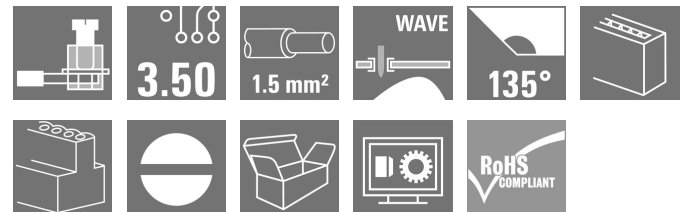


LM 3.50/04/135 3.2SN OR BX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com**Product image**

Small, compact PCB terminal with proven clamping yoke connection and 3.5 mm pitch. Conductor outlet direction 90° and 135°. Suitable for conductor cross-sections up to 1.5 mm².

General ordering data

Version	Printed circuit board terminals, 3.50 mm, Number of poles: 4, 135°, Solder pin length (l): 3.2 mm, tinned, orange, Clamping yoke connection, Clamping range, max. : 2.08 mm², Box
Order No.	1845220000
Type	LM 3.50/04/135 3.2SN OR BX
GTIN (EAN)	4032248357932
Qty.	126 pc(s).
Product data	IEC: 320 V / 16 A / 0.5 - 1.5 mm² UL: 300 V / 10 A / AWG 28 - AWG 14
Packaging	Box

Creation date May 23, 2024 6:11:18 AM CEST

LM 3.50/04/135 3.2SN OR BX

Weidmüller Interface GmbH & Co. KG

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Technical data

Dimensions and weights

Depth	12.7 mm	Depth (inches)	0.5 inch
Height	15.9 mm	Height (inches)	0.626 inch
Height of lowest version	12.7 mm	Width	14.6 mm
Width (inches)	0.575 inch	Net weight	2.456 g

System parameters

Product family	OMNIMATE Signal - series LM	Wire connection method	Clamping yoke connection
Mounting onto the PCB	THT solder connection	Conductor outlet direction	135°
Pitch in mm (P)	3.5 mm	Pitch in inches (P)	0.138 "
Number of poles	4	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	1.0 x 0.6 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	5 mm
L1 in mm	10.5 mm	L1 in inches	0.413 "
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	3.60 mΩ

Material data

Insulating material	PA	Colour	orange
Colour chart (similar)	RAL 2000	Insulating material group	I
Comparative Tracking Index (CTI)	≥ 600	Insulation strength	≥ 10 ⁸ Ω
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	1.5...3 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.	100 °C
Temperature range, installation, min.	-25 °C	Temperature range, installation, max.	100 °C

Conductors suitable for connection

Clamping range, min.	0.08 mm ²
Clamping range, max.	2.08 mm ²
Wire connection cross section AWG, min.	AWG 28
Wire connection cross section AWG, max.	AWG 14
Solid, min. H05(07) V-U	0.5 mm ²
Solid, max. H05(07) V-U	1.5 mm ²
Flexible, min. H05(07) V-K	0.5 mm ²
Flexible, max. H05(07) V-K	1.5 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, 0.5 mm ² min.	
w. plastic collar ferrule, DIN 46228 pt 4, 0.75 mm ² max.	
Plug gauge in accordance with EN 60999 a x b; ø	2.4 mm x 1.5 mm

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Technical data

Clampable conductor	Cross-section for conductor connection	Type	fine-wired		
		nominal	0.75 mm²		
	wire end ferrule	Stripping length	nominal	8 mm	
		Recommended wire-end ferrule	H0.75/12 W		
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)	16 A
Rated current, max. number of poles (Tu=20°C)	12 A	Rated current, min. number of poles (Tu=40°C)	14 A
Rated current, max. number of poles (Tu=40°C)	10 A	Rated voltage for surge voltage class / pollution degree II/2	320 V
Rated voltage for surge voltage class / pollution degree III/2	160 V	Rated voltage for surge voltage class / pollution degree III/3	160 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	2.5 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	2.5 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	2.5 kV	Short-time withstand current resistance	3 x 1s with 72 A

