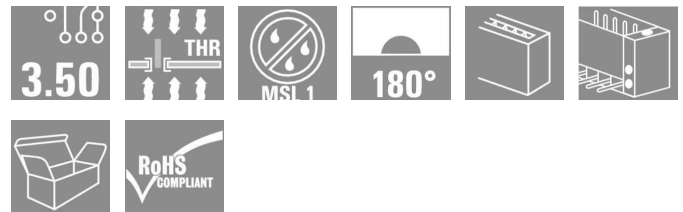


**OMNIMATE Signal - series BL/SL 3.50
SL-SMT 3.50/02/180F 3.2SN BK BX**

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 1429-0
Fax: +49 5231 14292083
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 3.50/02/180F 3.2SN BK BX
Order No.	1842770000
Version	PCB plug-in connector, male header, Flange, THT/THR solder connection, 3.50 mm, No. of poles: 2, 180°, Solder pin length (l): 3.2 mm, tinned, Black, Box
GTIN (EAN)	4032248354139
Qty.	132 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 3.50/02/180F 3.2SN BK BX

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 16
 D-32758 Detmold
 Germany
 Fon: +49 5231 1429-0
 Fax: +49 5231 14292083
 www.weidmueller.com

Technical data

Dimensions and weights

Net weight	1.045 g
------------	---------

System specifications

Product family	OMNIMATE Signal - series BL/SL 3.50	Type of connection	Solder 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	2	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	3.5 mm
L1 in inches	0.138 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
push-in force/pole	4 N	Withdrawal force per pole	4 N
Packaging	Box		

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 (Ta = 20°C)	15 A
Rated current, max. no. of poles (Ta = 20°C)	12 A	Rated current, min. no. of poles (Ta = 40°C)	13 A
Rated current, max. no. of poles (Ta = 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 3.50/02/180F 3.2SN BK BX

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 16
 D-32758 Detmold
 Germany
 Fon: +49 5231 1429-0
 Fax: +49 5231 14292083
 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 voltage (use group D)	300 V
Rated current (use group B)	10 A	Rated current (use group D)	10 A
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)	300 V	Rated voltage (use group D)	300 V
Rated current (use group B)	10 A	Rated current (use group D)	10 A
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

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		

Notes

Notes	• Gold-plated contact surfaces on request • Rated current related to rated cross-section & min. No. of poles. • Solder eyelet diameter D = 1.5 + 0.1 mm, from 9 poles • Solder eyelet diameter D = 1.5 + 0.1 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 after soldering.
IPC conformity	The products are developed, manufactured and delivered according to the internationally recognised IPC-A-610 standard, category "permissible". More extensive demands on the products can be evaluated on request.

OMNIMATE Signal - series BL/SL 3.50 SL-SMT 3.50/02/180F 3.2SN BK BX

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 1429-0
Fax: +49 5231 14292083
www.weidmueller.com

Technical data

Approvals

Approvals



ROHS

Conform

Downloads

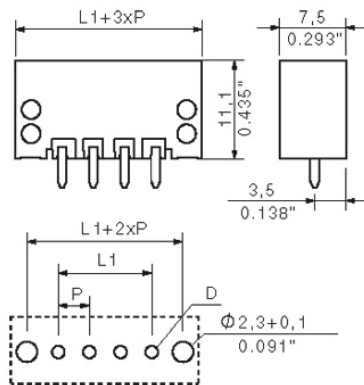
Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Brochure/Catalogue	FL DRIVES EN FL DRIVES DE
SMT white paper	Download Whitepaper

OMNIMATE Signal - series BL/SL 3.50 SL-SMT 3.50/02/180F 3.2SN BK BX

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 1429-0
Fax: +49 5231 14292083
www.weidmueller.com

Drawings

Dimensional drawing



OMNIMATE Signal - series BL/SL 3.50 SL-SMT 3.50/02/180F 3.2SN BK BX

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 1429-0
Fax: +49 5231 14292083
www.weidmueller.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

