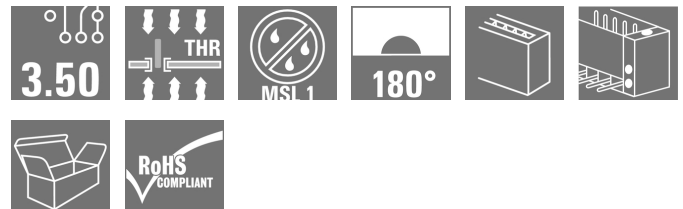


**OMNIMATE Signal - series BL/SL 3.50
SL-SMT 3.50/03/180F 3.2SN BK BX**

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



High-temperature-resistant male header, 3.50 mm pitch.

- **Plugging direction parallel (90°), straight 180° or angled (135°) to PCB**
- **Housing variants: closed side (G), screw flange (F), solder flange (LF) or snap-on solder flange (RF)**
- **Optimised for the SMT process**
- **Pin length 3.2 mm universal for all soldering methods**
- **Pin length 1.5 mm optimised for reflow soldering methods**
- **Packed either in a box (BX) or tape-on-reel (RL)**
- **Male header can be coded**

General ordering data

Type	SL-SMT 3.50/03/180F 3.2SN BK BX
Order No.	1842780000
Version	PCB plug-in connector, male header, Flange, THT/THR solder connection, 3.50 mm, No. of poles: 3, 180°, Solder pin length (l): 3.2 mm, tinned, Black, Box
GTIN (EAN)	4032248354146
Qty.	102 pc(s).
Product data	IEC: 320 V / 15 A UL: 300 V / 10 A
Packaging	Box

OMNIMATE Signal - series BL/SL 3.50 SL-SMT 3.50/03/180F 3.2SN BK BX

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Technical data

Dimensions and weights

Width	17.5 mm	Width (inches)	0.689 inch
Net weight	1.637 g		

System specifications

Product family	OMNIMATE Signal - series BL/SL 3.50	Type of connection	Board connection
Mounting onto the PCB	THT/THR solder connection	Pitch in mm (P)	3.5 mm
Pitch in inches (P)	0.138 inch	Outgoing elbow	180°
No. of poles	3	Number of solder pins per pole	1
Solder pin length (l)	3.2 mm	Solder pin length tolerance	0 / -0.3 mm
Tolerance of solder pin position	± 0.1 mm	Solder pin dimensions	d = 1.2 mm, Octagonal
Solder pin dimensions = d tolerance	0 / -0.03 mm	Solder eyelet hole diameter (D)	1.4 mm
Solder eyelet hole diameter tolerance (D) + 0.1 mm		Outside diameter of solder pad	2.3 mm
Template aperture diameter	2.1 mm	L1 in mm	7 mm
L1 in inches	0.276 inch	Number of rows	1
Pin series quantity	1	Touch-safe protection acc. to DIN VDE 57 106	Safe from back-of-hand touch
Touch-safe protection acc. to DIN VDE 0470	IP 10	Volume resistance	4.50 mΩ
Can be coded	Yes	Plugging cycles	25
Plugging force/pole, max.	10 N	Pulling force/pole, max.	8 N

Material data

Insulating material	LCP GF	Colour	Black
Colour chart (similar)	RAL 9011	Insulating material group	IIIa
CTI	≥ 175	Insulation resistance	≥ 10 ⁸ Ω
Moisture Level (MSL)	1	UL 94 flammability rating	V-0
Contact material	CuSn	Contact surface	tinned
Layer structure of solder connection	2-3 μm Ni / 5-7 μm Sn	Layer structure of plug contact	2-3 μm Ni / 5-7 μm Sn
Storage temperature, min.	-25 °C	Storage temperature, max.	55 °C
Max. relative humidity during storage	80 %	Operating temperature, min.	-50 °C
Operating temperature, max.	100 °C	Temperature range, installation, min.	-30 °C
Temperature range, installation, max.	100 °C		

Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. no. of poles (Tu=20°C)	15 A
Rated current, max. no. of poles (Tu=20°C)	12 A	Rated current, min. no. of poles (Tu=40°C)	13 A
Rated current, max. no. 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 100 A

OMNIMATE Signal - series BL/SL 3.50
SL-SMT 3.50/03/180F 3.2SN BK BX

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 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

Technical data
Rated data acc. to CSA

Institute (CSA)



Certificate No. (CSA)

200039-1176845

Rated voltage (Use group B)	300 V
Rated current (use group B)	10 A
Reference to approval values	Specifications are maximum values, details - see approval certificate.