Rated data acc. to CSA

Institute (CSA)		Certificate No. (CSA)	154685-1202192
Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group D / CSA)	300 V
Rated current (Use group B / CSA)	10 A	Rated current (Use group D / CSA)	10 A
Wire cross-section, AWG, min.	AWG 28	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 (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)	10 A	Rated current (Use group D / UL 1059)	10 A
Wire cross-section, AWG, min.	AWG 28	Wire cross-section, AWG, max.	AWG 14
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Packing

Packaging	Box	VPE length	353 mm
VPE width	136 mm	VPE height	25 mm

Type tests

Test: Durability of markings	Test	type identification, mark of origin, type of material
	Evaluation	available

Creation date May 23, 2024 6:11:18 AM CEST

Catalogue status 18.05.2024 / We reserve the right to make technical changes.

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Technical data

Test: Clampable cross section	Standard	DIN EN 60999 section 6 / 04.94
	Conductor type	Type of conductor and solid 0.08 mm ² conductor cross-section
		Type of conductor and stranded 0.08 mm ² conductor cross-section
		Type of conductor and solid 1.5 mm ² conductor cross-section
		Type of conductor and stranded 1.5 mm ² conductor cross-section
		Type of conductor and AWG 28/1 conductor cross-section
		Type of conductor and AWG 28/19 conductor cross-section
		Type of conductor and AWG 16/1 conductor cross-section
		Type of conductor and AWG 16/19 conductor cross-section
	Evaluation	passed
Test for damage to and accidental loosening of conductors	Standard	DIN EN 60999 section 8.4 / 04.94
	Requirement	0.2 kg
	Conductor type	Type of conductor and AWG 28/1 conductor cross-section
		Type of conductor and AWG 28/7 conductor cross-section
	Evaluation	passed
	Requirement	0.3 kg
	Conductor type	Type of conductor and solid 0.5 mm ² conductor cross-section
		Type of conductor and stranded 0.5 mm ² conductor cross-section
	Evaluation	passed
	Requirement	0.4 kg
	Conductor type	Type of conductor and solid 1.5 mm ² conductor cross-section
		Type of conductor and stranded 1.5 mm ² conductor cross-section
		Type of conductor and AWG 16/7 conductor cross-section
		Type of conductor and AWG 16/19 conductor cross-section
	Evaluation	passed

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Technical data

Pull-out test	Standard	DIN EN 60999 section 8.4 / 04.94
	Requirement	≥5 N
	Conductor type	Type of conductor and AWG 28/1 conductor cross-section
		Type of conductor and AWG 28/7 conductor cross-section
	Evaluation	passed
	Requirement	≥30 N
	Conductor type	Type of conductor and H05V-U0.5 conductor cross-section
		Type of conductor and H05V-K0.5 conductor cross-section
	Evaluation	passed
	Requirement	≥40 N
	Conductor type	Type of conductor and H07V-U1.5 conductor cross-section
		Type of conductor and H07V-K1.5 conductor cross-section
		Type of conductor and AWG 16/7 conductor cross-section
		Type of conductor and AWG 16/19 conductor cross-section
	Evaluation	passed

Classifications

ETIM 6.0	EC002643	ETIM 7.0	EC002643
ETIM 8.0	EC002643	ETIM 9.0	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
ECLASS 12.0	27-46-01-01	ECLASS 13.0	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	<ul style="list-style-type: none"> Additional variants on request Rated current related to rated cross-section & min. No. of poles. Max. outer diameter of the conductor: 2.9 mm 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

LM 3.50/04/135 3.2SN OR BX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com**Technical data****Approvals**

Approvals



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

Downloads

Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Engineering Data	CAD data – STEP
Catalogues	Catalogues in PDF-format
Brochures	FL DRIVES EN FL ANALO.SIGN.CONV. EN MB DEVICE MANUF. EN FL DRIVES DE FL BUILDING SAFETY EN FL APPL LED LIGHTING EN FL INDUSTR.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 PO OMNIMATE EN