Delivery status Available until	Type	Order No.	Version	GTIN (EAN)	Qty.
Discontinued 2016-07-08T00:00:00+02:00	BLIDCB 3.50/02/-F SN BK BX	1770740000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 90°/270°, IDC terminal, Clamping range, rated connection, max.: 0.5 mm ² , Box	4032248174522	10 pc(s).
BLIDCB 3.50/02/-F SN OR BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 90°/270°, IDC terminal, Clamping range, rated connection, max.: 0.5 mm ² , Box	4032248174386	10 pc(s).	IEC: 250 V / 6 A / 0.35 - 0.5 mm ² UL: 300 V / 7 A / AWG 22 - AWG 20	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 3.50/02/90F SN BK BX	1639240000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 90°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm ² , Box	4008190276782	156 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 3.50/02/180F 3.2SN BK BX

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 1429-0
Fax: +49 5231 14292083
www.weidmüller.com

Mating connector (fully pluggable)

BL 3.50/02/90F SN OR BX	1639010000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 90°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm², Box	4008190276553 156 pc(s).	IEC: 320 V / 12 A / 0.2 - 1.5 mm² UL: 300 V / 8 A / AWG 28 - AWG 14	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 3.50/02/180F SN OR BX	1606640000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 180°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm², Box	4008190187088 132 pc(s).		IEC: 320 V / 17 A / 0.2 - 1.5 mm² UL: 300 V / 10 A / AWG 28 - AWG 14	Box
BL 3.50/02/180F SN OR BX PRT	1740711001	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 180°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm², Box	4008190961695 132 pc(s).		IEC: 320 V / 17 A / 0.2 - 1.5 mm² UL: 300 V / 10 A / AWG 28 - AWG 14	Box
BL 3.50/02/180F SN BK BX	1615780000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 180°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm², Box	4008190061272 132 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 3.50/02/180F 3.2SN BK BX

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 1429-0
Fax: +49 5231 14292083
www.weidmueller.com

Mating connector (fully pluggable)

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 3.50/02/180LH SN OR BX	1687650000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 180°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm², Box	4008190853204	132 pc(s).	IEC: 320 V / 17 A / 0.2 - 1.5 mm² UL: 300 V / 10 A / AWG 28 - AWG 14	Box
BL 3.50/02/180LH SN BK BX	1687880000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 180°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm², Box	4008190853433	132 pc(s).	IEC: 320 V / 17 A / 0.2 - 1.5 mm² UL: 300 V / 10 A / AWG 28 - AWG 14	Box

BL 3.50/270F



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 3.50/02/270F SN BK BX	1640160000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 270°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm², Box	4008190277727	156 pc(s).	IEC: 320 V / 12 A / 0.2 - 1.5 mm² UL: 300 V / 8 A / AWG 28 - AWG 14	Box
BL 3.50/02/270F SN OR BX	1639930000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 270°, Clamping yoke connection, Clamping	4008190277482	156 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 3.50/02/180F 3.2SN BK BX

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 1429-0
Fax: +49 5231 14292083
www.weidmueller.com

Mating connector (fully pluggable)

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

OMNIMATE Signal - series BL/SL 3.50 SL-SMT 3.50/02/180F 3.2SN BK BX

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 1429-0
Fax: +49 5231 14292083
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 3.50/02/- SN BK BX	1770670000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 90°/270°, IDC terminal, Clamping range, rated connection, max.: 0.5 mm ² , Box	4032248174454	10 pc(s).
BLIDCB 3.50/02/- SN OR BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 90°/270°, IDC terminal, Clamping range, rated connection, max.: 0.5 mm ² , Box	4032248174201	10 pc(s).	IEC: 250 V / 6 A / 0.35 - 0.5 mm ² UL: 300 V / 7 A / AWG 22 - AWG 20	Box

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 3.50/02/270 SN BK BX	1639700000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 270°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm ² , Box	4008190277253	258 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 3.50/02/180F 3.2SN BK BX

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 1429-0
Fax: +49 5231 14292083
www.weidmüller.com

Mating connector (conditionally pluggable)

