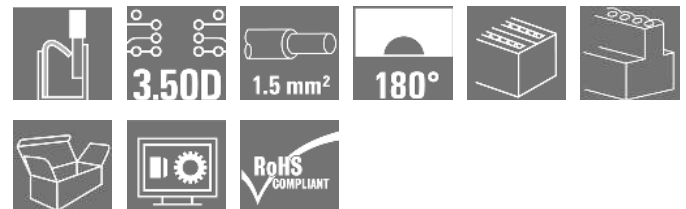


## OMNIMATE Signal - series B2C/S2C 3.50 - 2-row B2CF 3.50/14/180 SN OR BX

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

### Product image



Similar to illustration

### Two-row female plug with PUSH IN spring connection

- Simply insert the prepared wire - and you're done
- Intuitive to use because
- the wire-entry area and handling area are clearly separated
- Integrated push-buttons for opening the terminal point
- High component density because of low heights
- Optional: locking and releasing require no tools when using Weidmüller's release latch (LR) or release lever (LH)

### General ordering data

Type	B2CF 3.50/14/180 SN OR BX
Order No.	<a href="#">1277330000</a>
Version	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 14, 180°, PUSH IN, Tension-clamp connection, Clamping range, max.: 1.5 mm², Box
GTIN (EAN)	4050118067316
Qty.	72 pc(s).
Product data	IEC: 320 V / 13.4 A / 0.14 - 1.5 mm² UL: 300 V / 9.5 A / AWG 26 - AWG 16
Packaging	Box

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

Width	24.5 mm	Width (inches)	0.965 inch
Height	15.2 mm	Height (inches)	0.598 inch
Depth	26.25 mm	Depth (inches)	1.033 inch
Net weight	9.216 g		

**System parameters**

Product family	OMNIMATE Signal - series B2C/S2C 3.50 - 2-row	Type of connection	Field connection
Wire connection method	PUSH IN, Tension-clamp connection	Pitch in mm (P)	3.5 mm
Pitch in inches (P)	0.138 inch	Conductor outlet direction	180°
No. of poles	14	L1 in mm	21 mm
L1 in inches	0.827 inch	Number of rows	1
Pin series quantity	2	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
Can be coded	Yes	Stripping length	10 mm
Actuating force actuating element, max.	40 N	Screwdriver blade	0.4 x 2.5
Screwdriver blade standard	DIN 5264	Plugging cycles	25
Plugging force/pole, max.	5 N	Pulling force/pole, max.	5 N

**Material data**

Insulating material	PA 66 GF 30	Colour code	orange
Colour chart (similar)	RAL 2000	Insulating material group	II
CTI	≥ 600	Insulation strength	≥ 10 <sup>8</sup> Ω
UL 94 flammability rating	V-0	Contact material	Copper alloy
Contact surface	tinned	Layer structure of plug contact	2-5 μm Sn hot-dip tinned
Storage temperature, min.	-25 °C	Storage temperature, max.	55 °C
Max. relative humidity during storage	80 %	Operating temperature, min.	-50 °C
Operating temperature, max.	120 °C	Temperature range, installation, min.	-40 °C
Temperature range, installation, max.	120 °C		

**Conductors suitable for connection**

Clamping range, min.	0.14 mm <sup>2</sup>	Clamping range, max.	1.5 mm <sup>2</sup>
Solid, min. H05(07) V-U	0.14 mm <sup>2</sup>	Solid, max. H05(07) V-U	1.5 mm <sup>2</sup>
Flexible, min. H05(07) V-K	0.14 mm <sup>2</sup>	Flexible, max. H05(07) V-K	1.5 mm <sup>2</sup>
w. plastic collar ferrule, DIN 46228 pt 4, min.	0.14 mm <sup>2</sup>	w. plastic collar ferrule, DIN 46228 pt 4, max.	1 mm <sup>2</sup>
w. wire end ferrule, DIN 46228 pt 1, min	0.14 mm <sup>2</sup>	w. wire end ferrule, DIN 46228 pt 1, max.	1.5 mm <sup>2</sup>


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**Technical data****Rated data acc. to IEC**

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. no. of poles (Tu=20°C)	13.4 A
Rated current, max. no. of poles (Tu=20°C)	10 A	Rated current, min. no. of poles (Tu=40°C)	12 A
Rated current, max. no. of poles (Tu=40°C)	9 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 80 A

