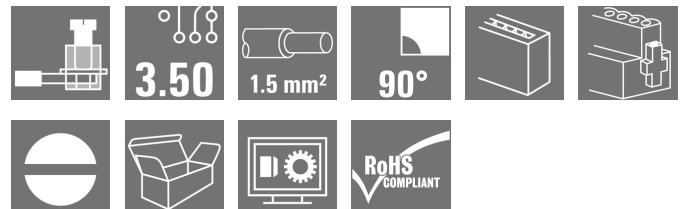


## OMNIMATE Signal - series BL/SL 3.50 BL 3.50/19/90F SN OR BX

**Weidmüller Interface GmbH & Co. KG**  
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Germany  
Fon: +49 5231 14-0  
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www.weidmueller.com

### Product image



Similar to illustration

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	BL 3.50/19/90F SN OR BX
Order No.	<a href="#">1639180000</a>
Version	PCB plug-in connector, female plug, 3.50 mm, Number of poles: 19, 90°, Clamping yoke connection, Clamping range, max. : 1.5 mm², Box
GTIN (EAN)	4008190276720
Qty.	24 pc(s).
Product data	IEC: 320 V / 12 A / 0.2 - 1.5 mm² UL: 300 V / 8 A / AWG 28 - AWG 14
Packaging	Box

Creation date May 3, 2020 5:40:38 PM CEST

**OMNIMATE Signal - series BL/SL 3.50  
BL 3.50/19/90F SN OR BX**

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

Width	73.5 mm	Width (inches)	2.894 inch
Height	12 mm	Height (inches)	0.472 inch
Depth	22.45 mm	Depth (inches)	0.884 inch
Net weight	15.167 g		

**System Parameters**

Product family	OMNIMATE Signal - series BL/SL 3.50	Type of connection	Field connection
Wire connection method	Clamping yoke connection	Pitch in mm (P)	3.5 mm
Pitch in inches (P)	0.138 inch	Conductor outlet direction	90°
Number of poles	19	L1 in mm	63 mm
L1 in inches	2.48 inch	Number of rows	1
Pin series quantity	1	Rated cross-section	1.5 mm <sup>2</sup>
Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch	Touch-safe protection acc. to DIN VDE 0470	IP 20
Volume resistance	≤ 5mΩ	Can be coded	Yes
Stripping length	6 mm	Tightening torque for screw flange, min.	0.15 Nm
Tightening torque for screw flange, max.	0.2 Nm	Tightening torque, min.	0.2 Nm
Tightening torque, max.	0.25 Nm	Clamping screw	M 2
Screwdriver blade	0.4 x 2.5	Screwdriver blade standard	DIN 5264
Plugging cycles	25	Plugging force/pole, max.	7 N
Pulling force/pole, max.	5 N		

**Material data**

Insulating material	PBT	Colour	orange
Colour chart (similar)	RAL 2000	Insulating material group	IIIa
Comparative Tracking Index (CTI)	≥ 200	Insulation strength	≥ 10 <sup>8</sup> Ω
UL 94 flammability rating	V-0	GWFI	960 °C
Contact material	Copper alloy	Contact surface	tinned
Layer structure of plug contact	4-8 μm Sn hot-dip tinned	Storage temperature, min.	-25 °C
Storage temperature, max.	50 °C	Max. relative humidity during storage	70 %
Operating temperature, min.	-50 °C	Operating temperature, max.	100 °C
Temperature range, installation, min.	-30 °C	Temperature range, installation, max.	100 °C

**Conductors suitable for connection**

Clamping range, min.	0.08 mm <sup>2</sup>
Clamping range, max.	1.5 mm <sup>2</sup>
Wire connection cross section AWG, min.	AWG 28
Wire connection cross section AWG, max.	AWG 14
Solid, min. H05(07) V-U	0.2 mm <sup>2</sup>
Solid, max. H05(07) V-U	1.5 mm <sup>2</sup>
Flexible, min. H05(07) V-K	0.2 mm <sup>2</sup>
Flexible, max. H05(07) V-K	1.5 mm <sup>2</sup>
w. plastic collar ferrule, DIN 46228 pt 4, 0.2 mm <sup>2</sup> min.	
w. plastic collar ferrule, DIN 46228 pt 4, 1.5 mm <sup>2</sup> max.	
w. wire end ferrule, DIN 46228 pt 1, min.	0.2 mm <sup>2</sup>
w. wire end ferrule, DIN 46228 pt 1, max.	1.5 mm <sup>2</sup>

Creation date May 3, 2020 5:40:38 PM CEST

**OMNIMATE Signal - series BL/SL 3.50**  
**BL 3.50/19/90F SN OR BX**

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**Technical data**

Plug gauge in accordance with EN 60999 a x b; ø	2.4 mm x 1.5 mm		
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	The outside diameter of the plastic collar should not be larger than the pitch (P). Length of ferrules is to be chosen depending on the product and the rated voltage.		
Max. clamping range	1.5 mm <sup>2</sup>		