BL 3.50/02/270 SN OR BX	1639470000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 270°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm ² , Box	4008190277024 258 pc(s).	IEC: 320 V / 12 A / 0.2 - 1.5 mm ² UL: 300 V / 8 A / AWG 28 - AWG 14	Box
-------------------------------	----------------------------	--	--------------------------	--	-----

BL 3.50/90



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 3.50/02/90 SN OR BX	1638550000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 90°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm ² , Box	4008190276102 258 pc(s).		IEC: 320 V / 12 A / 0.2 - 1.5 mm ² UL: 300 V / 8 A / AWG 28 - AWG 14	Box
BL 3.50/02/90 SN BK BX	1638780000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 90°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm ² , Box	4008190276324 258 pc(s).		IEC: 320 V / 12 A / 0.2 - 1.5 mm ² UL: 300 V / 8 A / AWG 28 - AWG 14	Box

BL 3.50/180



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 3.50/02/180 SN DKGN BX	1606520000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 180°, Clamping yoke connection, Clamping	4008190170202 264 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 3.50/02/180F 3.2SN BK BX

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 16
 D-32758 Detmold
 Germany
 Fon: +49 5231 1429-0
 Fax: +49 5231 14292083
 www.weidmueller.com

Mating connector (conditionally pluggable)

		range, rated connection, max.: 1.5 mm ² , Box		
BL	1740621001	PCB plug-in connector,	4008190961503 264 pc(s).	IEC: 320 V / 17 A / 0.2 - 1.5 mm ² Box
3.50/02/180		female plug, 3.50 mm, No.		UL: 300 V / 10 A / AWG 28 - AWG 14
SN OR BX PRT		of poles: 2, 180°, Clamping		
		yoke connection, Clamping		
		range, rated connection,		
		max.: 1.5 mm ² , Box		
BL	1615670000	PCB plug-in connector,	4008190058890 264 pc(s).	IEC: 320 V / 17 A / 0.2 - 1.5 mm ² Box
3.50/02/180		female plug, 3.50 mm, No.		UL: 300 V / 10 A / AWG 28 - AWG 14
SN BK BX		of poles: 2, 180°, Clamping		
		yoke connection, Clamping		
		range, rated connection,		
		max.: 1.5 mm ² , Box		
Discontinued	BL 3.50/02/180 SN GY BX	1620450000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 180°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm ² , Box	4008190156756 100 pc(s). IEC: 320 V / 17 A / 0.2 - 1.5 mm ² UL: 300 V / 10 A / AWG 28 - AWG 14
BL	1597360000	PCB plug-in connector,	4008190435868 264 pc(s).	IEC: 320 V / 17 A / 0.2 - 1.5 mm ² Box
3.50/02/180		female plug, 3.50 mm, No.		UL: 300 V / 10 A / AWG 28 - AWG 14
SN OR BX		of poles: 2, 180°, Clamping		
		yoke connection, Clamping		
		range, rated connection,		
		max.: 1.5 mm ² , Box		

OMNIMATE Signal - series BL/SL 3.50 SL-SMT 3.50/02/180F 3.2SN BK BX

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 1429-0
Fax: +49 5231 14292083
www.weidmueller.com

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 OR	1693430000	PCB plug-in connector, Accessories, Coding element, Orange, No. of poles: 1	4008190867447	100 pc(s).		Box
BL SL 3.5 KO SW	1610100000	PCB plug-in connector, Accessories, Coding element, Black, No. of poles: 1	4008190187637	100 pc(s).		Box

OMNIMATE Signal - series BL/SL 3.50 SL-SMT 3.50/02/180F 3.2SN BK BX

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 1429-0
Fax: +49 5231 14292083
www.weidmuller.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 2.3/1.75/8	1597640000	PCB plug-in connector, Accessories, Flood-light display, Transparent, No. of poles: 1	400819001132125	pc(s).		Box
SL 3.5 FLA 1.5/1.75/8	1597630000	PCB plug-in connector, Accessories, Flood-light display, Transparent, No. of poles: 1	400819014838650	pc(s).		Box
SL 3.5 FLA 4.0/1.75/8	1597650000	PCB plug-in connector, Accessories, Flood-light display, Transparent, No. of poles: 1	400819002777350	pc(s).		Box
SL 3.5 FLA 2.3/8	1597520000	PCB plug-in connector, Accessories, Flood-light display, Transparent, No. of poles: 1	400819012056650	pc(s).		Box
SL 3.5 FLA 1.5/8	1597510000	PCB plug-in connector, Accessories, Flood-light display, Transparent, No. of poles: 1	400819012754150	pc(s).		Box

