

## BLZ 5.08/04/90B SN OR BX

Weidmüller Interface GmbH &amp; Co. KG

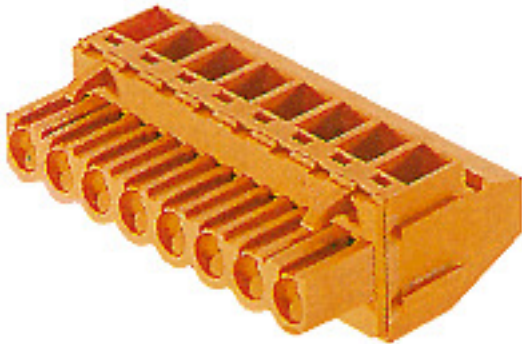
Klingenbergstraße 26

D-32758 Detmold

Germany

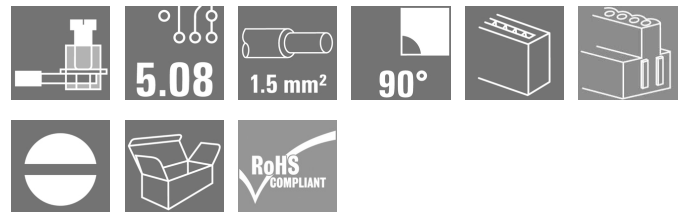
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## Product image



Similar to illustration

Do not use product for new  
developments



Female plugs with clamping-yoke screw connection.  
The female plugs provide space for labelling and can be coded.

## General ordering data

Version	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4, 90°, Clamping yoke connection, Clamping range, max.: 3.31 mm², Box
Order No.	<a href="#">1555260000</a>
Type	BLZ 5.08/04/90B SN OR BX
GTIN (EAN)	4008 190169589
Qty.	78 pc(s).
Product data	IEC: 400 V / 15 A / 0.2 - 2.5 mm² UL: 300 V / 10 A / AWG 26 - AWG 12
Packaging	Box

Creation date March 12, 2024 3:05:15 PM CET This article will be discontinued in the future.

Available until 2023-07-30

Alternative product [1949820000](#)

Catalogue status 09.03.2024 / We reserve the right to make technical changes.

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## Technical data

## Dimensions and weights

Depth	26.9 mm	Depth (inches)	1.059 inch
Height	14.1 mm	Height (inches)	0.555 inch
Width	22.32 mm	Width (inches)	0.879 inch
Net weight	8 g		

## System Parameters

Product family	OMNIMATE Signal - series BL/SL 5.08	Type of connection	Field connection
Wire connection method	Clamping yoke connection	Pitch in mm (P)	5.08 mm
Pitch in inches (P)	0.2 "	Conductor outlet direction	90°
Number of poles	4	L1 in mm	15.24 mm
L1 in inches	0.6 "	Number of rows	1
Pin series quantity	1	Rated cross-section	2.5 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	IP20 plugged/ IP10 unplugged
Protection degree	IP20	Volume resistance	≤5 mΩ
Can be coded	Yes	Stripping length	7 mm
Clamping screw	M 2.5	Screwdriver blade	0.6 x 3.5
Screwdriver blade standard	DIN 5264	Plugging cycles	25
Plugging force/pole, max.	8.5 N	Pulling force/pole, max.	6.5 N

## Material data

Insulating material	PBT	Colour	orange
Colour chart (similar)	RAL 2000	Insulating material group	IIIa
Comparative Tracking Index (CTI)	≥ 200	UL 94 flammability rating	V-0
Contact material	Cu-alloy	Contact surface	tinned
Layer structure of plug contact	4...8 μm Sn hot-dip tinned	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.	0.13 mm <sup>2</sup>
Clamping range, max.	3.31 mm <sup>2</sup>
Wire connection cross section AWG, min.	AWG 26
Wire connection cross section AWG, max.	AWG 12
Solid, min. H05(07) V-U	0.2 mm <sup>2</sup>
Solid, max. H05(07) V-U	2.5 mm <sup>2</sup>
Flexible, min. H05(07) V-K	0.2 mm <sup>2</sup>
Flexible, max. H05(07) V-K	2.5 mm <sup>2</sup>
w. plastic collar ferrule, DIN 46228 pt 4, min.	0.2 mm <sup>2</sup>
w. plastic collar ferrule, DIN 46228 pt 4, max.	2.5 mm <sup>2</sup>
w. wire end ferrule, DIN 46228 pt 1, min.	0.2 mm <sup>2</sup>
w. wire end ferrule, DIN 46228 pt 1, max.	2.5 mm <sup>2</sup>
Plug gauge in accordance with EN 60999 a x b; ø	2.8 mm x 2.0 mm; 2.4 mm

