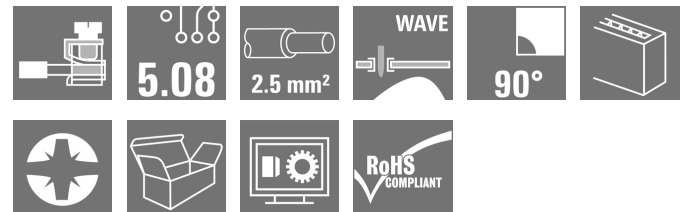


## OMNIMATE Signal - series PM PM 5.08/05/90 3.5SN OR BX

**Weidmüller Interface GmbH & Co. KG**  
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Germany  
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### 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 mm<sup>2</sup>.

### General ordering data

Type	PM 5.08/05/90 3.5SN OR BX
Order No.	<a href="#">1234570000</a>
Version	Printed circuit board terminals, 5.08 mm, Number of poles: 5, 90°, Solder pin length (l): 3.5 mm, tinned, orange, Pressure clamp connection, Clamping range, max. : 2.5 mm <sup>2</sup> , Box
GTIN (EAN)	4050118018745
Qty.	100 pc(s).
Product data	IEC: 600 V / 24 A / 0.13 - 2.5 mm <sup>2</sup> UL: 300 V / 15 A / AWG 26 - AWG 14
Packaging	Box

Creation date May 2, 2020 4:10:40 PM CEST

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**Technical data**
**Dimensions and weights**

Width	26 mm	Width (inches)	1.024 inch
Height	13.5 mm	Height (inches)	0.531 inch
Height of lowest version	10 mm	Depth	8 mm
Depth (inches)	0.315 inch	Net weight	4.26 g

**Environmental Product Compliance**

REACH SVHC Lead 7439-92-1

**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	Fitted by customer	Yes
Max. adjacent poles per row	24	Solder pin length (l)	3.5 mm
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
L1 in mm	20.32 mm	L1 in inches	0.8 inch
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)	Colour	orange
Colour chart (similar)	RAL 2000	Insulating material group	I
Comparative Tracking Index (CTI)	≥ 600	Insulation strength	≥ 10 <sup>8</sup> Ω
UL 94 flammability rating	V-0	GWIT	960 °C
GWFI	960 °C	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.	-25 °C	Storage temperature, max.	50 °C
Max. relative humidity during storage	70 %	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 <sup>2</sup>
Clamping range, max.	2.5 mm <sup>2</sup>
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 <sup>2</sup>
Solid, max. H05(07) V-U	2.5 mm <sup>2</sup>
Flexible, min. H05(07) V-K	0.13 mm <sup>2</sup>
Flexible, max. H05(07) V-K	2.5 mm <sup>2</sup>
w. plastic collar ferrule, DIN 46228 pt 4,	0.25 mm <sup>2</sup> min.

Creation date May 2, 2020 4:10:40 PM CEST

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**PM 5.08/05/90 3.5SN OR BX**

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**Technical data**

w. plastic collar ferrule, DIN 46228 pt 4, 1.5 mm<sup>2</sup>  
 max.

w. wire end ferrule, DIN 46228 pt 1, 0.25 mm<sup>2</sup>  
 min.

w. wire end ferrule, DIN 46228 pt 1, 1.5 mm<sup>2</sup>  
 max.

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>
Cross-section for conductor connection	Type	fine-wired	
	nominal	0.25 mm <sup>2</sup>	
wire end ferrule		Stripping length	nominal 8 mm
		Recommended wire-end ferrule	<a href="#">H0.25/10 HBL</a>
		Stripping length	nominal 5 mm
		Recommended wire-end ferrule	<a href="#">H0.25/5</a>
Cross-section for conductor connection	Type	fine-wired	
	nominal	0.34 mm <sup>2</sup>	
wire end ferrule		Stripping length	nominal 8 mm
		Recommended wire-end ferrule	<a href="#">H0.34/10 TK</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)		
Max. clamping range	2.5 mm <sup>2</sup>		


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**Technical data**
**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**

Institute (CSA)		Certificate No. (CSA)	200039-1815154
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
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