Rated voltage (use group D)	300 V
Rated current (use group D)	10 A

Rated data acc. to UL 1059

Institute (UR)



Certificate No. (UR)

E60693

Rated voltage (use group B)	300 V
Rated current (use group B)	10 A
Reference to approval values	Specifications are maximum values, details - see approval certificate.

Rated voltage (use group D)	300 V
Rated current (use group D)	10 A

Packaging

Packaging	Box	VPE length	42 mm
VPE width	70 mm	VPE height	168 mm

Classifications

ETIM 3.0	EC001284	ETIM 4.0	EC002637
ETIM 5.0	EC002637	ETIM 6.0	EC002637
UNSPSC	30-21-18-10	eClass 5.1	27-26-07-04
eClass 6.2	27-26-07-04	eClass 7.1	27-44-04-02
eClass 8.1	27-44-04-02	eClass 9.0	27-44-04-02
eClass 9.1	27-44-04-02		

OMNIMATE Signal - series BL/SL 3.50 SL-SMT 3.50/03/180F 3.2SN BK BX

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Technical data

Notes

Notes

- Gold-plated contact surfaces on request
- Rated current related to rated cross-section & min. No. of poles.
- Diameter of solder eyelet $D = 1.4 + 0.1 \text{ mm}$
- Solder eyelet diameter $D = 1.5 + 0.1 \text{ mm}$, from 9 poles
- 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.
- For additional mechanical support for male connectors with screw flange (...F), we recommend an additional cable gland with fastening screws (sheet metal screw ISO 1481-ST 2.2x4.5 C or ISO 7049-ST 2.2x4.5 C – see Accessories). Cable gland only permitted before soldering.

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.

Approvals

Approvals



ROHS

Conform

Downloads

Approval/Certificate/Document of Conformity

[Declaration of the Manufacturer](#)

Brochure/Catalogue

[FL DRIVES EN](#)
[MB SMT EN](#)
[FL DRIVES DE](#)
[MB DEVICE MANUF. EN](#)
[CAT 2 PORTFOLIOGUIDE EN](#)
[FL BUILDING SAFETY EN](#)
[FL APPL LED LIGHTING EN](#)
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[FL POWER SUPPLY EN](#)
[FL 72H SAMPLE SER EN](#)
[PO OMNIMATE EN](#)

Engineering Data

[STEP](#)

SMT white paper

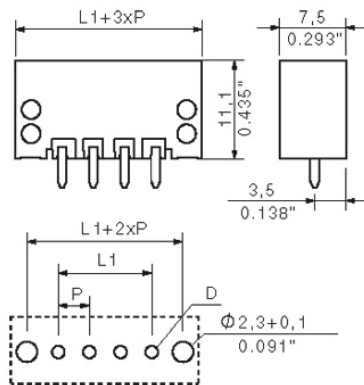
[Download Whitepaper](#)

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Drawings

Dimensional drawing

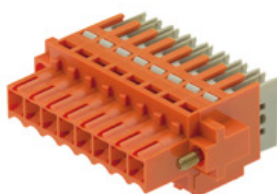


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Germany
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www.weidmüller.com

Mating connector (fully pluggable)

BLIDCB 3.5F



Female connectors for fast processing with insulation displacement connectors (IDC) for connecting wires at 3.50 pitch. They provide space for labelling and can be coded.

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
BLIDCB 3.50/03/-F SN OR BX	1751460000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 3, 90°/270°, IDC terminal, Clamping range, max. : 0.5 mm², Box	4032248174393	10 pc(s).	IEC: 250 V / 6 A / 0.35 - 0.5 mm² UL: 300 V / 7 A / AWG 22 - AWG 20	Box
Discontinued	2016-07-08T00:00:00+02:00	BLIDCB 3.50/03/-F SN BK BX	1770750000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 3, 90°/270°, IDC terminal, Clamping range, max. : 0.5 mm², Box	4032248174539	10 pc(s).