**Rated data acc. to IEC**


tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	12 A
Rated current, max. number of poles (Tu=20°C)	10 A	Rated current, min. number of poles (Tu=40°C)	10 A
Rated current, max. number of poles (Tu=40°C)	8 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

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**Technical data**

**Rated data acc. to CSA**

Institute (CSA)				Certificate No. (CSA)	
				154685-1318353	
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)	8 A	Rated current (Use group D / UL 1059)	8 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	1 mm
VPE width	1 mm	VPE height	1 mm

**Classifications**

ETIM 6.0	EC002638	ETIM 7.0	EC002638
eClass 9.0	27-44-03-09	eClass 9.1	27-44-03-09
eClass 10.0	27-44-03-09	UNSPSC	30-21-18-10

**Data sheet**

**OMNIMATE Signal - series BL/SL 3.50  
BL 3.50/19/90F SN OR BX**

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**Technical data**

**Notes**

Notes	<ul style="list-style-type: none"> <li>• Additional colours on request</li> <li>• Gold-plated contact surfaces on request</li> <li>• Rated current related to rated cross-section &amp; min. No. of poles.</li> <li>• Max. outer diameter of the conductor: 2.9 mm</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>• 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.

**Approvals**

Approvals



ROHS Conform

**Downloads**

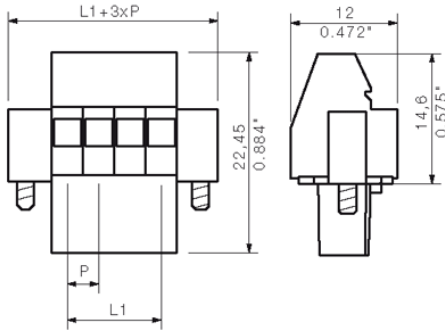
Approval/Certificate/Document of Conformity	<a href="#">Declaration of the Manufacturer</a>
Brochure/Catalogue	<a href="#">FL DRIVES EN</a> <a href="#">MB DEVICE MANUF. EN</a> <a href="#">FL DRIVES DE</a> <a href="#">CAT 2 PORTFOLIOGUIDE EN</a> <a href="#">FL BUILDING SAFETY EN</a> <a href="#">FL APPL 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>

**OMNIMATE Signal - series BL/SL 3.50  
BL 3.50/19/90F SN OR BX**

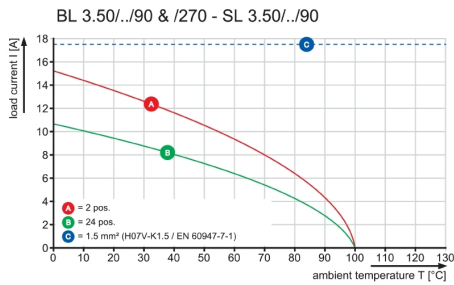
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**Drawings**

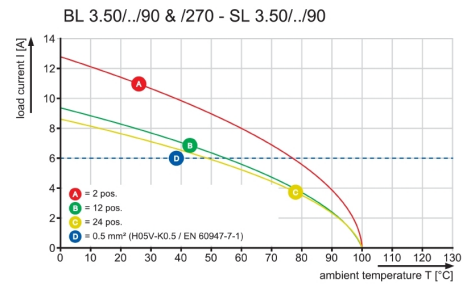
**Dimensional drawing**



**Graph**



**Graph**



**OMNIMATE Signal - series BL/SL 3.50  
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**Mating connector (conditionally pluggable)**
**SL-SMT 3.5/90G Tray**


**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 3.50/19/90G 1.5S ...	Version	Product data	Packaging
Order No.	<a href="#">1761713001</a>	PCB plug-in connector, male header, closed side, THT/THR solder connection, 3.50 mm, Number of poles: 19, 90°, Solder pin length (l): 1.5 mm, tinned, black, Tray	IEC: 320 V / 15 A	Tray
GTIN (EAN)	4032248133987		UL: 300 V / 10 A	
Qty.	24 pc(s).			

**SL-THR 3.5/135F**


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

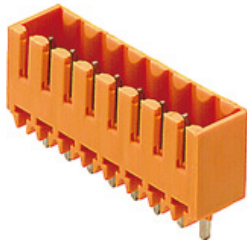
- **Plugging direction parallel (90°), straight 180° or angled (135°) to PCB**
- **Housing variants: closed side (G), screw flange (F), solder flange (LF) or snap-on solder flange (RF)**
- **Optimised for the SMT process**
- **Pin length 3.2 mm universal for all soldering methods**
- **Pin length 1.5 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 3.50/19/135F 3.2 ...	Version	Product data	Packaging
Order No.	<a href="#">1003690000</a>	PCB plug-in connector, male header, Flange, THT/THR solder connection, 3.50 mm, Number of poles: 19, 135°, Solder pin length (l): 3.2 mm, tinned, black, Box	IEC: 320 V / 15 A	Box
GTIN (EAN)	4032248700318		UL: 300 V / 10 A	
Qty.	24 pc(s).			