**Rated data acc. to CSA**

Institute (CSA)		Certificate No. (CSA)	200039-1121690
Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group C / CSA)	50 V
Rated voltage (Use group D / CSA)	300 V	Rated current (Use group B / CSA)	9.5 A
Rated current (Use group C / CSA)	9.5 A	Rated current (Use group D / CSA)	9.5 A
Wire cross-section, AWG, min.	AWG 26	Wire cross-section, AWG, max.	AWG 16
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

**Rated data acc. to UL 1059**

Institute (cURus)		Certificate No. (cURus)	E60693
Rated voltage (Use group B / UL 1059)	300 V	Rated voltage (Use group C / UL 1059)	50 V
Rated voltage (Use group D / UL 1059)	300 V	Rated current (Use group B / UL 1059)	9.5 A
Rated current (Use group C / UL 1059)	9.5 A	Rated current (Use group D / UL 1059)	9.5 A
Wire cross-section, AWG, min.	AWG 26	Wire cross-section, AWG, max.	AWG 16
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

**Packaging**

Packaging	Box	VPE length	35 mm
VPE width	135 mm	VPE height	350 mm

**Classifications**

ETIM 4.0	EC002637	ETIM 5.0	EC002637
ETIM 6.0	EC002637	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

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# Technical data

### Notes

Notes

- Additional colours on request
- Gold-plated contact surfaces on request
- Rated current related to rated cross-section & min. No. of poles.
- Crimp shape A for wire-end ferrules with crimping tools PZ 1,5 (order no. 9005990000) or PZ 6/5 (order no. 9011460000) for larger wire cross-sections recommended.
- 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.
- Max. outer diameter of the conductor 2.6 mm

Wire-end ferrule w/plastic collar DIN 46228/4 or Weidmüller colour code

- 1.00mm<sup>2</sup> [H1.0/18D] mtl. ferrule leng. 12mm, stripping leng. 15mm
- 0.75mm<sup>2</sup> [H0.75/18D] mtl. ferrule leng. 12mm, stripping leng. 14mm
- 0.50mm<sup>2</sup> [H0.5/16D] mtl. ferrule leng. 10mm, stripping leng. 12mm
- 0.34mm<sup>2</sup> [H0.34/12] mtl. ferrule leng. 8mm, stripping leng. 10mm
- 0.25mm<sup>2</sup> [H0.25/12] mtl. ferrule leng. 8mm, stripping leng. 10mm
- 0.14mm<sup>2</sup> [H0.14/12] mtl. ferrule leng. 8mm, stripping leng. 10mm

Wire-end ferrule w/o plastic collar acc. to DIN 46228/1

- 1.50mm<sup>2</sup> [H1.5/10] mtl. ferrule leng. 10mm, stripping leng. 10mm

Wire-end ferrule w/plastic collar DIN 46228/4 and 2 connec. cables

- 2 x 0.20mm<sup>2</sup> [H0.5/16] mtl. ferrule leng. 10mm, stripping leng. 12mm
- 2 x 0.34mm<sup>2</sup> [H1.0/18] mtl. ferrule leng. 12mm, stripping leng. 15mm

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

## Data sheet

### OMNIMATE Signal - series B2C/S2C 3.50 - 2-row B2CF 3.50/14/180 SN OR BX

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## Technical data

### Downloads

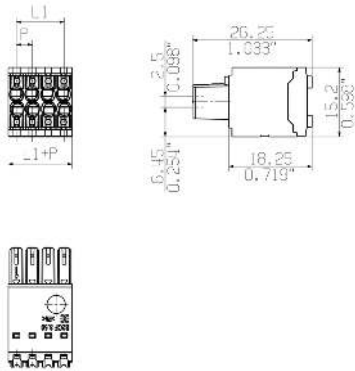
Approval/Certificate/Document of Conformity	<a href="#">Declaration of the Manufacturer</a>
Brochure/Catalogue	<a href="#">FL DRIVES EN</a> <a href="#">MB DEVICE MANUF. EN</a> <a href="#">FL DRIVES DE</a> <a href="#">CAT 2 PORTFOLIOGUIDE EN</a> <a href="#">FL BUILDING SAFETY EN</a> <a href="#">FL APPL LED LIGHTING EN</a> <a href="#">FL INDUSTR.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>
User Documentation	<a href="#">Operating instruction</a>
White Paper wire connection	<a href="#">Download Whitepaper</a>

