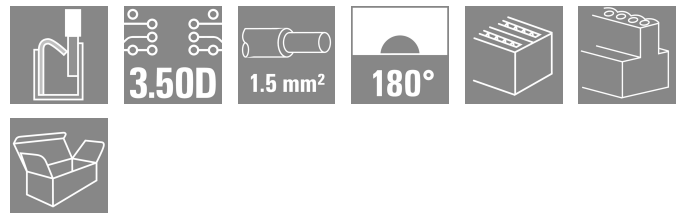
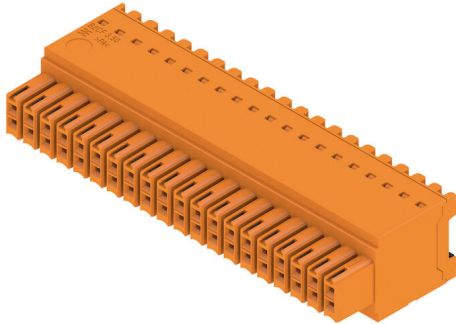


B2CF 3.50/40/180 SN OR BX
Weidmüller Interface GmbH & Co. KG

 Klingenbergstraße 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 mm², Box
Order No.	2558420000
Type	B2CF 3.50/40/180 SN OR BX
GTIN (EAN)	4050118680591
Qty.	24 items
Product data	IEC: 320 V / 13.4 A / 0.14 - 1.5 mm² UL: 300 V / 9.5 A / AWG 30 - AWG 16
Packaging	Box

B2CF 3.50/40/180 SN OR BX**Weidmüller Interface GmbH & Co. KG**

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Technical data**Approvals**

ROHS	Conform
------	---------

Dimensions and weights

Depth	25.25 mm	Depth (inches)	0.9941 inch
Height	15.2 mm	Height (inches)	0.5984 inch
Width	70 mm	Width (inches)	2.7559 inch
Net weight	3.3 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

Material data

Insulating material	PA 66 GF 30	Colour	orange
Colour of operational elements	black	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

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, 0.14 mm ² min.	

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Technical data

w. plastic collar ferrule, DIN 46228 pt 4, 1 mm²
max.w. wire end ferrule, DIN 46228 pt 1, 0.14 mm²
min.w. wire end ferrule, DIN 46228 pt 1, 1.5 mm²
max.

Clampable conductor	Cross-section for conductor connection	Type	fine-wired	
		nominal	0.14 mm ²	
wire end ferrule		Stripping length	nominal	10 mm
		Recommended wire-end ferrule	H0.14/12 GR SV	
Cross-section for conductor connection		Type	fine-wired	
		nominal	0.25 mm ²	
wire end ferrule		Stripping length	nominal	10 mm
		Recommended wire-end ferrule	H0.25/12 HBL SV	
Cross-section for conductor connection		Type	fine-wired	
		nominal	0.34 mm ²	
wire end ferrule		Stripping length	nominal	10 mm
		Recommended wire-end ferrule	H0.34/12 TK SV	
Cross-section for conductor connection		Type	fine-wired	
		nominal	0.5 mm ²	
wire end ferrule		Stripping length	nominal	12 mm
		Recommended wire-end ferrule	H0.5/16 OR SV	
		Stripping length	nominal	10 mm
		Recommended wire-end ferrule	H0.5/10	
Cross-section for conductor connection		nominal	0.75 mm ²	
		Stripping length	nominal	12 mm
wire end ferrule		Recommended wire-end ferrule	H0.75/16 W SV	
		Stripping length	nominal	10 mm
		Recommended wire-end ferrule	H0.75/10	
Cross-section for conductor connection		nominal	1	
		Stripping length	nominal	12 mm
wire end ferrule		Recommended wire-end ferrule	H1.0/16 GE SV	
		Stripping length	nominal	10 mm
		Recommended wire-end ferrule	H1.0/10	
Cross-section for conductor connection		nominal	1.5 mm ²	
		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.

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
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

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Technical data

Rated impulse voltage for surge voltage class/ pollution degree II/2 2.5 kV

Rated impulse voltage for surge voltage class/ contamination degree III/3 2.5 kV

Rated impulse voltage for surge voltage class/ pollution degree III/2 2.5 kV

Short-time withstand current resistance 3 x 1 s with 80 A

Rated data acc. to CSA

Rated voltage (Use group B / CSA) 300 V

Rated voltage (Use group D / CSA) 300 V

Rated current (Use group C / CSA) 9.5 A

Wire cross-section, AWG, min. AWG 30

Rated voltage (Use group C / CSA) 50 V

Rated current (Use group B / CSA) 9.5 A

Rated current (Use group D / CSA) 9.5 A

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 D / UL 1059) 300 V

Rated current (Use group C / UL 1059) 9.5 A

Wire cross-section, AWG, min. AWG 30

Rated voltage (Use group C / UL 1059) 50 V

Rated current (Use group B / UL 1059) 9.5 A

Rated current (Use group D / UL 1059) 9.5 A

Wire cross-section, AWG, max. AWG 16

Packing

Packaging Box

VPE width 139.00 mm

VPE length 349.00 mm

VPE height 38.00 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

Test: Misengagement (Non-interchangeability)