**OMNIMATE Signal - series BL/SL 3.50  
BL 3.50/19/90F SN OR BX**

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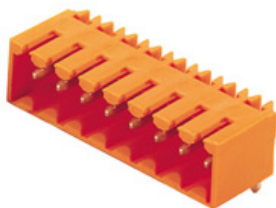
**Mating connector (conditionally pluggable)**
**SL 3.50/180G**


Pin headers for wave soldering in 3.50 mm pitch

- Plugging direction is parallel (90°), straight 180° or angled (135°) to the PCB
- Housing variant: screw flange (F)
- Packed in a cardboard box (BX)
- Pin header can be coded

**General ordering data**

Type	SL 3.50/19/180G 3.2SN O ...	Version	Product data	Packaging
Order No.	<a href="#">1621810000</a>	PCB plug-in connector, male header, closed side, THT solder	IEC: 320 V / 17 A	Box
GTIN (EAN)	4008190181048	connection, 3.50 mm, Number of poles: 19, 180°, Solder pin length	UL: 300 V / 10 A	
Qty.	20 pc(s).	(I): 3.2 mm, tinned, orange, Box		

**SL 3.50/90G**


Pin headers for wave soldering in 3.50 mm pitch

- Plugging direction is parallel (90°), straight 180° or angled (135°) to the PCB
- Housing variant: screw flange (F)
- Packed in a cardboard box (BX)
- Pin header can be coded

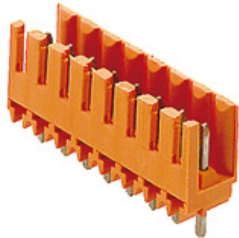
**General ordering data**

Type	SL 3.50/19/90G 3.2SN OR ...	Version	Product data	Packaging
Order No.	<a href="#">1619400000</a>	PCB plug-in connector, male header, closed side, THT solder	IEC: / 17 A	Box
GTIN (EAN)	4008190138981	connection, 3.50 mm, Number of poles: 19, 90°, Solder pin length (I):	UL: 300 V / 10 A	
Qty.	20 pc(s).	3.2 mm, tinned, orange, Box		
Type	SL 3.50/19/90G 4.5SN OR ...	Version	Product data	Packaging
Order No.	<a href="#">1617920000</a>	PCB plug-in connector, male header, closed side, THT solder	IEC: / 17 A	Box
GTIN (EAN)	4008190114381	connection, 3.50 mm, Number of poles: 19, 90°, Solder pin length (I):	UL: 300 V / 10 A	
Qty.	20 pc(s).	4.5 mm, tinned, orange, Box		
Type	SL 3.50/19/90G 4.5SN BK ...	Version	Product data	Packaging
Order No.	<a href="#">1618000000</a>	PCB plug-in connector, male header, closed side, THT solder	IEC: / 17 A	Box
GTIN (EAN)	4008190115494	connection, 3.50 mm, Number of poles: 19, 90°, Solder pin length (I):	UL: 300 V / 10 A	
Qty.	20 pc(s).	4.5 mm, tinned, black, Box		
Type	SL 3.50/19/90G 3.2SN DK ...	Version	Product data	Packaging
Order No.	<a href="#">1619710000</a>	PCB plug-in connector, male header, closed side, THT solder	IEC: / 17 A	Box
GTIN (EAN)	4008190145231	connection, 3.50 mm, Number of poles: 19, 90°, Solder pin length (I):	UL: 300 V / 10 A	
Qty.	20 pc(s).	3.2 mm, tinned, Signal green, Box		
Type	SL 3.50/19/90G 3.2SN GY ...	Version	Product data	Packaging
Order No.	<a href="#">1619630000</a>	PCB plug-in connector, male header, closed side, THT solder	IEC: / 17 A	Box
GTIN (EAN)	4008190144128	connection, 3.50 mm, Number of poles: 19, 90°, Solder pin length (I):	UL: 300 V / 10 A	
Qty.	20 pc(s).	3.2 mm, tinned, Pebble grey, Box		



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**Mating connector (conditionally pluggable)**
**SL 3.50/180**


Pin headers for wave soldering in 3.50 mm pitch

- Plugging direction is parallel (90°), straight 180° or angled (135°) to the PCB
- Housing variant: screw flange (F)
- Packed in a cardboard box (BX)
- Pin header can be coded

**General ordering data**

Type	SL 3.50/19/180 3.2SN OR ...	Version	Product data	Packaging
Order No.	<a href="#">1621420000</a>	PCB plug-in connector, male header, open side, THT solder connection, 3.50 mm, Number of poles: 19, 180°, Solder pin length (l): 3.2 mm, tinned, orange, Box	IEC: 320 V / 17 A UL: 300 V / 10 A	Box
GTIN (EAN)	4008190172459			
Qty.	20 pc(s).			