**OMNIMATE Signal - series B2C/S2C 3.50 - 2-row  
B2CF 3.50/14/180 SN OR BX**

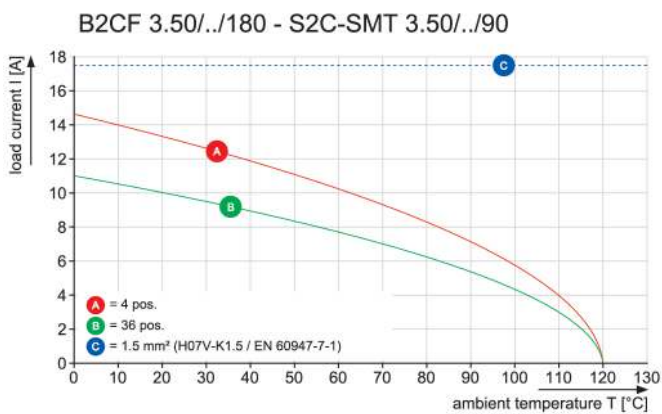
**Weidmüller Interface GmbH & Co. KG**  
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**Drawings**

**Dimensional drawing**



**Graph**



**Product benefits**



- Solid PUSH IN contact
- Safe and durable

**Product benefits**



- Large connection cross-section
- Up to 1.5 mm possible with ease

**Product benefits**



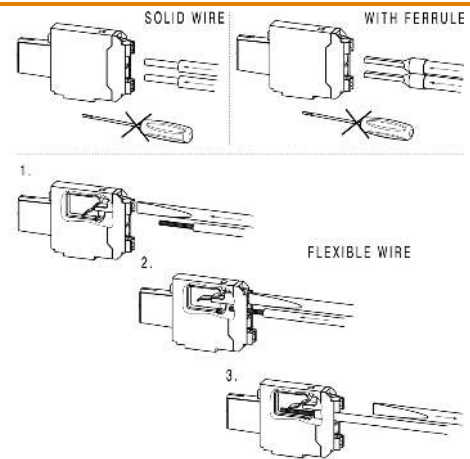
- Fast PUSH IN connection
- Tool-free and touch-safe

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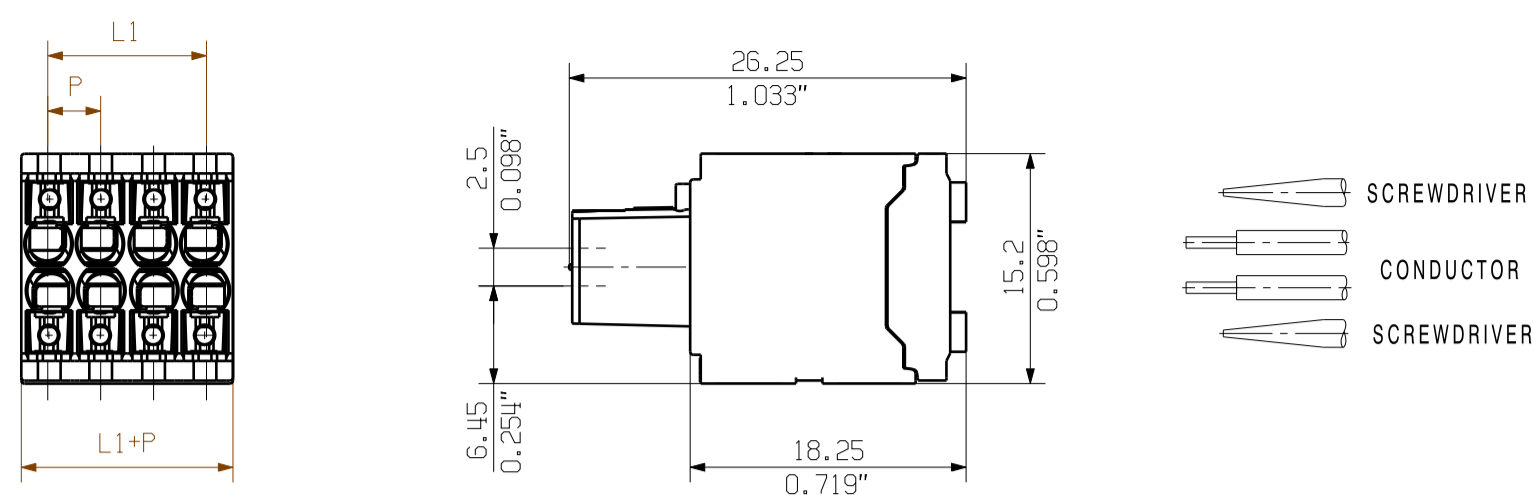
**Product benefits**

