PRODUCT FILE: PM 5.08 7063	

Recommended wave soldering profiles

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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.