**SL-SMT 3.5/180G Box**


**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 3.50/19/180G 1.5 ...	Version	Product data	Packaging
Order No.	<a href="#">1753152001</a>	PCB plug-in connector, male header, closed side, THT/THR solder connection, 3.50 mm, Number of poles: 19, 180°, Solder pin length (l): 1.5 mm, tinned, black, Box	IEC: 320 V / 15 A UL: 300 V / 10 A	Box
GTIN (EAN)	4032248131051			
Qty.	20 pc(s).			
Type	SL-SMT 3.50/19/180G 3.2 ...	Version	Product data	Packaging
Order No.	<a href="#">1842480000</a>	PCB plug-in connector, male header, closed side, THT/THR solder connection, 3.50 mm, Number of poles: 19, 180°, Solder pin length (l): 3.2 mm, tinned, black, Box	IEC: 320 V / 15 A UL: 300 V / 10 A	Box
GTIN (EAN)	4032248353835			
Qty.	20 pc(s).			

**OMNIMATE Signal - series BL/SL 3.50  
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**Mating connector (conditionally pluggable)**
**SL-SMT 3.5/180G Tray**


**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 3.50/19/180G 1.5 ...	Version	Product data	Packaging
Order No.	<a href="#">1753153001</a>	PCB plug-in connector, male header, closed side, THT/THR solder connection, 3.50 mm, Number of poles: 19, 180°, Solder pin length (!): 1.5 mm, tinned, black, Tray	IEC: 320 V / 15 A UL: 300 V / 10 A	Tray
GTIN (EAN)	4032248133024			
Qty.	24 pc(s).			

**SL-SMT 3.5/90G Box**


**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 3.50/19/90G 1.5S ...	Version	Product data	Packaging
Order No.	<a href="#">1761712001</a>	PCB plug-in connector, male header, closed side, THT/THR solder connection, 3.50 mm, Number of poles: 19, 90°, Solder pin length (!): 1.5 mm, tinned, black, Box	IEC: 320 V / 15 A UL: 300 V / 10 A	Box
GTIN (EAN)	4032248132300			
Qty.	20 pc(s).			

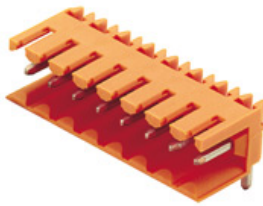
## OMNIMATE Signal - series BL/SL 3.50 BL 3.50/19/90F SN OR BX

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### Mating connector (conditionally pluggable)

Type	SL-SMT 3.50/19/90G 3.2S ...	Version	Product data	Packaging
Order No.	<a href="#">1841800000</a>	PCB plug-in connector, male header, closed side, THT/THR solder	IEC: 320 V / 15 A	Box
GTIN (EAN)	4032248353156	connection, 3.50 mm, Number of poles: 19, 90°, Solder pin length (l):	UL: 300 V / 10 A	
Qty.	20 pc(s).	3.2 mm, tinned, black, Box		

### SL 3.50/90



Pin headers for wave soldering in 3.50 mm pitch

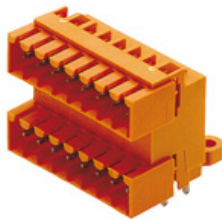
- Plugging direction is parallel (90°), straight 180° or angled (135°) to the PCB
- Housing variant: screw flange (F)
- Packed in a cardboard box (BX)
- Pin header can be coded

### General ordering data

Type	SL 3.50/19/90 4.5SN OR ...	Version	Product data	Packaging
Order No.	<a href="#">1617760000</a>	PCB plug-in connector, male header, open side, THT solder	IEC: 320 V / 17 A	Box
GTIN (EAN)	4008190110994	connection, 3.50 mm, Number of poles: 19, 90°, Solder pin length (l):	UL: 300 V / 10 A	
Qty.	20 pc(s).	4.5 mm, tinned, orange, Box		
Type	SL 3.50/19/90 4.5SN BK ...	Version	Product data	Packaging
Order No.	<a href="#">1617840000</a>	PCB plug-in connector, male header, open side, THT solder	IEC: 320 V / 17 A	Box
GTIN (EAN)	4008190112974	connection, 3.50 mm, Number of poles: 19, 90°, Solder pin length (l):	UL: 300 V / 10 A	
Qty.	20 pc(s).	4.5 mm, tinned, black, Box		
Type	SL 3.50/19/90 3.2SN GY ...	Version	Product data	Packaging
Order No.	<a href="#">1619240000</a>	PCB plug-in connector, male header, open side, THT solder	IEC: 320 V / 17 A	Box
GTIN (EAN)	4008190136963	connection, 3.50 mm, Number of poles: 19, 90°, Solder pin length (l):	UL: 300 V / 10 A	
Qty.	20 pc(s).	3.2 mm, tinned, Pebble grey, Box		
Type	SL 3.50/19/90 3.2SN DKG ...	Version	Product data	Packaging
Order No.	<a href="#">1619320000</a>	PCB plug-in connector, male header, open side, THT solder	IEC: 320 V / 17 A	Box
GTIN (EAN)	4008190137878	connection, 3.50 mm, Number of poles: 19, 90°, Solder pin length (l):	UL: 300 V / 10 A	
Qty.	20 pc(s).	3.2 mm, tinned, Signal green, Box		
Type	SL 3.50/19/90 3.2SN OR ...	Version	Product data	Packaging
Order No.	<a href="#">1619010000</a>	PCB plug-in connector, male header, open side, THT solder	IEC: 320 V / 17 A	Box
GTIN (EAN)	4008190132231	connection, 3.50 mm, Number of poles: 19, 90°, Solder pin length (l):	UL: 300 V / 10 A	
Qty.	20 pc(s).	3.2 mm, tinned, orange, Box		