- Clear marking
- Unique designation

**Example of use**

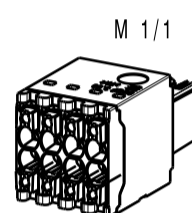
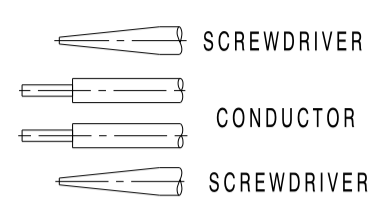
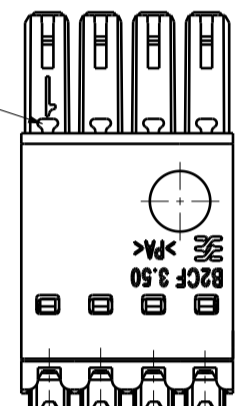
ALLGEMEINGÜLTIGE KUNDENZEICHUNG, AKTUELLER STAND NUR AUF ANFRAGE  
GENERAL CUSTOMER DRAWING, TOPICAL VERSION ONLY IF REQUIRED

SHOWN: B2CF 3.50/08/180

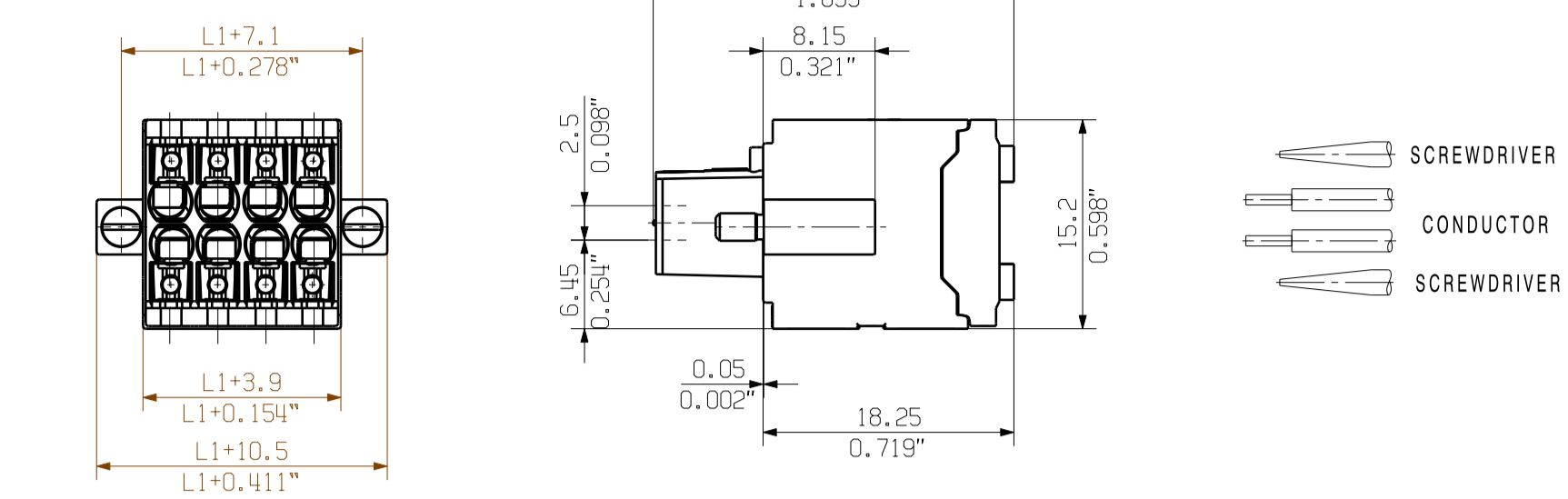


22																							
20	X	X										X	X							X	X		
18	X	X																				X	X
16	X	X												X	X								
14	X	X												X	X	X							
12	X	X												X	X								
10	X	X												X	X								
8	X	X	X	X										X	X								
6	X	X	X	X										X	X								
4	X	X												X	X								