BLF 3.50/180LH



Connect efficiently - in a small space: female header with spring connection (PUSH IN) as a plug-in connection level; used together with male headers in 3.50 mm pitch.

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
BLF 3.50/03/180LH SN OR BX	2459960000	PCB plug-in connector, 3.50 mm, No. of poles: 3, 180°, PUSH IN, Spring connection, Clamping range, max. : 1.5 mm², Box	4050118475371	102 pc(s).	IEC: 320 V / 17.5 A / 0.14 - 1.5 mm² UL: 300 V / AWG 26 - AWG 16	Box
BLF 3.50/03/180LH SN BK BX	2538020000	PCB plug-in connector, 3.50 mm, No. of poles: 3, 180°, PUSH IN, Spring	4050118549546	102 pc(s).	IEC: 320 V / 17.5 A / 0.14 - 1.5 mm² UL: 300 V / AWG 26 - AWG 16	Box

OMNIMATE Signal - series BL/SL 3.50

SL-SMT 3.50/03/180F 3.2SN 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

Mating connector (fully pluggable)

connection, Clamping
 range, max. : 1.5 mm², Box

BL 3.50/90F



Female connectors with clamping yoke screw system for connecting conductors at 3.50 mm pitch. They provide space for labelling and can be coded.

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
BL 3.50/03/90F SN BK BX	1639250000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 3, 90°, Clamping yoke connection, Clamping range, max. : 1.5 mm ² , Box	4008190276799	108 pc(s).	IEC: 320 V / 12 A / 0.2 - 1.5 mm ² UL: 300 V / 8 A / AWG 28 - AWG 14	Box
BL 3.50/03/90F SN OR BX	1639020000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 3, 90°, Clamping yoke connection, Clamping range, max. : 1.5 mm ² , Box	4008190276560	108 pc(s).	IEC: 320 V / 12 A / 0.2 - 1.5 mm ² UL: 300 V / 8 A / AWG 28 - AWG 14	Box

BL 3.50/270F



Female connectors with clamping yoke screw system for connecting conductors at 3.50 mm pitch. They provide space for labelling and can be coded.

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
BL 3.50/03/270F SN OR BX	1639940000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 3, 270°, Clamping yoke connection, Clamping range, max. : 1.5 mm ² , Box	4008190277499	108 pc(s).	IEC: 320 V / 12 A / 0.2 - 1.5 mm ² UL: 300 V / 8 A / AWG 28 - AWG 14	Box
BL 3.50/03/270F SN BK BX	1640170000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 3, 270°, Clamping	4008190277734	108 pc(s).	IEC: 320 V / 12 A / 0.2 - 1.5 mm ² UL: 300 V / 8 A / AWG 28 - AWG 14	Box

OMNIMATE Signal - series BL/SL 3.50

SL-SMT 3.50/03/180F 3.2SN 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

Mating connector (fully pluggable)

yoke connection, Clamping
 range, max. : 1.5 mm², Box

BL 3.50/180F



Female connectors with clamping yoke screw system for connecting conductors at 3.50 mm pitch. They provide space for labelling and can be coded.

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
BL 3.50/03/180F SN OR BX	1606650000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 3, 180°, Clamping yoke connection, Clamping range, max. : 1.5 mm ² , Box	4008190123062	102 pc(s).	IEC: 320 V / 17 A / 0.2 - 1.5 mm ² UL: 300 V / 10 A / AWG 28 - AWG 14	Box
Discontinued	2016-04-08T00:00:00+02:00	BL 3.50/03/180F SN OR BX PRT	1740721001	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 3, 180°, Clamping yoke connection, Clamping range, max. : 1.5 mm ² , Box	4008190961718	102 pc(s).
BL 3.50/03/180F SN BK BX	1615790000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 3, 180°, Clamping yoke connection, Clamping range, max. : 1.5 mm ² , Box	4008190062132	102 pc(s).	IEC: 320 V / 17 A / 0.2 - 1.5 mm ² UL: 300 V / 10 A / AWG 28 - AWG 14	Box

OMNIMATE Signal - series BL/SL 3.50

SL-SMT 3.50/03/180F 3.2SN 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

Mating connector (fully pluggable)

BLF 3.50/180F



Connect efficiently - in a small space: female header with spring connection (PUSH IN) as a plug-in connection level; used together with male headers in 3.50 mm pitch.