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**Technical data**

Clampable conductor	Cross-section for conductor connection	Type	fine-wired
		nominal	0.5 mm <sup>2</sup>
wire end ferrule		Stripping length	nominal 6 mm
		Recommended wire-end ferrule	<a href="#">H0.5/6</a>
Clampable conductor	Cross-section for conductor connection	Type	fine-wired
		nominal	1 mm <sup>2</sup>
wire end ferrule		Stripping length	nominal 6 mm
		Recommended wire-end ferrule	<a href="#">H1.0/6</a>
Clampable conductor	Cross-section for conductor connection	Type	fine-wired
		nominal	1.5 mm <sup>2</sup>
wire end ferrule		Stripping length	nominal 7 mm
		Recommended wire-end ferrule	<a href="#">H1.5/7</a>
Clampable conductor	Cross-section for conductor connection	Type	fine-wired
		nominal	2.5 mm <sup>2</sup>
wire end ferrule		Stripping length	nominal 7 mm
		Recommended wire-end ferrule	<a href="#">H2.5/7</a>
Clampable conductor	Cross-section for conductor connection	Type	fine-wired
		nominal	0.75 mm <sup>2</sup>
wire end ferrule		Stripping length	nominal 6 mm
		Recommended wire-end ferrule	<a href="#">H0.75/6</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.

**Rated data acc. to IEC**

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	15 A
Rated current, max. number of poles (Tu=20°C)	12 A	Rated current, min. number of poles (Tu=40°C)	12 A
Rated current, max. number of poles (Tu=40°C)	10 A	Rated voltage for surge voltage class / pollution degree II/2	400 V
Rated voltage for surge voltage class / pollution degree III/2	320 V	Rated voltage for surge voltage class / pollution degree III/3	250 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	4 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	4 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	4 kV	Short-time withstand current resistance	3 x 1s with 120 A

**Rated data acc. to CSA**

Institute (CSA)		Certificate No. (CSA)	200039-1301847
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 26	Wire cross-section, AWG, max.	AWG 12
Reference to approval values	Specifications are maximum values, details - see approval certificate.		


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## Technical data

## 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 26	Wire cross-section, AWG, max.	AWG 12
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

## Packing

Packaging	Box	VPE length	347 mm
VPE width	135 mm	VPE height	31 mm

## Classifications

ETIM 6.0	EC002638	ETIM 7.0	EC002638
ETIM 8.0	EC002638	ETIM 9.0	EC002638
ECLASS 9.0	27-44-03-09	ECLASS 9.1	27-44-03-09
ECLASS 10.0	27-44-03-09	ECLASS 11.0	27-46-02-02
ECLASS 12.0	27-46-02-02	ECLASS 13.0	27-46-02-02

## 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"> <li>• Additional variants 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>• 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> <li>• In accordance with IEC 61984, OMNIMATE-connectors are connectors without breaking capacity (COC). During designated use, connectors are not allowed to be engaged or disengaged when live or under load</li> <li>• Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months</li> </ul>

**Data sheet**

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**Technical data**

**Approvals**

Approvals



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

**Downloads**

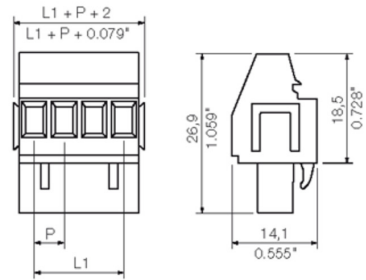
Approval/Certificate/Document of Conformity	<a href="#">Declaration of the Manufacturer</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>
Brochures	<a href="#">FL DRIVES EN</a> <a href="#">MB DEVICE MANUF. EN</a> <a href="#">FL DRIVES DE</a> <a href="#">FL BUILDING SAFETY EN</a> <a href="#">FL 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>

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**Dimensional drawing**



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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	BLZ/SL KO OR BX	Version	Product data	Packaging
Order No.	<a href="#">1573010000</a>	PCB plug-in connector, Accessories, Coding element, orange, Number		Box
GTIN (EAN)	4008190048396	of poles: 1		
Qty.	100 pc(s).			
Type	BLZ/SL KO BK BX	Version	Product data	Packaging
Order No.	<a href="#">1545710000</a>	PCB plug-in connector, Accessories, Coding element, black, Number		Box
GTIN (EAN)	4008190087142	of poles: 1		
Qty.	50 pc(s).			