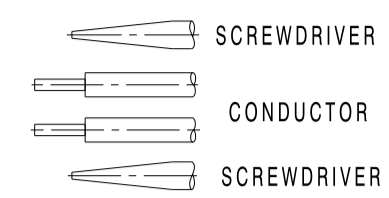
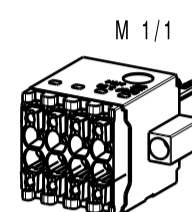
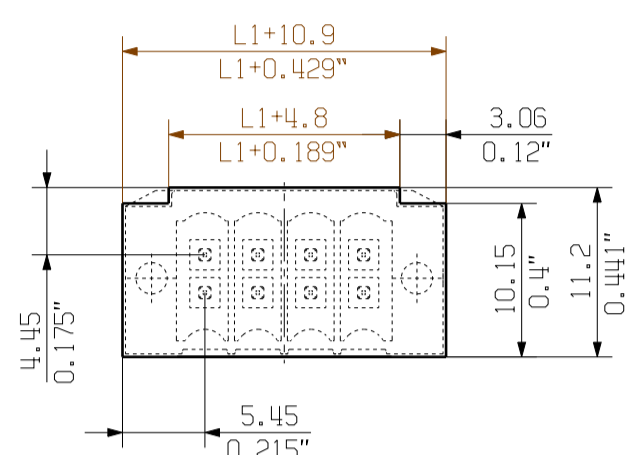
ACHTUNG: AB 22-POLIG OHNE RASTHAKEN  
ATTENTION: HOUSING WITH 22-36 POLES WITHOUT SNAP-FITS