**OMNIMATE Signal - series BL/SL 3.50  
BL 3.50/19/90F SN OR BX**

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**Mating connector (conditionally pluggable)**
**SLD 3.50/90G**


Two-tier pin header for wave soldering in 3.50 mm pitch. The connector is available in open, closed and flange versions. The male connectors provide space for labelling and can be coded. Packed in a cardboard box.

**General ordering data**

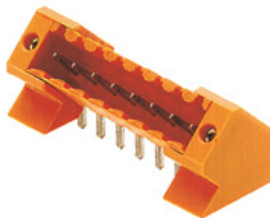
Type	SLD 3.50/38/90G 3.2SN O ...	Version	Product data	Packaging
Order No.	<a href="#">1633750000</a>	PCB plug-in connector, male header, closed side, THT solder connection, 3.50 mm, Number of poles: 38, 90°, Solder pin length (l): 3.2 mm, tinned, orange, Box	IEC: 200 V / 10.5 A UL: 300 V / 8 A	Box
GTIN (EAN)	4008190258207			
Qty.	10 pc(s).			
Type	SLD 3.50/38/90G 4.5SN B ...	Version	Product data	Packaging
Order No.	<a href="#">1634440000</a>	PCB plug-in connector, male header, closed side, THT solder connection, 3.50 mm, Number of poles: 38, 90°, Solder pin length (l): 4.5 mm, tinned, black, Box	IEC: 200 V / 10.5 A UL: 300 V / 8 A	Box
GTIN (EAN)	4008190258894			
Qty.	10 pc(s).			
Type	SLD 3.50/38/90G 3.2SN D ...	Version	Product data	Packaging
Order No.	<a href="#">1675020000</a>	PCB plug-in connector, male header, closed side, THT solder connection, 3.50 mm, Number of poles: 38, 90°, Solder pin length (l): 3.2 mm, tinned, Signal green, Box	IEC: 200 V / 10.5 A UL: 300 V / 8 A	Box
GTIN (EAN)	4008190445713			
Qty.	10 pc(s).			

## OMNIMATE Signal - series BL/SL 3.50 BL 3.50/19/90F SN OR BX

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### Mating connector (fully pluggable)

#### SL 3.50/135F



Pin headers for wave soldering in 3.50 mm pitch

- Plugging direction is parallel (90°), straight 180° or angled (135°) to the PCB
- Housing variant: screw flange (F)
- Packed in a cardboard box (BX)
- Pin header can be coded

#### General ordering data

Type	SL 3.50/19/135F 3.2SN O ...	Version	Product data	Packaging
Order No.	<a href="#">1643500000</a>	PCB plug-in connector, male header, Flange, THT solder connection,	IEC: 320 V / 15 A	Box
GTIN (EAN)	4008190282264	3.50 mm, Number of poles: 19, 135°, Solder pin length (l): 3.2 mm,	UL: 300 V / 10 A	
Qty.	24 pc(s).	tinned, orange, Box		

#### SL-SMT 3.5/90LF Box



**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 3.50/19/90LF 1.5 ...	Version	Product data	Packaging
Order No.	<a href="#">1805110000</a>	PCB plug-in connector, male header, Solder flange, THT/THR solder	IEC: 320 V / 15 A	Box
GTIN (EAN)	4032248269013	connection, 3.50 mm, Number of poles: 19, 90°, Solder pin length (l):	UL: 300 V / 10 A	
Qty.	20 pc(s).	1.5 mm, tinned, black, Box		
Type	SL-SMT 3.50/19/90LF 3.2 ...	Version	Product data	Packaging
Order No.	<a href="#">1842020000</a>	PCB plug-in connector, male header, Solder flange, THT/THR solder	IEC: 320 V / 15 A	Box
GTIN (EAN)	4032248353378	connection, 3.50 mm, Number of poles: 19, 90°, Solder pin length (l):	UL: 300 V / 10 A	
Qty.	24 pc(s).	3.2 mm, tinned, black, Box		

