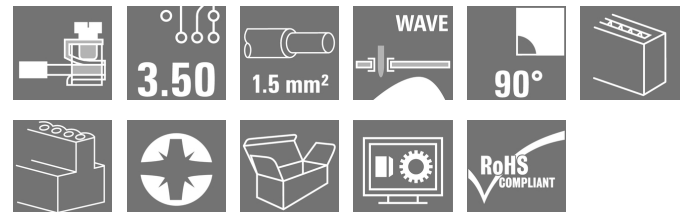


PS 3.50/16/90 3.5SN OR BX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com**Product image**

Very small and compact PCB terminal with leaf spring connection at 3.5 mm pitch, conductor outlet direction 90°. Suitable for conductor cross-sections up to 1.5 mm².

General ordering data

Version	Printed circuit board terminals, 3.50 mm, 90°, Solder pin length (l): 3.5 mm, tinned, orange, Pressure clamp connection, Clamping range, max.: 1.5 mm ² , Box
Order No.	2440220000
Type	PS 3.50/16/90 3.5SN OR BX
GTIN (EAN)	4050118457698
Qty.	100 pc(s).
Product data	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm ² UL: 300 V / 10 A / AWG 28 - AWG 16
Packaging	Box

Creation date March 26, 2021 11:48:19 PM CET

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Technical data

Dimensions and weights

Depth	6.8 mm	Depth (inches)	0.268 inch
Height	11.9 mm	Height (inches)	0.469 inch
Height of lowest version	8.4 mm	Net weight	4.3 g
Width	56.46 mm	Width (inches)	2.223 inch

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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System parameters

Product family	PS	Wire connection method	Pressure clamp connection
Mounting onto the PCB	THT solder connection	Conductor outlet direction	90°
Pitch in mm (P)	3.5 mm	Pitch in inches (P)	0.138 inch
Fitted by customer	Yes	Max. adjacent poles per row	24
Solder pin length (l)	3.5 mm	Solder pin dimensions	d = 0.8 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	0.4 x 2.5
Screwdriver blade standard	DIN 5264	Tightening torque, min.	0.2 Nm
Tightening torque, max.	0.25 Nm	Clamping screw	M 2
Stripping length	4 mm	L1 in mm	52.5 mm
L1 in inches	2.07 inch	Touch-safe protection acc. to DIN VDE 0470	IP 20
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	UL 94 flammability rating	V-0
Contact material	Copper alloy	Contact surface	tinned
Coating	1-3 µm Ni, 4-6 µm SN	Layer structure of solder connection	1.5...3 µm Ni / 4...6 µm Sn
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.	0.08 mm ²	Clamping range, max.	1.5 mm ²
Wire connection cross section AWG, min.	AWG 28	Wire connection cross section AWG, max.	AWG 16
Solid, min. H05(07) V-U	0.2 mm ²	Solid, max. H05(07) V-U	1.5 mm ²
Flexible, min. H05(07) V-K	0.2 mm ²	Flexible, max. H05(07) V-K	1.5 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, min.	0.25 mm ²	w. plastic collar ferrule, DIN 46228 pt 4, max.	0.75 mm ²
w. wire end ferrule, DIN 46228 pt 1, min.	0.25 mm ²	w. wire end ferrule, DIN 46228 pt 1, max.	0.75 mm ²
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)		

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Technical data

Rated data acc. to IEC

tested acc. to standard

IEC 60664-1, IEC 61984

Rated current, max. number of poles
(Tu=20°C)

17.5 A

Rated current, max. number of poles
(Tu=40°C)

17.5 A

Rated voltage for surge voltage class /
pollution degree III/2

160 V

Rated impulse voltage for surge voltage
class/ pollution degree II/2

2.5 kV

Rated impulse voltage for surge voltage
class/ contamination degree III/3

2.5 kV

Rated current, min. number of poles
(Tu=20°C)

17.5 A

Rated current, min. number of poles
(Tu=40°C)

17.5 A

Rated voltage for surge voltage class /
pollution degree II/2

320 V

Rated voltage for surge voltage class /
pollution degree III/3

160 V

Rated impulse voltage for surge voltage
class/ pollution degree III/2

2.5 kV

Rated data acc. to CSA

Rated voltage (Use group B / CSA)

300 V

Wire cross-section, AWG, min.