OMNIMATE Signal - series BL/SL 3.50 SL-SMT 3.50/02/180F 3.2SN BK BX

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 1429-0
Fax: +49 5231 14292083
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

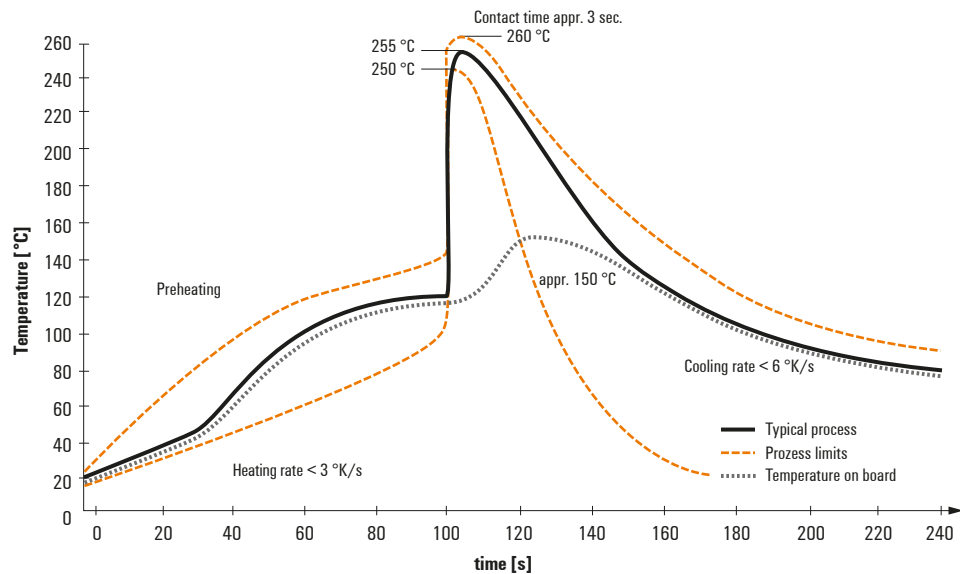
General ordering data