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
BLF 3.50/03/180F SN BK BX	2459580000	PCB plug-in connector, 3.50 mm, No. of poles: 3, 180°, PUSH IN, Spring connection, Clamping range, max.: 1.5 mm², Box	4050118474992	102 pc(s).	IEC: 320 V / 17.5 A / 0.14 - 1.5 mm² UL: 300 V / AWG 26 - AWG 16	Box
BLF 3.50/03/180F SN OR BX	2459400000	PCB plug-in connector, 3.50 mm, No. of poles: 3, 180°, PUSH IN, Spring connection, Clamping range, max.: 1.5 mm², Box	4050118474312	102 pc(s).	IEC: 320 V / 17.5 A / 0.14 - 1.5 mm² UL: 300 V / AWG 26 - AWG 16	Box

BL 3.50/180LH



Female connectors with clamping yoke screw system for connecting conductors at 3.50 mm pitch. They provide space for labelling and can be coded.

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
BL 3.50/03/180LH SN OR BX	1687660000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 3, 180°, Clamping yoke connection, Clamping range, max.: 1.5 mm², Box	4008190853211	102 pc(s).	IEC: 320 V / 17 A / 0.2 - 1.5 mm² UL: 300 V / 10 A / AWG 28 - AWG 14	Box
Discontinued	2014-05-20T00:00:00+02:00	BL 3.50/03/180LH SN BK BX	1687890000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 3, 180°, Clamping yoke connection, Clamping range,	4008190853440	100 pc(s).

OMNIMATE Signal - series BL/SL 3.50
SL-SMT 3.50/03/180F 3.2SN 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

Mating connector (fully pluggable)

max. : 1.5 mm²,
Box

OMNIMATE Signal - series BL/SL 3.50

SL-SMT 3.50/03/180F 3.2SN 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

Mating connector (conditionally pluggable)

BLIDCB 3.5



Female connectors for fast processing with insulation displacement connectors (IDC) for connecting wires at 3.50 pitch. They provide space for labelling and can be coded.

General ordering data

Delivery status	Available until	Type	Order No.	Version	GTIN (EAN)	Qty.
Discontinued	2014-05-20T00:00:00+02:00	BLIDCB 3.50/03/- SN BK BX	1770680000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 3, 90°/270°, IDC terminal, Clamping range, max. : 0.5 mm², Box	4032248174461	10 pc(s).
Discontinued	2016-07-08T00:00:00+02:00	BLIDCB 3.50/03/- SN OR BX	1751390000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 3, 90°/270°, IDC terminal, Clamping range, max. : 0.5 mm², Box	4032248174317	10 pc(s).

BL 3.50/90



Female connectors with clamping yoke screw system for connecting conductors at 3.50 mm pitch. They provide space for labelling and can be coded.

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
BL 3.50/03/90 SN BK BX	1638790000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 3, 90°, Clamping yoke connection, Clamping range, max. : 1.5 mm², Box	4008190276331	174 pc(s).	IEC: 320 V / 12 A / 0.2 - 1.5 mm² UL: 300 V / 8 A / AWG 28 - AWG 14	Box

OMNIMATE Signal - series BL/SL 3.50 SL-SMT 3.50/03/180F 3.2SN BK BX

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

Mating connector (conditionally pluggable)

BL 3.50/03/90 SN OR BX	1638560000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 3, 90°, Clamping yoke connection, Clamping range, max. : 1.5 mm², Box	4008190276096 174 pc(s).	IEC: 320 V / 12 A / 0.2 - 1.5 mm² UL: 300 V / 8 A / AWG 28 - AWG 14	Box
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BLIDCB 3.5F BS

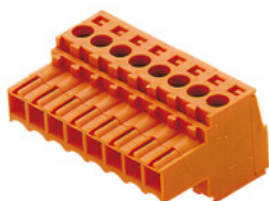


Female connectors for fast processing with insulation displacement connectors (IDC) for connecting wires at 3.50 pitch. They provide space for labelling and can be coded.