**OMNIMATE Signal - series BL/SL 3.50  
BL 3.50/19/90F SN OR BX**

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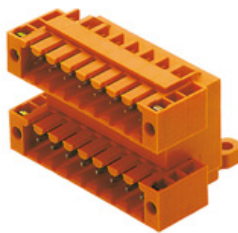
**Mating connector (fully pluggable)**
**SL-SMT 3.5/180F Box**


**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 3.50/19/180F 3.2 ...	Version	Product data	Packaging
Order No.	<a href="#">1842940000</a>	PCB plug-in connector, male header, Flange, THT/THR solder connection, 3.50 mm, Number of poles: 19, 180°, Solder pin length (l): 3.2 mm, tinned, black, Box	IEC: 320 V / 15 A UL: 300 V / 10 A	Box
GTIN (EAN)	4032248354405			
Qty.	24 pc(s).			

**SLD 3.50/90F**


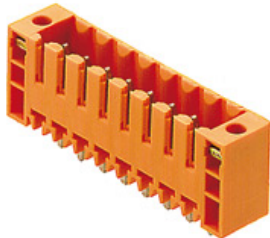
Two-tier pin header for wave soldering in 3.50 mm pitch. The connector is available in open, closed and flange versions. The male connectors provide space for labelling and can be coded. Packed in a cardboard box.

**General ordering data**

Type	SLD 3.50/38/90F 3.2SN O ...	Version	Product data	Packaging
Order No.	<a href="#">1633980000</a>	PCB plug-in connector, male header, Flange, THT solder connection, 3.50 mm, Number of poles: 38, 90°, Solder pin length (l): 3.2 mm, tinned, orange, Box	IEC: 200 V / 10.5 A UL: 300 V / 8 A	Box
GTIN (EAN)	4008190258436			
Qty.	10 pc(s).			

**OMNIMATE Signal - series BL/SL 3.50  
BL 3.50/19/90F SN OR BX**

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**Mating connector (fully pluggable)****SL 3.50/180F**

Pin headers for wave soldering in 3.50 mm pitch

- Plugging direction is parallel (90°), straight 180° or angled (135°) to the PCB
- Housing variant: screw flange (F)
- Packed in a cardboard box (BX)
- Pin header can be coded

**General ordering data**

Type	SL 3.50/19/180F 3.2SN D ...	Version	Product data	Packaging
Order No.	<a href="#">1622650000</a>	PCB plug-in connector, male header, Flange, THT solder connection,	IEC: 320 V / 17 A	Box
GTIN (EAN)	4008190193317	3.50 mm, Number of poles: 19, 180°, Solder pin length (l): 3.2 mm,	UL: 300 V / 10 A	
Qty.	20 pc(s).	tinned, Signal green, Box		
Type	SL 3.50/19/180F 4.5 SN ...	Version	Product data	Packaging
Order No.	<a href="#">1618930000</a>	PCB plug-in connector, male header, Flange, THT solder connection,	IEC: 320 V / 17 A	Box
GTIN (EAN)	4008190130343	3.50 mm, Number of poles: 19, 180°, Solder pin length (l): 4.5 mm,	UL: 300 V / 10 A	
Qty.	20 pc(s).	tinned, black, Box		
Type	SL 3.50/19/180F 3.2SN G ...	Version	Product data	Packaging
Order No.	<a href="#">1622430000</a>	PCB plug-in connector, male header, Flange, THT solder connection,	IEC: 320 V / 17 A	Box
GTIN (EAN)	4008190190132	3.50 mm, Number of poles: 19, 180°, Solder pin length (l): 3.2 mm,	UL: 300 V / 10 A	
Qty.	20 pc(s).	tinned, Pebble grey, Box		
Type	SL 3.50/19/180F 3.2SN O ...	Version	Product data	Packaging
Order No.	<a href="#">1622200000</a>	PCB plug-in connector, male header, Flange, THT solder connection,	IEC: 320 V / 17 A	Box
GTIN (EAN)	4008190188917	3.50 mm, Number of poles: 19, 180°, Solder pin length (l): 3.2 mm,	UL: 300 V / 10 A	
Qty.	20 pc(s).	tinned, orange, Box		
Type	SL 3.50/19/180F 4.5SN O ...	Version	Product data	Packaging
Order No.	<a href="#">1618850000</a>	PCB plug-in connector, male header, Flange, THT solder connection,	IEC: 320 V / 17 A	Box
GTIN (EAN)	4008190128487	3.50 mm, Number of poles: 19, 180°, Solder pin length (l): 4.5 mm,	UL: 300 V / 10 A	
Qty.	20 pc(s).	tinned, orange, Box		

## OMNIMATE Signal - series BL/SL 3.50 BL 3.50/19/90F SN OR BX

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### Mating connector (fully pluggable)

#### SL-SMT 3.5/90F Box



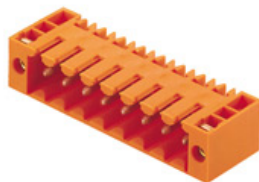
**High-temperature-resistant male header, 3.50 mm pitch.**

- **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 3.50/19/90F 3.2S ...	Version	Product data	Packaging
Order No.	<a href="#">1842250000</a>	PCB plug-in connector, male header, Flange, THT/THR solder connection, 3.50 mm, Number of poles: 19, 90°, Solder pin length (l): 3.2 mm, tinned, black, Box	IEC: 320 V / 15 A UL: 300 V / 10 A	Box
GTIN (EAN)	4032248353606			
Qty.	24 pc(s).			