## Blocks for PCB mounting



**Minor component, major effect:**

Clip-on attachment elements increase the mechanical resilience of the whole plug connection by

- securing the male connectors to the circuit board
- providing a vibration-proof connection between the sockets and the male connectors

Clip-on or pre-assembled - always the right solution:

- Hard-wearing, precise fitting dovetail joint
- Hard-wearing metal threaded inserts
- Suitable for all outlet directions

Maximum stability, minimum effort:

- Extremely resilient for frequent fastening operations
- Complete set for easy selection

The result: soldering points, contacts and overall module are more resilient against mechanical stress such as vibrations and tensile loads.

## General ordering data

Type	SLA BB6R SW	Version	Product data	Packaging
Order No.	<a href="#">1723520000</a>	PCB plug-in connector, Accessories, Mounting block, black, Number of		Box
GTIN (EAN)	4008190366070	poles: 1		
Qty.	20 pc(s).			

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## Accessories

Type	SLA BB5R OR	Version	Product data	Packaging
Order No.	<a href="#">1723460000</a>	PCB plug-in connector, Accessories, Mounting block, orange, Number		Box
GTIN (EAN)	4008190366018	of poles: 1		
Qty.	20 pc(s).			
Type	SLA BB2R SW	Version	Product data	Packaging
Order No.	<a href="#">1723490000</a>	PCB plug-in connector, Accessories, Mounting block, black, Number of		Box
GTIN (EAN)	4008190366049	poles: 1		
Qty.	20 pc(s).			
Type	SLA BB5R SW	Version	Product data	Packaging
Order No.	<a href="#">1723510000</a>	PCB plug-in connector, Accessories, Mounting block, black, Number of		Box
GTIN (EAN)	4008190366063	poles: 1		
Qty.	20 pc(s).			
Type	SLA BB1R SW	Version	Product data	Packaging
Order No.	<a href="#">1723480000</a>	PCB plug-in connector, Accessories, Mounting block, black, Number of		Box
GTIN (EAN)	4008190366032	poles: 1		
Qty.	20 pc(s).			
Type	SLA BB12R OR	Version	Product data	Packaging
Order No.	<a href="#">1593450000</a>	PCB plug-in connector, Accessories, Mounting block, orange, Number		Box
GTIN (EAN)	4008190122164	of poles: 1		
Qty.	100 pc(s).			
Type	SLA BB11R SW	Version	Product data	Packaging
Order No.	<a href="#">1692340000</a>	PCB plug-in connector, Accessories, Mounting block, black, Number of		Box
GTIN (EAN)	4008190864965	poles: 1		
Qty.	20 pc(s).			
Type	SLA BB2R OR	Version	Product data	Packaging
Order No.	<a href="#">1723440000</a>	PCB plug-in connector, Accessories, Mounting block, orange, Number		Box
GTIN (EAN)	4008190365998	of poles: 1		
Qty.	20 pc(s).			
Type	SLA BB6R OR	Version	Product data	Packaging
Order No.	<a href="#">1723470000</a>	PCB plug-in connector, Accessories, Mounting block, orange, Number		Box
GTIN (EAN)	4008190366025	of poles: 1		
Qty.	20 pc(s).			
Type	SLA BB11R OR	Version	Product data	Packaging
Order No.	<a href="#">1604120000</a>	PCB plug-in connector, Accessories, Mounting block, orange, Number		Box
GTIN (EAN)	4008190182977	of poles: 1		
Qty.	20 pc(s).			
Type	SLA BB1R OR	Version	Product data	Packaging
Order No.	<a href="#">1723430000</a>	PCB plug-in connector, Accessories, Mounting block, orange, Number		Box
GTIN (EAN)	4008190365981	of poles: 1		
Qty.	20 pc(s).			
Type	SLA BB12R SW	Version	Product data	Packaging
Order No.	<a href="#">1626880000</a>	PCB plug-in connector, Accessories, Mounting block, black, Number of		Box
GTIN (EAN)	4008190198213	poles: 1		
Qty.	100 pc(s).			



