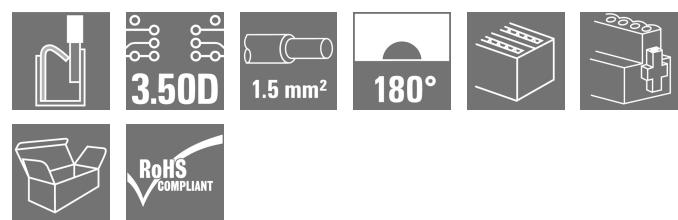
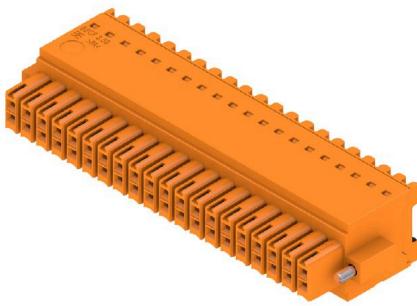


B2CF 3.50/40/180F SN OR BX

Weidmüller Interface GmbH & Co. KG
 Klingenbergsstraße 26
 D-32758 Detmold
 Germany

www.weidmueller.com

Product image

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

Version	PCB plug-in connector, female plug, 3.50 mm, Number of poles: 40, 180°, PUSH IN with push button, Clamping range, max. : 1.5 mm ² , Box
Order No.	2558520000
Type	B2CF 3.50/40/180F SN OR BX
GTIN (EAN)	4050118610901
Qty.	24 items
Product data	IEC: 320 V / 13.4 A / 0.14 - 1.5 mm ² UL: 300 V / 9.5 A / AWG 30 - AWG 16
Packaging	Box

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Technical data**Approvals**

RoHS	Conform
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Dimensions and weights

Depth	25.25 mm	Depth (inches)	0.9941 inch
Height	15.2 mm	Height (inches)	0.5984 inch
Width	77 mm	Width (inches)	3.0315 inch
Net weight	27.07 g		

Environmental Product Compliance

RoHS Compliance Status	Compliant without exemption
REACH SVHC	No SVHC above 0.1 wt%

System Parameters

Product family	OMNIMATE Signal - series B2C/S2C 3.50 - 2-row								
Type of connection	Field connection								
Wire connection method	PUSH IN with push button								
Pitch in mm (P)	3.50 mm								
Pitch in inches (P)	0.138 "								
Conductor outlet direction	180°								
Number of poles	40								
L1 in mm	66.50 mm								
L1 in inches	2.622 "								
Number of rows	1								
Pin series quantity	2								
Rated cross-section	15 mm ²								
Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch								
Touch-safe protection acc. to DIN VDE 0470	IP20 plugged								
Protection degree	IP20, when fully mounted								
Can be coded	Yes								
Stripping length	10 mm								
Screwdriver blade	0.4 x 2.5								
Screwdriver blade standard	DIN 5264								
Plugging cycles	25								
Plugging force/pole, max.	3.5 N								
Pulling force/pole, max.	3.5 N								
Tightening torque	<table> <tr> <td>Torque type</td> <td>Screw flange</td> </tr> <tr> <td>Usage information</td> <td>Tightening torque</td> </tr> <tr> <td></td> <td>min. 0.15 Nm</td> </tr> <tr> <td></td> <td>max. 0.2 Nm</td> </tr> </table>	Torque type	Screw flange	Usage information	Tightening torque		min. 0.15 Nm		max. 0.2 Nm
Torque type	Screw flange								
Usage information	Tightening torque								
	min. 0.15 Nm								
	max. 0.2 Nm								

Material data

Insulating material	PA 66 GF 30	Colour	orange
Colour chart (similar)	RAL 2000	Insulating material group	II
Comparative Tracking Index (CTI)	≥ 600	Insulation resistance	≥ 108 Ω
Moisture Level (MSL)		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.	-40 °C
Storage temperature, max.	70 °C	Operating temperature, min.	-50 °C
Operating temperature, max.	120 °C	Temperature range, installation, min.	-40 °C
Temperature range, installation, max.	120 °C		