#### SL 3.50/90F



Pin headers for wave soldering in 3.50 mm pitch

- **Plugging direction is parallel (90°), straight 180° or angled (135°) to the PCB**
- **Housing variant: screw flange (F)**
- **Packed in a cardboard box (BX)**
- **Pin header can be coded**

#### General ordering data

Type	SL 3.50/19/90F 4.5SN OR ...	Version	Product data	Packaging
Order No.	<a href="#">1618220000</a>	PCB plug-in connector, male header, Flange, THT solder connection, 3.50 mm, Number of poles: 19, 90°, Solder pin length (l): 4.5 mm, tinned, orange, Box	IEC: / 17 A UL: 300 V / 10 A	Box
GTIN (EAN)	4008190117863			
Qty.	20 pc(s).			
Type	SL 3.50/19/90F 3.2SN DK ...	Version	Product data	Packaging
Order No.	<a href="#">1620230000</a>	PCB plug-in connector, male header, Flange, THT solder connection, 3.50 mm, Number of poles: 19, 90°, Solder pin length (l): 3.2 mm, tinned, Signal green, Box	IEC: / 17 A UL: 300 V / 10 A	Box
GTIN (EAN)	4008190153779			
Qty.	20 pc(s).			
Type	SL 3.50/19/90F 4.5SN BK ...	Version	Product data	Packaging
Order No.	<a href="#">1618300000</a>	PCB plug-in connector, male header, Flange, THT solder connection, 3.50 mm, Number of poles: 19, 90°, Solder pin length (l): 4.5 mm, tinned, black, Box	IEC: / 17 A UL: 300 V / 10 A	Box
GTIN (EAN)	4008190119911			
Qty.	20 pc(s).			



## OMNIMATE Signal - series BL/SL 3.50 BL 3.50/19/90F SN OR BX

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### Mating connector (fully pluggable)

Type	SL 3.50/19/90F 3.2SN OR ...	Version	Product data	Packaging
Order No.	<a href="#">1619790000</a>	PCB plug-in connector, male header, Flange, THT solder connection,	IEC: / 17 A	Box
GTIN (EAN)	4008190147518	3.50 mm, Number of poles: 19, 90°, Solder pin length (l): 3.2 mm,	UL: 300 V / 10 A	
Qty.	20 pc(s).	tinned, orange, Box		
Type	SL 3.50/19/90F 3.2SN GY ...	Version	Product data	Packaging
Order No.	<a href="#">1620020000</a>	PCB plug-in connector, male header, Flange, THT solder connection,	IEC: / 17 A	Box
GTIN (EAN)	4008190150860	3.50 mm, Number of poles: 19, 90°, Solder pin length (l): 3.2 mm,	UL: 300 V / 10 A	
Qty.	20 pc(s).	tinned, Pebble grey, Box		

### SL-SMT 3.5/180LF Box



#### 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 3.50/19/180LF 1. ...	Version	Product data	Packaging
Order No.	<a href="#">1804870000</a>	PCB plug-in connector, male header, Solder flange, THT/THR solder	IEC: 320 V / 15 A	Box
GTIN (EAN)	4032248268641	connection, 3.50 mm, Number of poles: 19, 180°, Solder pin length	UL: 300 V / 10 A	
Qty.	20 pc(s).	(l): 1.5 mm, tinned, black, Box		
Type	SL-SMT 3.50/19/180LF 3. ...	Version	Product data	Packaging
Order No.	<a href="#">1842710000</a>	PCB plug-in connector, male header, Solder flange, THT/THR solder	IEC: 320 V / 15 A	Box
GTIN (EAN)	4032248354078	connection, 3.50 mm, Number of poles: 19, 180°, Solder pin length	UL: 300 V / 10 A	
Qty.	24 pc(s).	(l): 3.2 mm, tinned, black, Box		

## OMNIMATE Signal - series BL/SL 3.50 BL 3.50/19/90F SN OR BX

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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.