**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

**Classifications**

ETIM 6.0	EC002643	ETIM 7.0	EC002643
eClass 9.0	27-44-04-01	eClass 9.1	27-44-04-01
eClass 10.0	27-44-04-01		

**Data sheet**

**OMNIMATE Signal - series PM  
PM 5.08/05/90 3.5SN OR BX**

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**Technical data**

**Notes**

- |       |  |
|-------|--|
| Notes | <ul style="list-style-type: none"> <li>• Rated current related to rated cross-section &amp; min. No. of poles.</li> <li>• Wire end ferrule without plastic collar to DIN 46228/1</li> <li>• Wire end ferrule with plastic collar to DIN 46228/4</li> <li>• The data given under CSA relates to a cUL approval - E60693</li> <li>• P on drawing = pitch</li> <li>• 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.</li> </ul> |
|-------|--|

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.
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**Approvals**

Approvals



ROHS	Conform
------	---------

**Downloads**

Approval/Certificate/Document of Conformity	<a href="#">Declaration of the Manufacturer</a>
Brochure/Catalogue	<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="#">CAT 2 PORTFOLIOGUIDE EN</a> <a href="#">FL BUILDING SAFETY EN</a> <a href="#">FL APPL LED LIGHTING EN</a> <a href="#">FLIndustr.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>
Engineering Data	<a href="#">EPLAN_WSCAD</a>
Engineering Data	<a href="#">STEP</a>

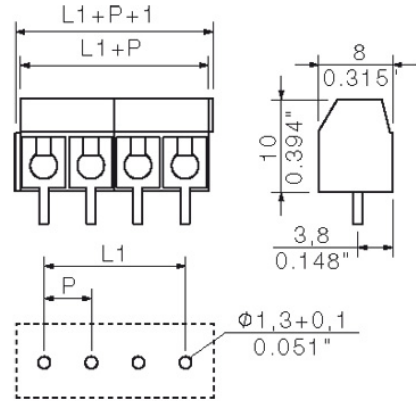
**Data sheet**

**OMNIMATE Signal - series PM  
PM 5.08/05/90 3.5SN OR BX**

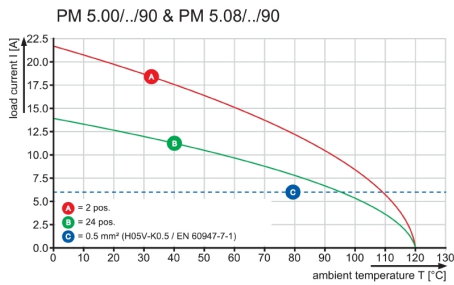
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**Drawings**

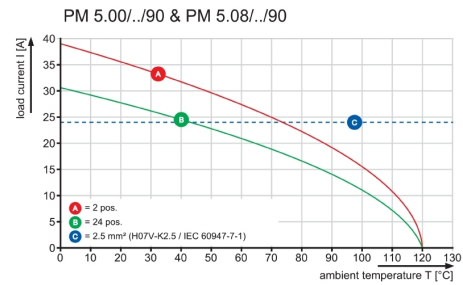
**Dimensional drawing**



**Graph**



**Graph**



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**Accessories**

**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, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade thickness (A): 0.6 mm
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

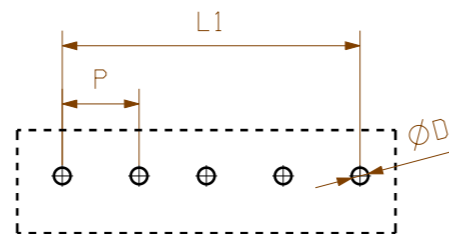
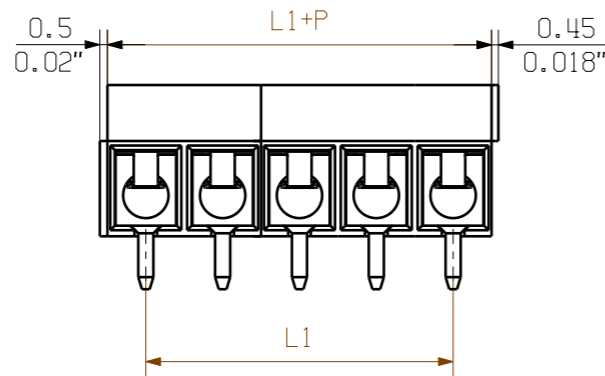
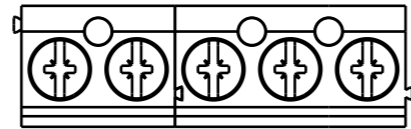