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Technical data

Conductors suitable for connection

Clamping range, min.	0.14 mm ²
Clamping range, max.	1.5 mm ²
Wire connection cross section AWG, min.	AWG 30
Wire connection cross section AWG, max.	AWG 16
Solid, min. H05(07) V-U	0.14 mm ²
Solid, max. H05(07) V-U	1.5 mm ²
Flexible, min. H05(07) V-K	0.14 mm ²
Flexible, max. H05(07) V-K	1.5 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, min.	0.14 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, max.	1 mm ²
w. wire end ferrule, DIN 46228 pt 1, min.	0.14 mm ²
w. wire end ferrule, DIN 46228 pt 1, max.	1.5 mm ²

Clampable conductor	wire end ferrule	Stripping length	nominal	10 mm
		Recommended wire-end ferrule	H0.14/12 GR SV	
	wire end ferrule	Stripping length	nominal	10 mm
		Recommended wire-end ferrule	H0.25/12 HBL SV	
	wire end ferrule	Stripping length	nominal	10 mm
		Recommended wire-end ferrule	H0.34/12 TK SV	
	wire end ferrule	Stripping length	nominal	12 mm
		Recommended wire-end ferrule	H0.5/16 OR SV	
	wire end ferrule	Stripping length	nominal	10 mm
		Recommended wire-end ferrule	H0.5/10	
	wire end ferrule	Stripping length	nominal	12 mm
		Recommended wire-end ferrule	H0.75/16 W SV	
	wire end ferrule	Stripping length	nominal	10 mm
		Recommended wire-end ferrule	H0.75/10	
	wire end ferrule	Stripping length	nominal	12 mm
		Recommended wire-end ferrule	H1.0/16 GE SV	
	wire end ferrule	Stripping length	nominal	10 mm
		Recommended wire-end ferrule	H1.0/10	
	wire end ferrule	Stripping length	nominal	10 mm
		Recommended wire-end ferrule	H1.5/10	

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.
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Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	13.4 A
Rated current, max. number of poles (Tu=20°C)	10 A	Rated current, min. number of poles (Tu=40°C)	12 A

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Technical data

Rated current, max. number 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

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 30	Wire cross-section, AWG, max.	AWG 16

Rated data acc. to UL 1059

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 30	Wire cross-section, AWG, max.	AWG 16

Packing

Packaging	Box	VPE length	338.00 mm
VPE width	130.00 mm	VPE height	33.00 mm

Type tests

Test: Durability of markings	Standard	IEC 61984 section 6.2 and 7.3.2 / 10.11 taking pattern from IEC 60068-2-70 / 12.95
	Test	mark of origin, type identification, pitch, type of material, date clock, approval marking UL, approval marking cULus
	Evaluation	available
	Test	durability
	Evaluation	passed
	Standard	IEC 61984 section 6.3 and 6.9.1 / 10.11, IEC 60512-13-5 / 02.06
Test: Misengagement (Non-interchangeability)	Test	180° turned without coding elements
	Evaluation	passed
	Test	180° turned with coding elements
	Evaluation	passed
	Test	visual examination
	Evaluation	passed
Test: Clampable cross section	Standard	IEC 60999-1 section 7 and 9.1 / 11.99, IEC 60947-1 section 8.2.4.5.1 / 03.11
	Conductor type	Type of conductor solid 0.14 mm ² and conductor cross-section
		Type of conductor stranded 0.14 mm ² and conductor cross-section
		Type of conductor solid 1.5 mm ² and conductor cross-section
		Type of conductor stranded 1.5 mm ² and conductor cross-section