MASSE OHNE TOLERANZ SIND KEINE PRUEFMASSE  
 DIMS. WITHOUT TOLERANCE ARE NOT CONTROL DIMS.

DIE DEUTSCHE VERSION IST VERBINDLICH  
 THE GERMAN VERSION IS BINDING

**Technical Data**

Rev.	Material data	
	Insulation material type	PBT
	Insulation material colors	orange
	Insulation material flammability class	UL94
	Insulation resistance	> 10 <sup>5</sup> MOhm
	Contact base material	Cu-alloy
	Contact plating	tin-plated

**System characteristic values**

Pitch P	mm/inch	5.08/0.2
Number of rows		1
Dielectric strength (r.m.s withstand voltage)	kV	>2.21
Mechanical operating cycles	acc. to IEC 512	>25
Plug in force (max.)	N/pole	10
Pull out force (max.I)	N/pole	8
Through resistance (typical)	mOhm	3.6
Operating temperatur range	°C	-55...+100
Degree of protection acc. to VDE 0106 (plugged/unplugged)		finger safe/finger safe
Degree of protection acc. to DIN EN 60529 (plugged/unplugged)		IP20/IP20
Conductor connection method		clamping yoke
Screw size		M2.5
Screw torque	Nm	0.4
Screw driver type		0.6 x 3.5

**Application notes**

Coding possibility	yes/no	yes (accessory)
Joinable with loss of pitch	yes/no	no
Manual assembly of modules	yes/no	no
Max. number of poles	n	24

**Conductor**

Clamping range	mm <sup>2</sup>	0.08...2.5
"e" solid H05(07) V-U	mm <sup>2</sup>	0.5...2.5
"f" flexible H05(07) V-K	mm <sup>2</sup>	0.5...2.5
"f" with ferrule acc. to DIN 46228/1	mm <sup>2</sup>	0.5...2.5
... with plastic collar acc. to DIN 46228/4	mm <sup>2</sup>	0.5...2.5
Conductor insulation stripping length	mm	7/0.276
Conductor insulation diameter max.	mm	---
Two wire clamping range	mm <sup>2</sup>	0.5...1.5
Gauges to EN 60999 (a x b ; Ø)	mm	2.8x2.4 ; 2.4

**VDE0110 (4.97) rated data**

Rated cross section acc. to EN 60999	mm <sup>2</sup>	2.5
Rated current @ 20°C ambient (together with)	A	13 (SL5.08)
Rated current @ 40°C ambient (together with)	A	11 (SL5.08)
<b>Overvoltage category / Pollution degree</b>	<b>III/3 III/2 II/2</b>	<b>3) 3)</b>
Rated voltage	V	250 320 400
Rated impulse voltage	kV	4.0 4.0 4.0

**UL 1059 rated data**

 File No.: E60693

B	C	D
Rated voltage	V	300 - 300
Rated current	A	15 - 10
AWG wire range (field wiring / factory wiring)		22...12

**CSA C22.2 rated data**

 File No.: LR12400

B	C	D
Rated voltage	V	300 - 300
Rated current	A	15 - 10
AWG wire range (field wiring / factory wiring)		26....12