General ordering data

Delivery status	Available until	Type	Order No.	Version	GTIN (EAN)	Qty.
Discontinued	2010-12-31T00:00:00+01:00	BLIDCB 3.50/03/-FBS SN BK BX	1836450000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 3, 90°/270°, IDC terminal, Clamping range, max. : 0.5 mm², Box	4032248339051	100 pc(s).

BL 3.50/180



Female connectors with clamping yoke screw system for connecting conductors at 3.50 mm pitch. They provide space for labelling and can be coded.

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
BL 3.50/03/180 SN OR BX	1597370000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 3, 180°, Clamping yoke connection, Clamping range, max. : 1.5 mm², Box	4008190169909 174 pc(s).		IEC: 320 V / 17 A / 0.2 - 1.5 mm² UL: 300 V / 10 A / AWG 28 - AWG 14	Box
BL 3.50/03/180 SN OR BX PRT	1740631001	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 3, 180°, Clamping	4008190961527 174 pc(s).		IEC: 320 V / 17 A / 0.2 - 1.5 mm² UL: 300 V / 10 A / AWG 28 - AWG 14	Box

OMNIMATE Signal - series BL/SL 3.50 SL-SMT 3.50/03/180F 3.2SN BK BX

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Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Mating connector (conditionally pluggable)

		yoke connection, Clamping range, max. : 1.5 mm ² , Box			
BL	1606530000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 3, 180°, Clamping yoke connection, Clamping range, max. : 1.5 mm ² , Box	4008190009274 174 pc(s).	IEC: 320 V / 17 A / 0.2 - 1.5 mm ² UL: 300 V / 10 A / AWG 28 - AWG 14	Box
3.50/03/180					
SN DKGN BX					
Discontinued	BL 3.50/03/180 SN GY BX	1620460000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 3, 180°, Clamping yoke connection, Clamping range, max. : 1.5 mm ² , Box	4008190157159 100 pc(s).	IEC: 320 V / 17 A / 0.2 - 1.5 mm ² UL: 300 V / 10 A / AWG 28 - AWG 14
BL	1615680000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 3, 180°, Clamping yoke connection, Clamping range, max. : 1.5 mm ² , Box	4008190058906 174 pc(s).	IEC: 320 V / 17 A / 0.2 - 1.5 mm ² UL: 300 V / 10 A / AWG 28 - AWG 14	Box
3.50/03/180					
SN BK BX					

BL 3.50/270



Female connectors with clamping yoke screw system for connecting conductors at 3.50 mm pitch. They provide space for labelling and can be coded.

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
BL	1639480000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 3, 270°, Clamping yoke connection, Clamping range, max. : 1.5 mm ² , Box	4008190277031 174 pc(s).		IEC: 320 V / 12 A / 0.2 - 1.5 mm ² UL: 300 V / 8 A / AWG 28 - AWG 14	Box
3.50/03/270						
SN OR BX						
BL	1639710000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 3, 270°, Clamping	4008190277260 174 pc(s).		IEC: 320 V / 12 A / 0.2 - 1.5 mm ² UL: 300 V / 8 A / AWG 28 - AWG 14	Box
3.50/03/270						
SN BK BX						

Creation date October 17, 2018 12:04:29 PM CEST

OMNIMATE Signal - series BL/SL 3.50
SL-SMT 3.50/03/180F 3.2SN 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

Mating connector (conditionally pluggable)

yoke connection, Clamping
range, max. : 1.5 mm², Box

OMNIMATE Signal - series BL/SL 3.50 SL-SMT 3.50/03/180F 3.2SN BK BX

Weidmüller Interface GmbH & Co. KG
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www.weidmüller.com

Accessories

LED Light guides



Effective: the link between LED and front panel.