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Test for damage to and accidental loosening of conductors	Type of conductor and conductor cross-section	AWG 26/1
	Type of conductor and conductor cross-section	AWG 26/19
	Type of conductor and conductor cross-section	AWG 16/1
	Type of conductor and conductor cross-section	AWG 16/19
	Evaluation	passed
	Standard	IEC 60999-1 section 9.4 / 11.99
	Requirement	0.2 kg
	Conductor type	Type of conductor and conductor cross-section
		AWG 26/1
		AWG 26/19
Pull-out test	Evaluation	passed
	Requirement	0.3 kg
	Conductor type	Type of conductor and conductor cross-section
		H05V-U0.75
		H05V-K0.75
	Evaluation	passed
	Requirement	0.4 kg
	Conductor type	Type of conductor and conductor cross-section
		H07V-U1.5
		H07V-K1.5
	Type of conductor and conductor cross-section	AWG 16/1
	Type of conductor and conductor cross-section	AWG 16/19
	Evaluation	passed
	Standard	IEC 60999-1 section 9.5 / 11.99
	Requirement	≥10 N
	Conductor type	Type of conductor and conductor cross-section
		AWG 26/1
		AWG 26/19
	Evaluation	passed
	Requirement	≥20 N
	Conductor type	Type of conductor and conductor cross-section
		H05V-U0.75
		H05V-K0.75
	Evaluation	passed
	Requirement	≥40 N

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Technical data

Conductor type	Type of conductor and conductor cross-section	H07V-U1.5
	Type of conductor and conductor cross-section	H07V-K1.5
	Type of conductor and conductor cross-section	AWG 16/1
	Type of conductor and conductor cross-section	AWG 16/19
Evaluation	passed	

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"> Additional variants 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 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 Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months

Classifications

ETIM 8.0	EC002638	ETIM 9.0	EC002638
ETIM 10.0	EC002638	ECLASS 14.0	27-46-02-02
ECLASS 15.0	27-46-02-02		

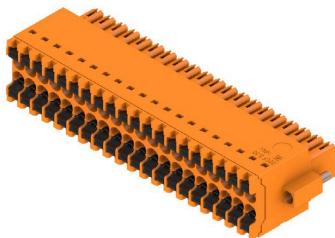
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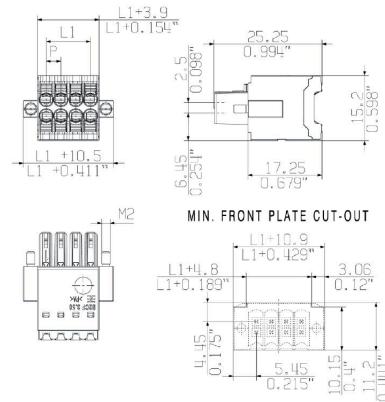
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Drawings

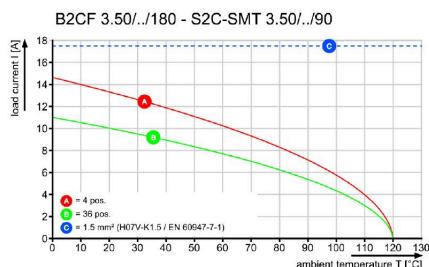
Product image



Dimensional drawing



Graph



Product benefits



Solid PUSH IN contactSafe and durable

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Drawings

Product benefits



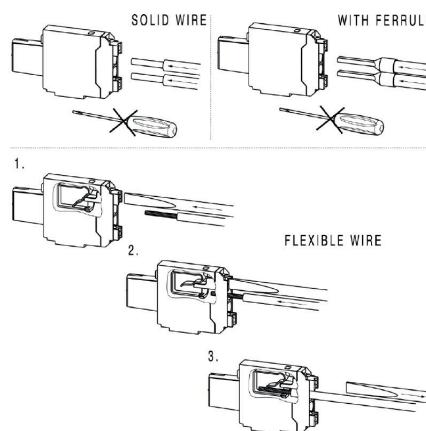
Large connection cross-section
Up to 1.5 mm² possible with ease

Product benefits



Fast PUSH IN connection
Tool-free and touch-safe

Example of use



B2CF 3.50/40/180F 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	B2L/S2L 3.50 KO BK BX	Version
Order No.	1849740000	PCB plug-in connector, Accessories, Coding element, black, Number
GTIN (EAN)	4032248378203	of poles: 1
Qty.	100 ST	
Type	B2L/S2L 3.50 KO OR BX	Version
Order No.	1849730000	PCB plug-in connector, Accessories, Coding element, orange, Number
GTIN (EAN)	4032248378197	of poles: 1
Qty.	100 ST	