**Packaging**

card box

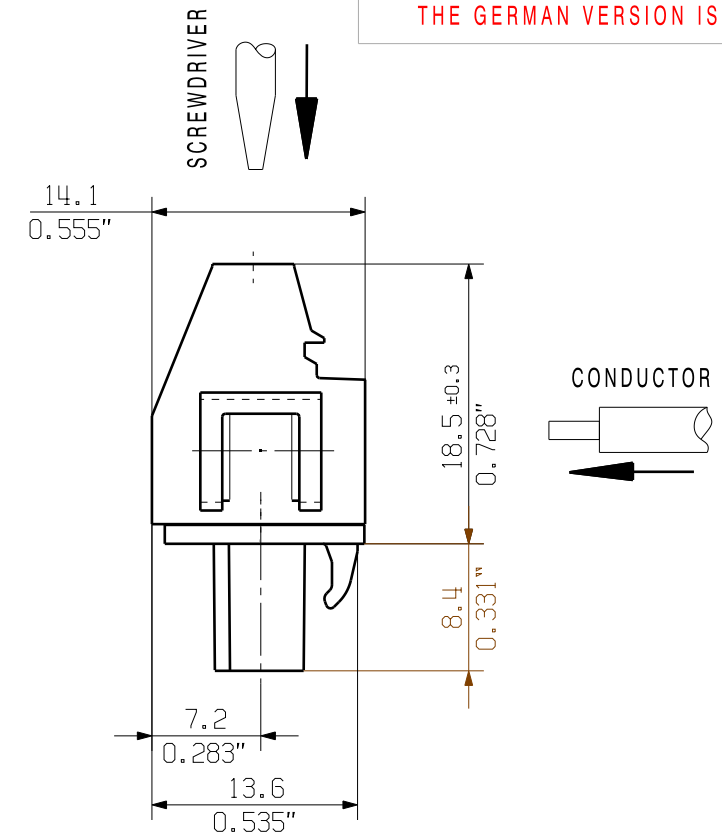
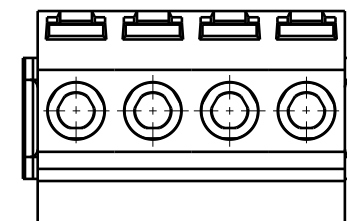
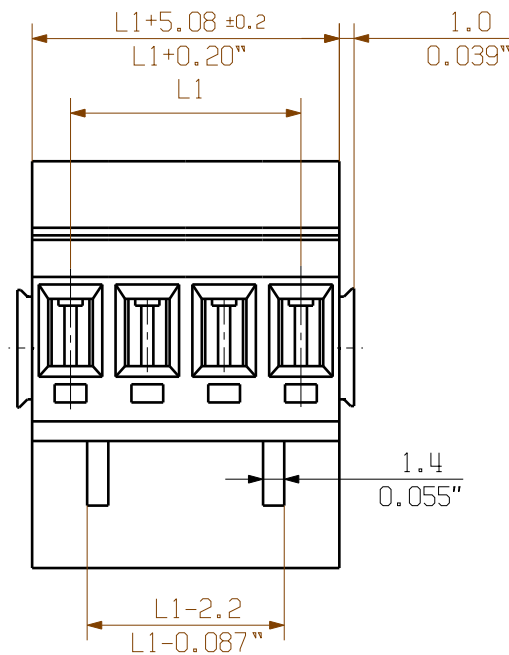
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- 1) Without locking latches
- 2) Sum of ambient temperature and temperature rise
- 3) Referred to rated cross section and minimum pole number

n.a. = not applicable

Subject to technical changes





24	116,84	4,60
23	111,76	4,40
22	106,68	4,20
21	101,60	4,00
20	96,52	3,80
19	91,44	3,60
18	86,36	3,40
17	81,28	3,20
16	76,20	3,00
15	71,12	2,80
14	66,04	2,60
13	60,96	2,40
12	55,88	2,20
11	50,80	2,00
10	45,72	1,80
9	40,64	1,60
8	35,56	1,40
7	30,48	1,20
6	25,40	1,00
5	20,32	0,80
4	15,24	0,60
3	10,16	0,40
2	5,08	0,20
n	L1 [mm]	L1 [inch]

SHOWN: BLZ 5.08/4/90B

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 connectors 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	39998/0 21.04.08 HELIS_MA 00	CAT.NO.:	
	<b>MODIFICATION</b>		<b>C 16661</b> <b>25</b>
	DRAWN 11.04.2008 HELIS_MA	DRAWING NO. ISSUE NO. SHEET 04 OF 05 SHEETS	
	RESPONSIBLE HECKERT_S	<b>BLZ 5.08 / 90 (B)</b> BUCHSENLEISTE SOCKET BLOCK	
SCALE: 2/1 SUPERSEDES:	CHECKED 24.04.2008 HECKERT_M	PRODUCT FILE: BLZ 5.08 90/270 7161	
APPROVED	HECKERT_M		

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