Floodlight indicators allow users to monitor the switching states without requiring a special design: optical plastic directs the light from standard LEDs around a bend into the connectors or through the front plate.

The fibre-optic elements are simply clipped behind the relevant 90° bend male connectors (90° outlet direction). Versions with different incoming light beam heights achieve maximum light efficiency for LEDs with different designs or heights.

The advantages compared to conventional solutions:

- No additional LED circuit board required behind the front panel
- No "long-legged" LEDs with separate mounting required
- Bent fibre-optic cable line for maximum light efficiency
- Uncomplicated front plate bore holes due to circular shape of outgoing light beam
- Easy to maintain correct clearance and creepage distance
- Can be partitioned for smaller pole numbers

The result: simplified manufacturing process, reduced costs and simplified design

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
SL 3.5 FLA 1.5/1.75/8	1597630000	PCB plug-in connector, Accessories, Flood-light display, Transparent, No. of poles: 1	4008190148386	50 pc(s).	UL:	Box
SL 3.5 FLA 4.0/1.75/8	1597650000	PCB plug-in connector, Accessories, Flood-light display, Transparent, No. of poles: 1	4008190027773	50 pc(s).	UL:	Box
SL 3.5 FLA 1.5/8	1597510000	PCB plug-in connector, Accessories, Flood-light display, Transparent, No. of poles: 1	4008190127541	50 pc(s).	UL:	Box
SL 3.5 FLA 2.3/8	1597520000	PCB plug-in connector, Accessories, Flood-light display, Transparent, No. of poles: 1	4008190120566	50 pc(s).	UL:	Box
SL 3.5 FLA 2.3/1.75/8	1597640000	PCB plug-in connector, Accessories, Flood-light display, Transparent, No. of poles: 1	4008190011321	25 pc(s).	UL:	Box

OMNIMATE Signal - series BL/SL 3.50 SL-SMT 3.50/03/180F 3.2SN 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

Additional accessories



No task is too small when creating the perfect solution. br />

Connections form just one part of the overall process. Small details are often the key to the perfect solution in applications where potentials are tested, grouped or even isolated.

A system is not a system without small but useful details:

- Test plugs - ensure reliable pick-up from diagnostic sockets
- Cross-connectors - ensure a stable electrical distribution contact directly at the connection
- Compartment partition elements - divide a large number of male connectors into several separate socket connector channels
- Locks and clips - optional vibration-resistant clip-on connection or mounting for male and female connectors

In tandem with the manufacturing process and application - more accessories = smaller workload

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data
BL/SL 3.50 VR OR BX	1669310000	PCB plug-in connector, Accessories, Latches, Orange, No. of poles: 1	4008190428488	100 pc(s).	UL:
PTSC KA 2.2X4.5 WN1412	1610740000	PCB plug-in connector, Accessories, Mounting screw, No. of poles: 1	4008190039523	100 pc(s).	UL:
BL/SL 3.50 VR BK BX	1669300000	PCB plug-in connector, Accessories, Latches, Black, No. of poles: 1	4008190428471	100 pc(s).	UL:

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Accessories

Coding elements



Only connects what is supposed to be connected: the right connection at the right place.

Coding elements and locking devices clearly assign connecting elements during the manufacturing process and operation

The coding elements and locking devices are inserted prior to assembly or during the cable assembly phase. The Weidmüller alternative: configure online using the variant configurator to precode prior to delivery.

Incorrect assembly on the circuit board and incorrect plugging of connecting elements is no longer possible. The advantage: no troubleshooting during manufacture and no operational errors by the user.