AWG 28

Rated current (Use group B / CSA)

10 A

Wire cross-section, AWG, max.

AWG 16

Rated data acc. to UL 1059

Rated voltage (Use group B / UL 1059)

300 V

Rated current (Use group B / UL 1059)

10 A

Wire cross-section, AWG, min.

AWG 28

Rated voltage (Use group D / UL 1059)

300 V

Rated current (Use group D / UL 1059)

10 A

Wire cross-section, AWG, max.

AWG 16

Packing

Packaging

Box

VPE length

495 mm

VPE width

355 mm

VPE height

182 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

ECLASS 11.0

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

- Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months

Approvals

ROHS

Conform

Downloads

Engineering Data

[EPLAN](#)

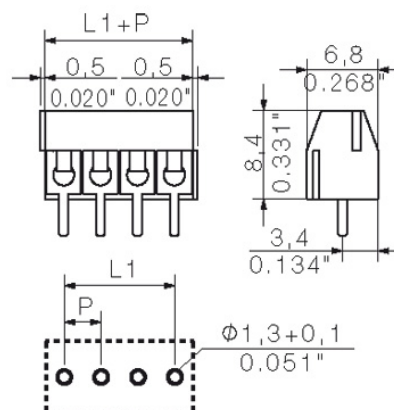
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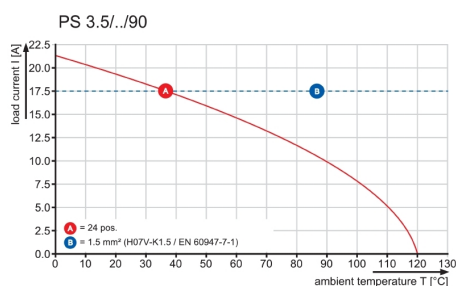
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Drawings

Dimensional drawing



Graph



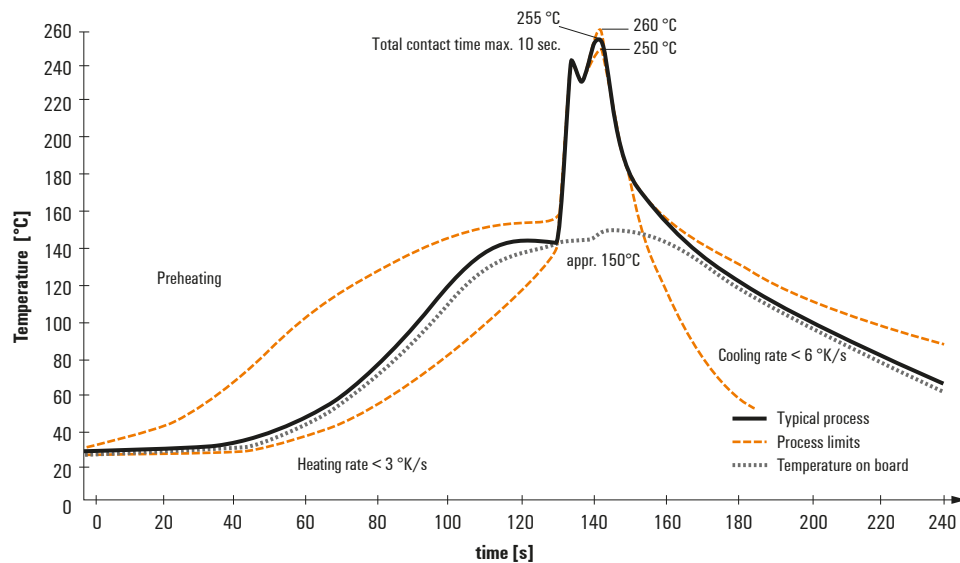
Recommended wave soldering profiles

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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.