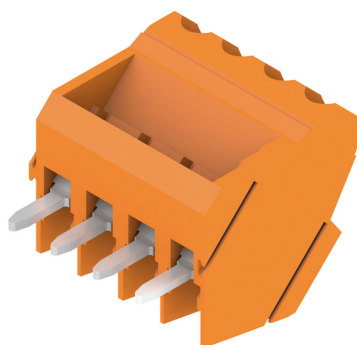
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Drawings

Product image



Dimensional drawing



Graph



LM 3.50/04/135 3.2SN OR BX**Weidmüller Interface GmbH & Co. KG**

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www.weidmueller.com**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 0.4X2.5X75	Version
Order No.	9009030000	Screwdriver, Screwdriver
GTIN (EAN)	4032248266944	
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 0.4X2.5X75	Version
Order No.	9008370000	Screwdriver, Screwdriver
GTIN (EAN)	4032248056330	
Qty.	1 pc(s).	

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WEIDMUELLER INTERFACE GmbH & Co.KG

Technical Data

Rev.

Material data

Insulation material type

Insulation material colours

Insulation material flammability class

Insulation resistance

Conatct base material

Contact plating

UL94

MOhm

System characteristic values

Pitch P

Number of rows

Dielectric strength (r.m.s withstand voltage)

Through resistance (typical)

Operating temperature range

Degree of protection acc. to VDE 0106

Degree of protection acc. to DIN EN 60529

Conductor connection method

Screw size

Screw torque max. acc. to EN 60999

Screw driver type

Solder pin length L

PCB hole diameter D (wave soldering)

PCB hole diameter D (reflow soldering)

Resistance to soldering heat acc. to DIN IEC 60512-6

Resistance to soldering heat acc. to EN 61760-1

Solderability classification acc. to EN 61760-1

Solder connection type

Solder pin diameter d (max.)

mm/inch

kV

mOhm

°C

Nm

mm/inch

mm/inch

mm/inch

°C/sec

°C/sec

mm/inch

Application notes

Coding possibility

Joinable without loss of pitch

Manual assembly of modules

Max. number of poles

yes/no

yes/no

yes/no

n

Conductor

Clamping range

"e" solid H05(07) V-U

"f" flexible H05(07) V-K

"f" with ferrule acc. to DIN 46228/1

... with plastic collar acc. to DIN 46228/4

Conductor insulation stripping length

Conductor insulation diameter max.

Two wire clamping range

Gauge to EN 60999 (a x b ; Ø)

mm²

mm²

mm²

mm²

mm²

mm/inch

mm/inch

mm²

mm

IEC 664-1 / VDE0110 (4.97) rated data

Rated cross section acc. to EN 60999

Rated current @ 20°C ambient

Rated current @ 40°C ambient

mm²

A

A

Overvoltage category / Pollution degree

Rated voltage

Rated impulse voltage

V

kV

UL 1059 rated data

Rated voltage

Rated current

AWG wire range (field wiring / factory wiring)

CSA C22.2 rated data

Rated voltage

Rated current

AWG wire range (field wiring / factory wiring)

Packaging

Downloads

PA 66

orange

V - 2

10³

Cu-alloy

tin-plated

3.5/0.138

1

>2.0

1.6

-55°...+100°

finger safe

IP20

clamping yoke

M2

0.2

SDI 0.4x2.5

3.2/0.126

1.3+0.1/0.051+0.004

n.a.

260/10

n.a.

n.a.

wave soldering

1.22/0.048

no

no

yes

24

0.08...1.5

0.08...1.5

0.08...1.5

n.a.

n.a.

7/0.276

n.a.