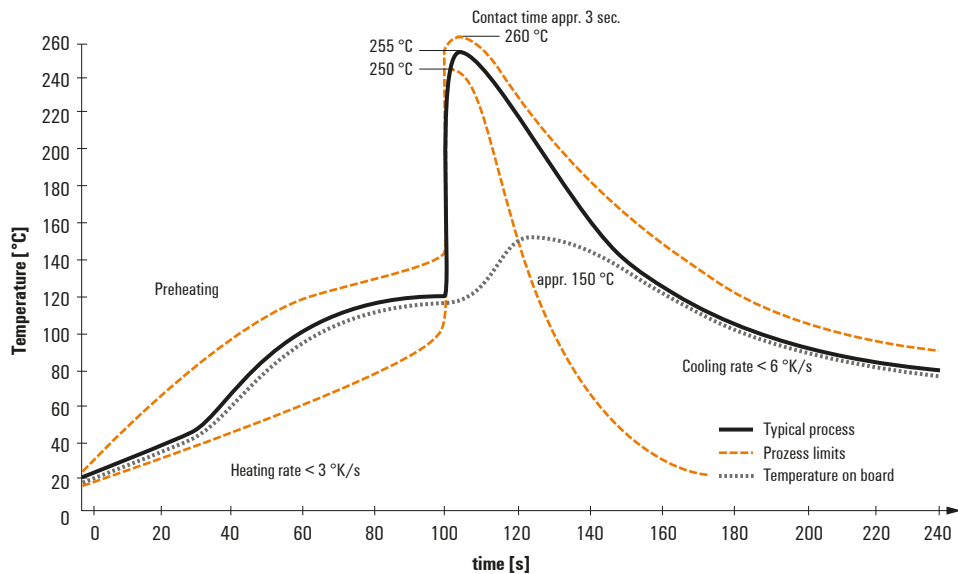
General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
BL SL 3.5 KO SW	1610100000	PCB plug-in connector, Accessories, Coding element, Black, No. of poles: 1	4008190187637	100 pc(s).	UL:	Box
BL SL 3.5 KO OR	1693430000	PCB plug-in connector, Accessories, Coding element, Orange, No. of poles: 1	4008190867447	100 pc(s).	UL:	Box

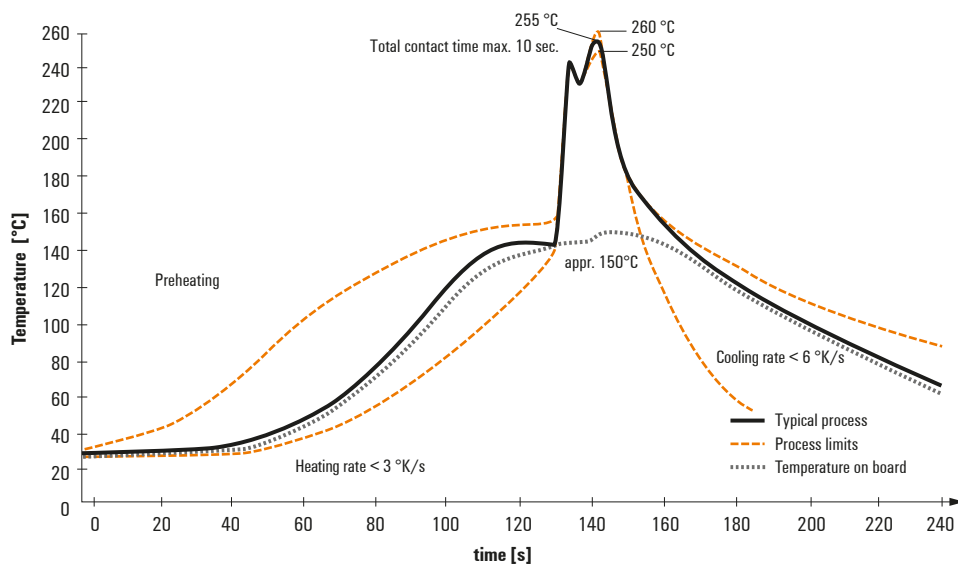
Recommended wave soldering profiles

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:

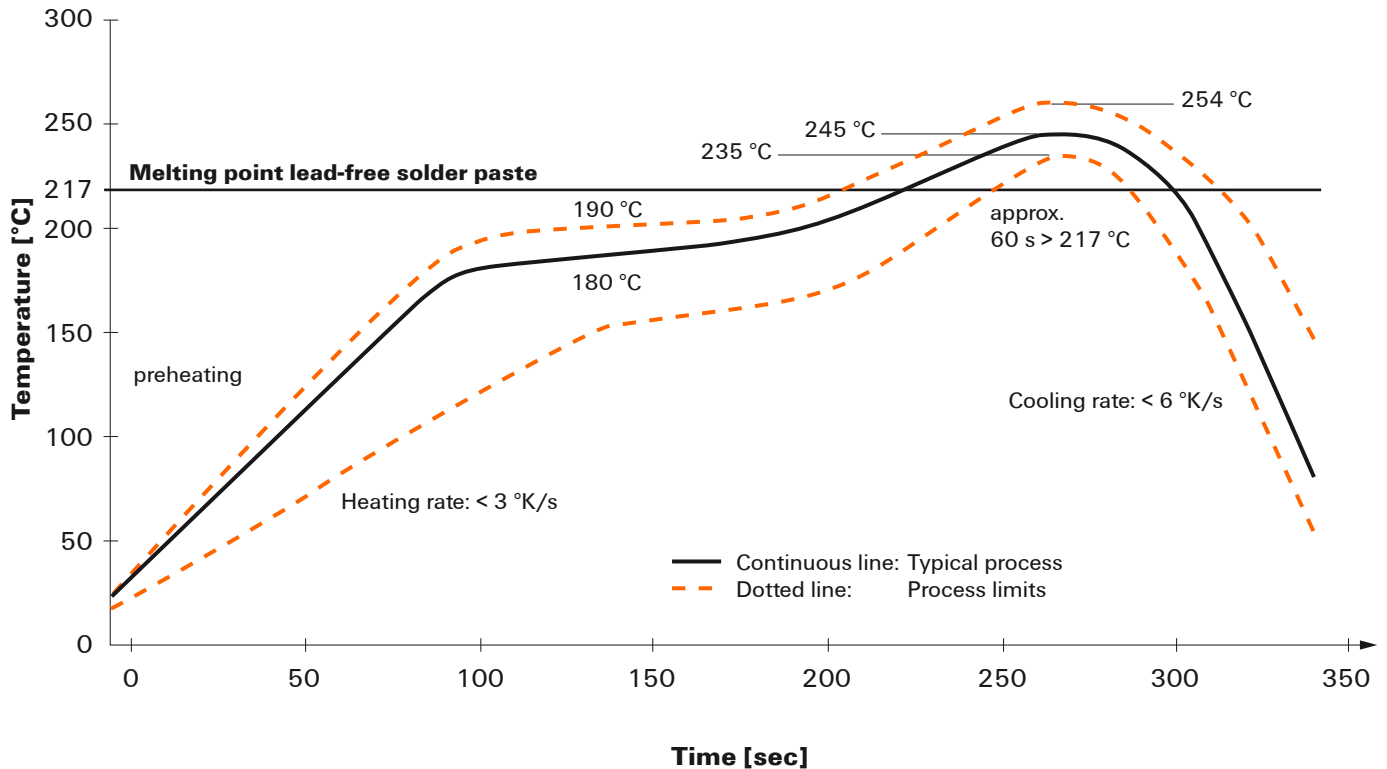
- PCB thickness
- Proportion of Cu in the layers
- Single/double-sided assembly
- Product range
- Heating and cooling rates

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.

Recommended reflow soldering profile

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



Reflow soldering profile

The perfect soldering profile for SMT Surface Mount Technology is one the most exiting question in SMT production. But there are more than one correct answer: The diagram of temperature-on-time is related to processing features of solder paste and to maximum load of components.

We have to consider the following parameters:

- Time for pre heating
- Maximum temperature
- Time above melting point
- Time for cooling
- Maximum heating rate
- Maximum cooling rate

We recommend a typical solder profile with associated process limits. With preheating components and board are prepared smoothly for the solder phase. Heating rate is typically $\leq +3\text{K/s}$. In parallel the solder paste is 'activated'. The time above melting point of 217°C the paste gets liquid and components and boards begin to connect. The maximum temperature of 245°C to 254°C should stay between 10 and 40 seconds. In the cooling phase at $\geq -6\text{K/s}$ solder is cured. Board and components cool down while avoiding cold cracks.