**General ordering data**

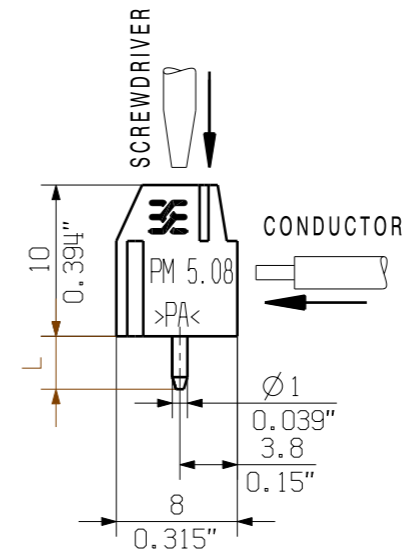
Type	SDIS 0.6X3.5X100	Version
Order No.	<a href="#">9008390000</a>	Screwdriver, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade thickness (A): 0.6 mm
GTIN (EAN)	4032248056354	
Qty.	1 pc(s).	

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

07



PCB LAYOUT



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]

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 to 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.

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

WEITERGABE SOWIE VERVIELFÄLTIGUNG DIESES DOKUMENTS, VERWERTUNG UND MITTEILUNG SEINES INHALTS SIND VERBOTEN, SOWEIT NICHT AUSDRUECKLICH GESTATTET.  
 ZUWIDERHANDLUNGEN VERPFLICHTEN ZU SCHADENERSATZ. ALLE RECHTE FUER DEN FALL DER PATENT-, GEBRAUCHSMUSTER- ODER GESCHMACKSMUSTEREINTRAGUNG VORBEHALTEN.  
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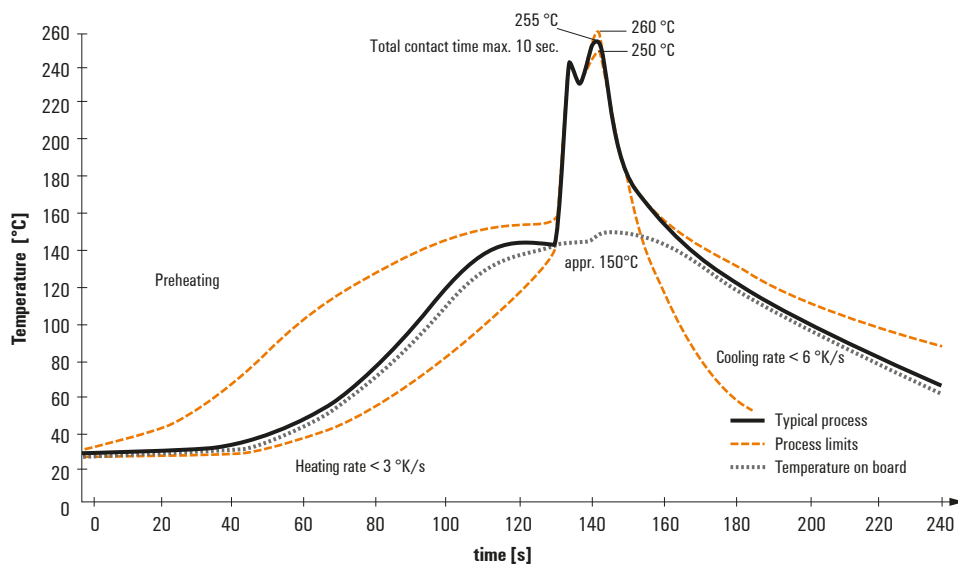
## Recommended wave soldering profiles

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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.