Standard

IEC 61984 section 6.3 and 6.9.1 / 10.11, IEC 60512-13-5 / 02.06

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 and conductor cross-section solid 0.14 mm²

Type of conductor and conductor cross-section stranded 0.14 mm²

Type of conductor and conductor cross-section solid 1.5 mm²

Type of conductor and conductor cross-section stranded 1.5 mm²

Type of conductor and conductor cross-section AWG 26/1

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Technical data

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

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Technical data

	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	• 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		

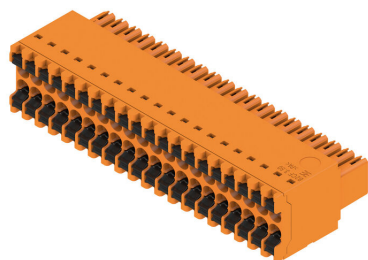
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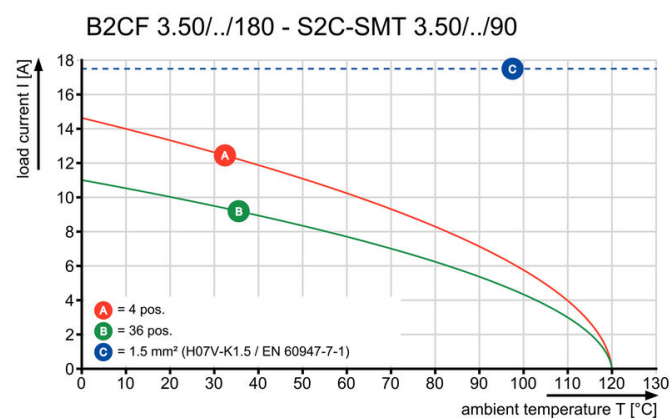
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Drawings

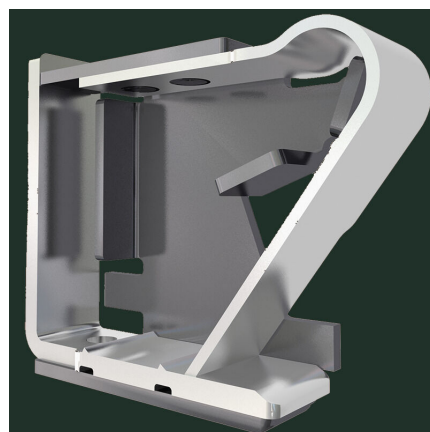
Product image



Graph



Product benefits



Solid PUSH IN contact Safe and durable

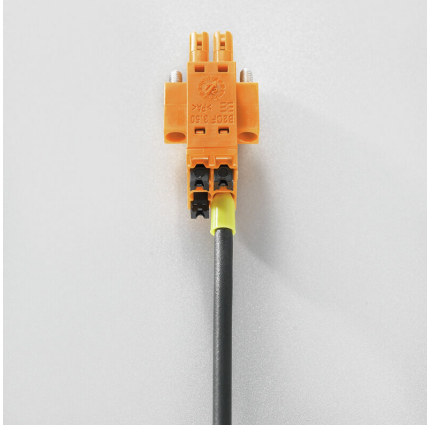
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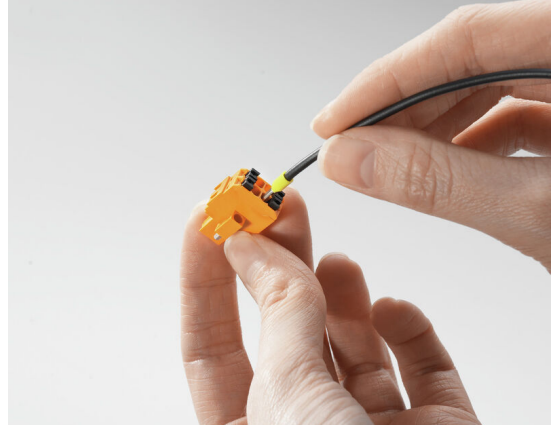
Drawings

Product benefits



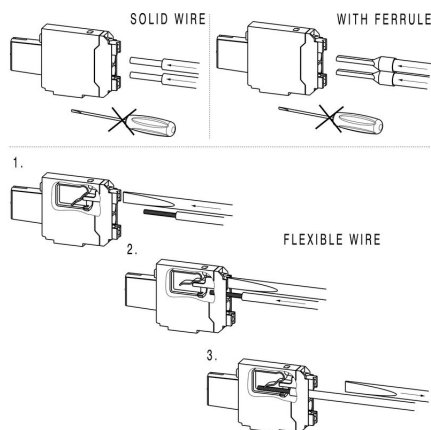
Large connection cross-section Up to 1.5 mm possible with ease

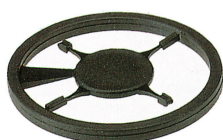
Product benefits



Fast PUSH IN connection Tool-free and touch-safe

Example of use



B2CF 3.50/40/180 SN OR BX**Weidmüller Interface GmbH & Co. KG**Klingenbergstraße 26
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Germanywww.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	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	