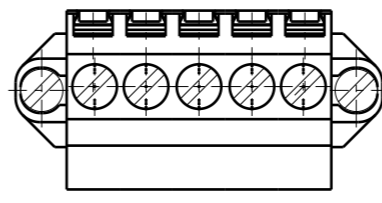
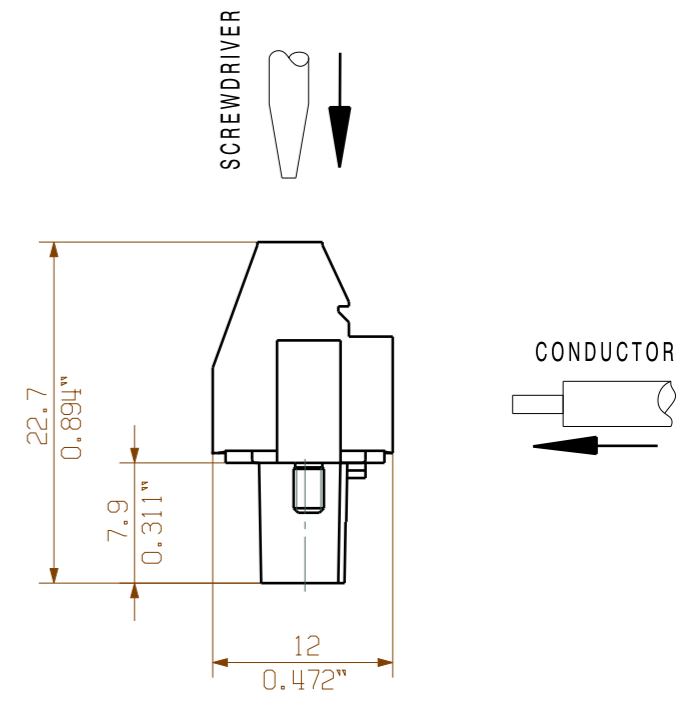
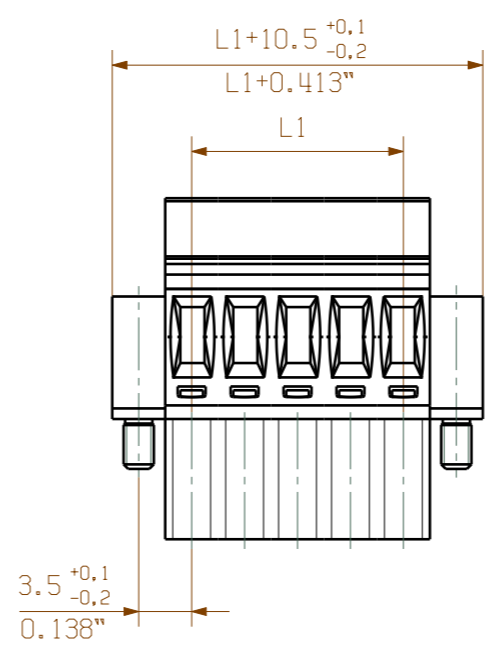
Incorrect assembly on the circuit board and incorrect plugging of connecting elements is no longer possible. The advantage: no troubleshooting during manufacture and no operational errors by the user.

## General ordering data

Type	BL SL 3.5 KO SW	Version	Product data	Packaging
Order No.	<a href="#">1610100000</a>	PCB plug-in connector, Accessories, Coding element, black, Number		Box
GTIN (EAN)	4008190187637	of poles: 1		
Qty.	100 pc(s).			
Type	BL SL 3.5 KO OR	Version	Product data	Packaging
Order No.	<a href="#">1693430000</a>	PCB plug-in connector, Accessories, Coding element, orange, Number		Box
GTIN (EAN)	4008190867447	of poles: 1		
Qty.	100 pc(s).			

DIE DEUTSCHE VERSION IST VERBINDLICH  
THE GERMAN VERSION IS BINDING

WEITERGABE SOWIE VERVIELFÄLTIGUNG DIESES DOKUMENTS, VERWERTUNG UND MITTEILUNG SEINES INHALTS SIND VERBOTEN, SOWEIT NICHT AUSDRUECKLICH GESTATTET.  
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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]

BL 3.50/05/90F

For the mounting of PCBs, it should be noted that the rated data given in the catalogue relates only to the connection elements. The necessary creepage and clearance paths must be observed in connection with the respective applicant in accordance with VDE 0110. The current-carrying capacity and pitch tolerance is to be determined according to DIN IEC 326 part 3 very fine.

Weidmüller connectors are tested to the DIN VDE 0627 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.

	METRIC TOLERANCES: X. = ±0.3 X.X = ±0.1 X.XX = ±0.05		CAT.NO.:	
	60340/0 15.09.11 HELIS_MA 01		<b>C 21346</b> 15	
MODIFICATION				DRAWING NO. OF 03 SHEETS
		DATE: 24.07.2003	NAME: KOWOLLIK_R	<b>BL 3.50/././90...</b> BUCHSENSTECKER FEMALE PLUG
SCALE: 5/1		RESPONSIBLE:	LANG_T	
SUPERSEDES:		CHECKED: 15.09.2011	RIEPENHAUSEN_H	
APPROVED:		HECKERT_M	PRODUCT FILE: BL 3.50	7369