0.5...0.75

2.4x1.5

1.5

17

14.5

III/3

III/2

II/2

160

160

320

2.5

2.5

2.5

B

C

D

150

300

10

10

28...14

B

C

D

150

300

10

10

28...14

carton

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1) Sum of ambient temperature and temperature rise

2) Recommendation for manual assembly

3) Recommendation for automatic assembly

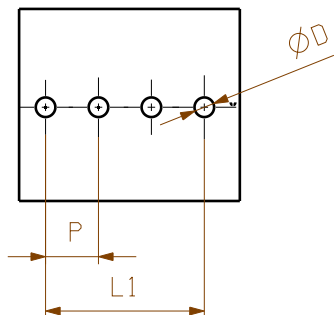
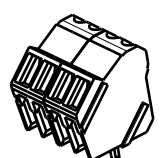
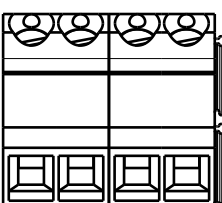
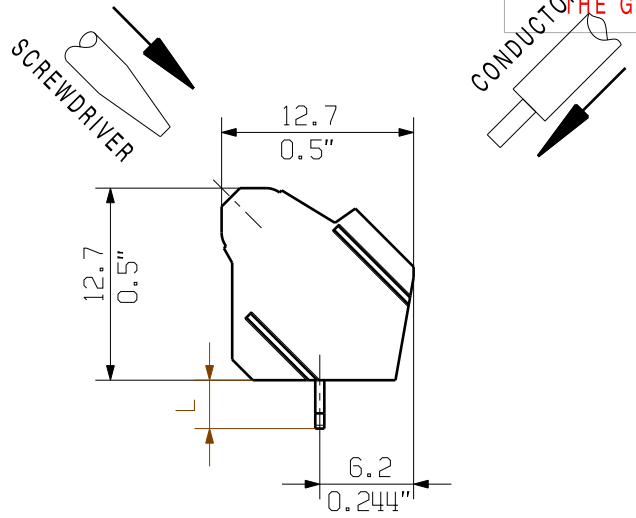
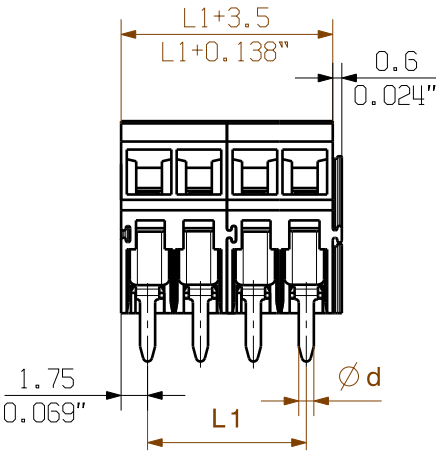
4) Recommendation for wave soldering

5) Recommendation for reflow soldering

6) Referred to rated cross section and minimum pole number

n.a. = not applicable

Subject to technical changes



DIE DEUTSCHE VERSION IST VERBINDLICH
THE GERMAN VERSION IS BINDING

24	80,50	3,169
23	77,00	3,031
22	73,50	2,894
21	70,00	2,756
20	66,50	2,618
19	63,00	2,480
18	59,50	2,343
17	56,00	2,205
16	52,50	2,067
15	49,00	1,929
14	45,50	1,791
13	42,00	1,654
12	38,50	1,516
11	35,00	1,378
10	31,50	1,240
9	28,00	1,102
8	24,50	0,965
7	21,00	0,827
6	17,50	0,689
5	14,00	0,551
4	10,50	0,413
3	7,00	0,276
2	3,50	0,138
n	L1 [mm]	L1 [Inch]

METRIC TOLERANCES
X. = ±0.3
X.X = ±0.1
X.XX = ±0.05

39842/5
17.03.08 HELIS_MA 00

MODIFICATION

DRAWN 17.03.2008 HELIS_MA
RESPONSIBLE KRUG_M
CHECKED 20.03.2008 HECKERT_M
APPROVED HECKERT_M

CAT.NO.:
C 25475 06
DRAWING NO. SHEET 02 OF 03 SHEETS

Weidmüller
LM3.5/././135°
LEITERPLATTENKLEMME
PCB TERMINAL

PRODUCT FILE: LM 3.5/135 7196

Recommended wave soldering profiles

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 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.

We reserve the right to make technical changes.