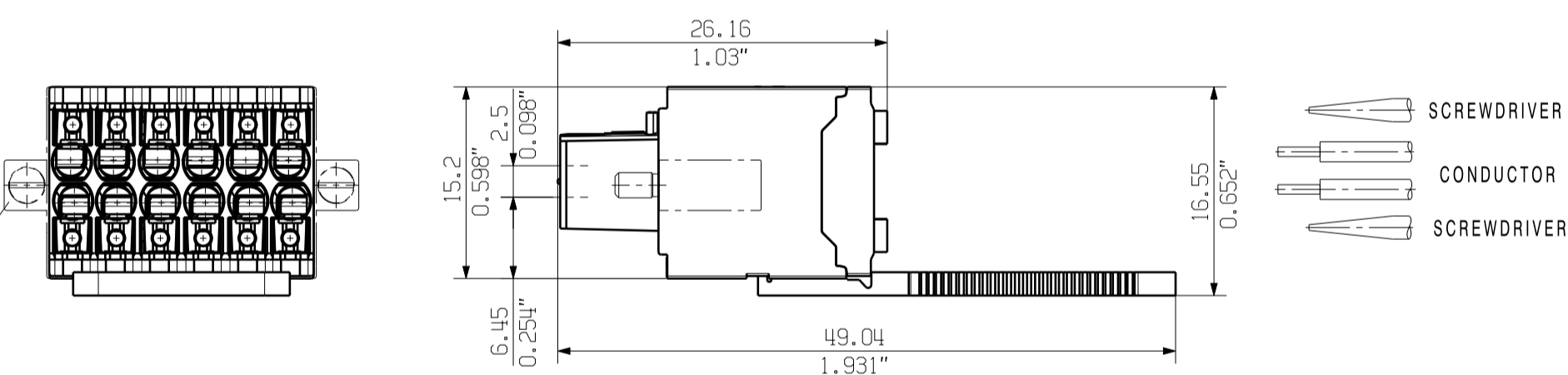
SHOWN: B2CF 3.50/08/180F



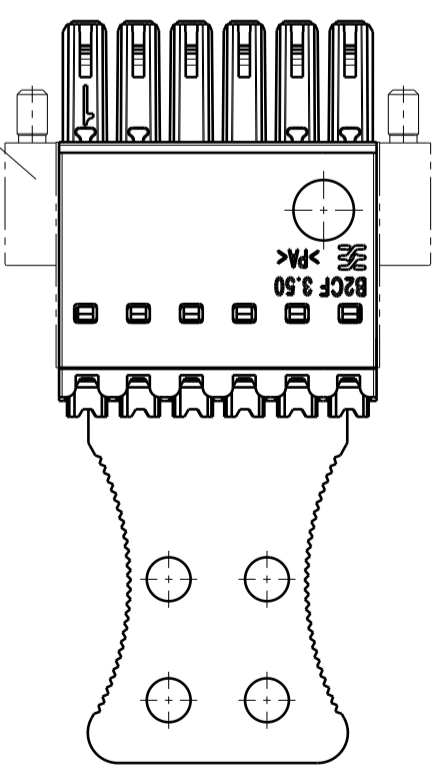
MIN. FRONT PLATE CUT-OUT



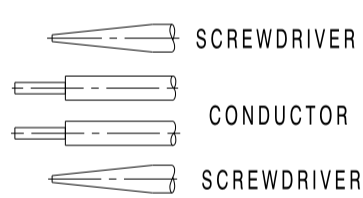
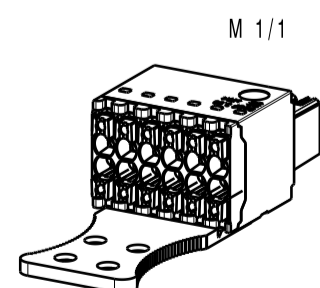
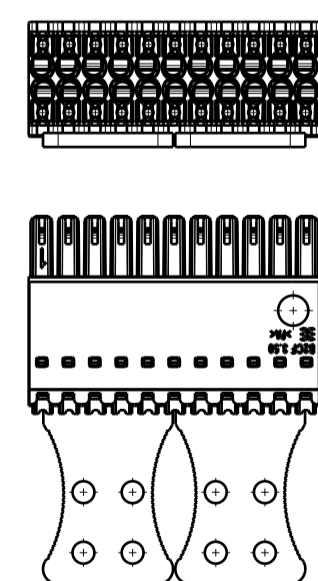
SHOWN: B2CF 3.50/12/180ZE



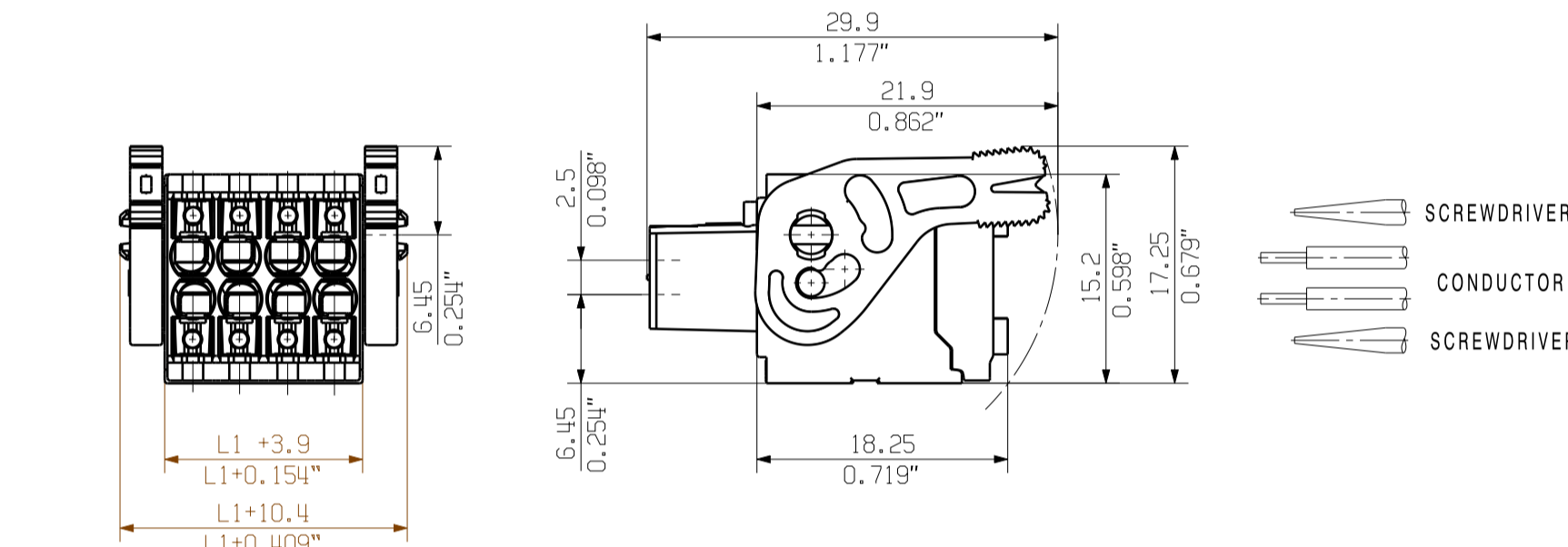
AUCH ANDERE FLANSCH MIT ZUGENTLASTUNG MÖGLICH  
ALSO OTHER FLANGE TYPES WITH STRAIN RELIEF AVAILABLE (F/LH/LR)