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

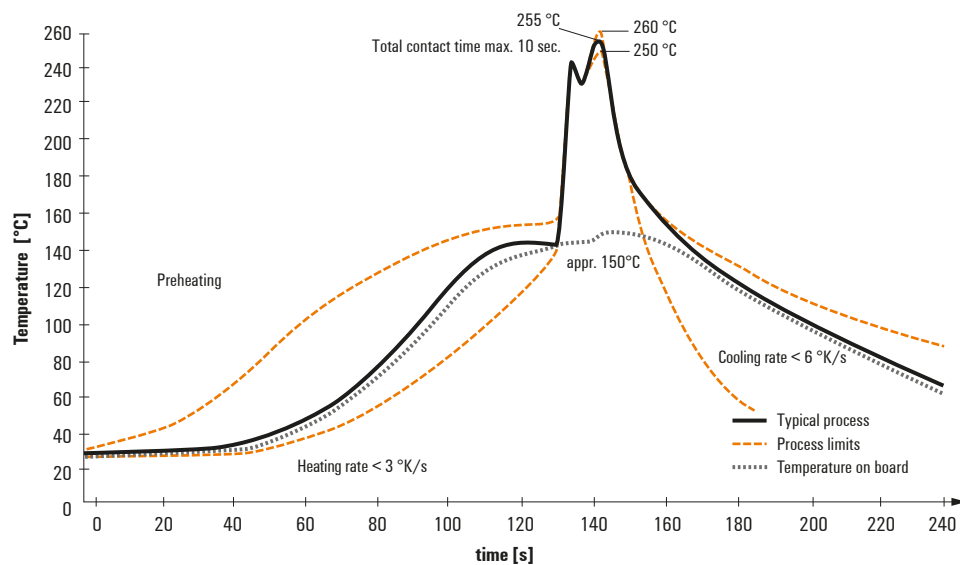
Recommended wave soldering profiles

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

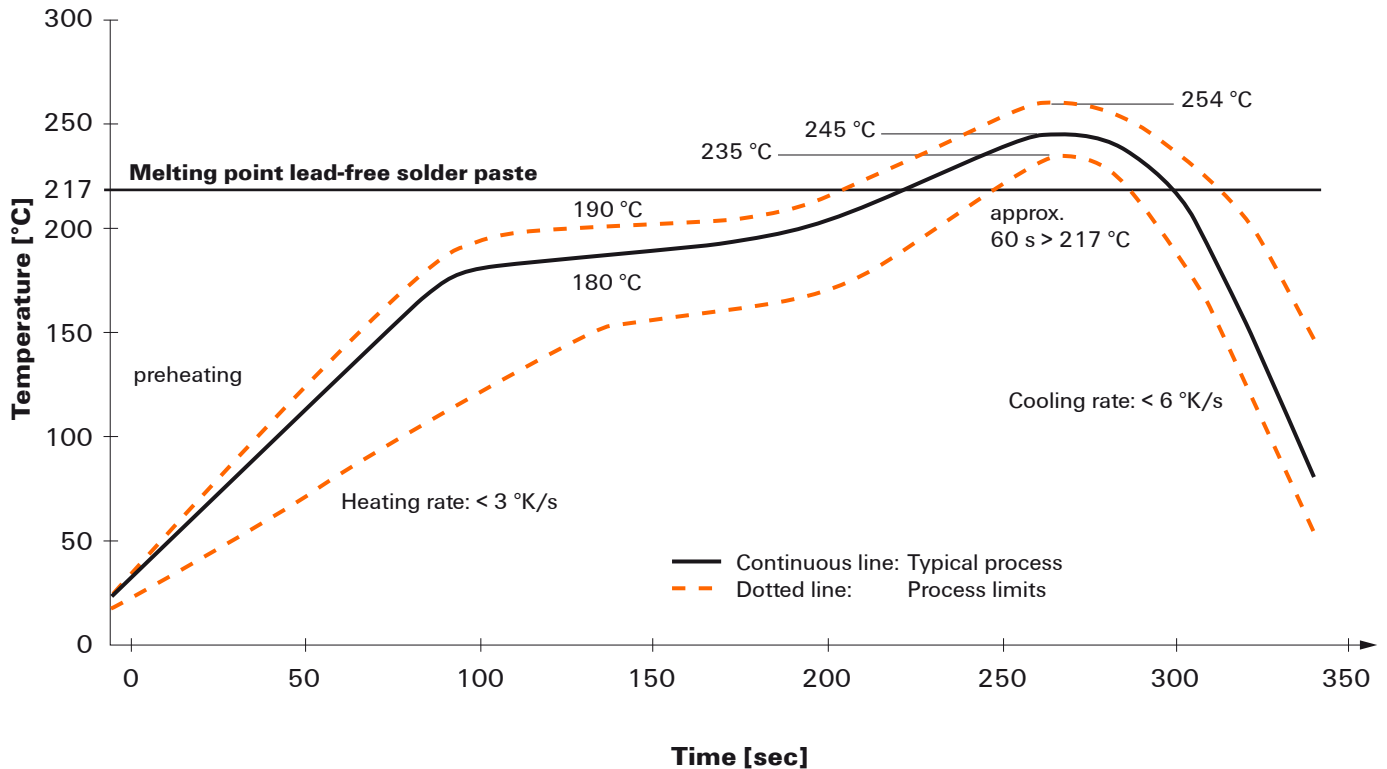
D-32758 Detmold

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.