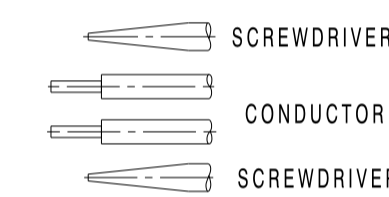
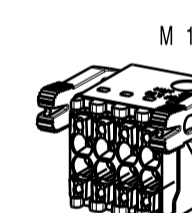
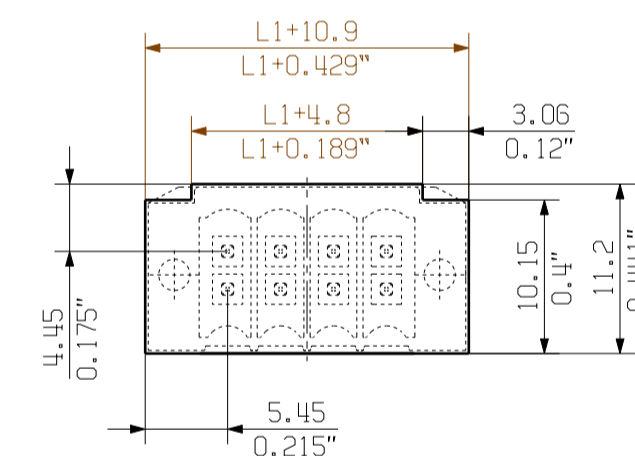
SCHEMatische DARSTELLUNG  
SCHEMATIC REPRESENTATION  
AB 22-POLIG MIT ZWEI ZUGENTLASTUNGEN  
22-36 POLE VERSIONS WITH TWO STRAIN RELIEFS



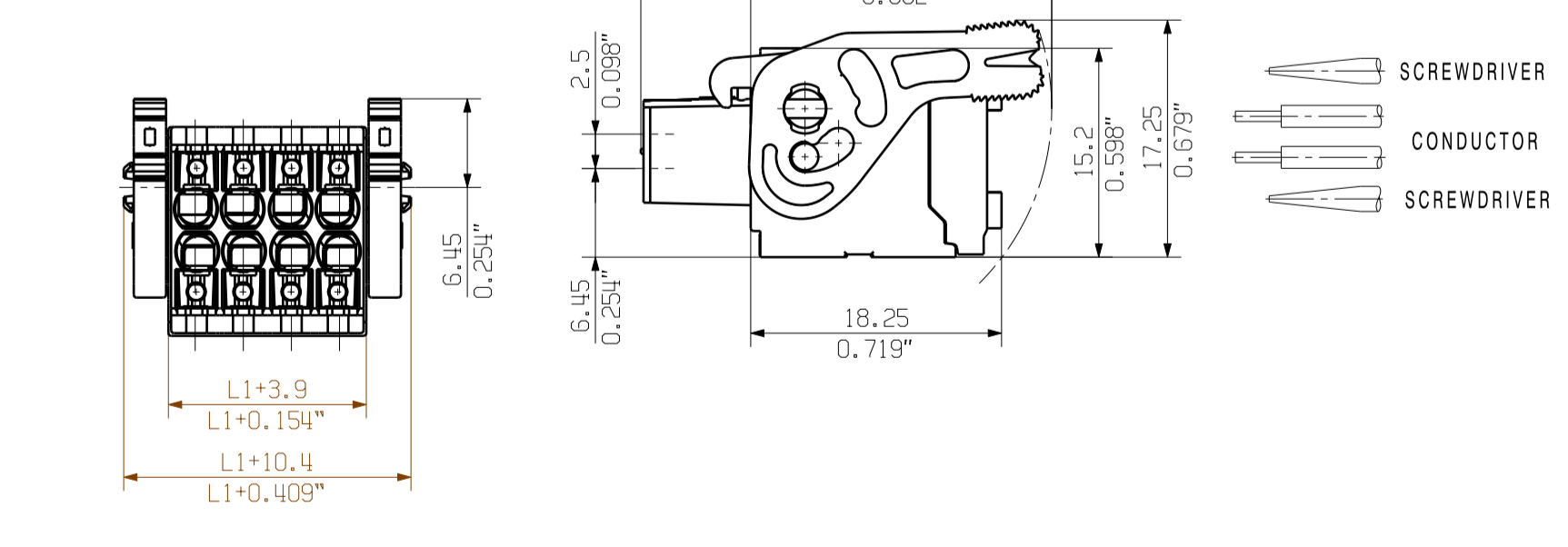
SHOWN: B2CF 3.50/08/180LH



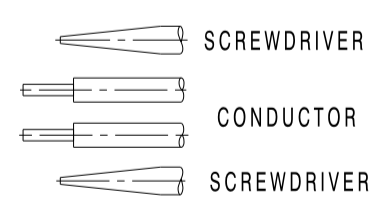
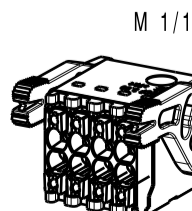
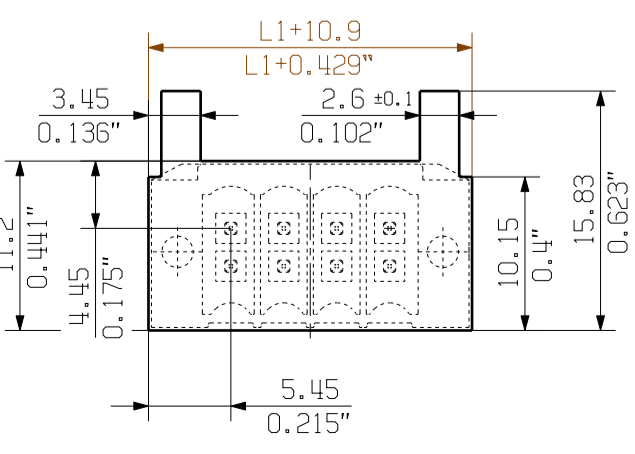
MIN. FRONT PLATE CUT-OUT



SHOWN: B2CF 3.50/08/180LR



MIN. FRONT PLATE CUT-OUT



P=3.50 RASTER  
0.138" PITCH

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 to 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, thermal and corrosive stress will be satisfied.

n POLES	L1 [mm]	L1 [inch]	TOLERANZ TOLERANCE L1 [mm]
46	76.8	80.5	
44	73.3	77.0	+0.3 -0.35
42	69.8	73.5	
40	66.3	70.0	
38	62.8	66.5	
36	59.3	63.0	
34	55.8	59.5	
32	52.3	56.0	
30	48.8	52.5	
28	45.3	49.0	
26	41.8	45.5	+0.3 -0.5
24	38.3	42.0	
22	34.8	38.5	
20	31.3	35.0	
18	27.8	31.5	
16	24.3	28.0	
14	20.8	24.5	
12	17.3	21.0	
10	13.8	17.5	+0.2 -0.5
8	10.3	14.0	
6	6.8	10.5	
4	3.3	7.0	

**GENERAL TOLERANCE:**  
DIN ISO 2768-m

08607/0	28.03.18	HELLIS_MK	01
<b>Modification</b>			
Drawn	28.10.2011	REGULIN_A	
Responsible		AMANN_A	
Checked	03.04.2018	HERTEL_S	
Approved		LAMB_T	

Cat.no.: 1 53600 21  
Drawing no.: 02 of 05 sheets

**Weidmüller**

**B2CF 3.50/.../180...**  
BUCHSENSTECKER  
FEMALE PLUG

Scale: 2/1  
Supersedes: .  
Product file: B2CF 3.50  
7400