

# ES-BPC-C 50-70 BK - Connector



1155595

<https://www.phoenixcontact.com/pc/products/1155595>

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Connector, Range of articles: BPC, color: black, number of positions: 1, min. conductor cross section: 50 mm<sup>2</sup>, max. conductor cross section: 70 mm<sup>2</sup>, rated voltage: 1500, rated current: 250 A, Connection method: Crimp, Contact connection type: Socket, min. cable diameter: 11.3 mm, max. cable diameter: 17 mm

## Your advantages

- Patented design, with 3 proofs and one rotation
- Safety lock
- 360° free rotation and flexible wiring
- Foolproof mechanism installed
- Touch-proof
- Mismatching and short circuit proof

## Commercial data

Item number	1155595
Packing unit	15 pc
Minimum order quantity	1 pc
Product key	ABLDDBA
GTIN	4063151156985
Weight per piece (including packing)	97 g
Weight per piece (excluding packing)	97 g
Customs tariff number	85359000
Country of origin	CN

## Technical data

### Notes

#### Safety note

Safety note	<ul style="list-style-type: none"> <li>• <b>WARNING:</b> Commission properly functioning products only. The products must be regularly inspected for damage. Decommission defective products immediately. Replace damaged products. Repairs are not possible.</li> </ul>
	<ul style="list-style-type: none"> <li>• <b>WARNING:</b> Only electrically qualified personnel may install and operate the product. They must observe the following safety notes. The qualified personnel must be familiar with the basics of electrical engineering. They must be able to recognize and prevent danger. The relevant symbol on the packaging indicates that only personnel familiar with electrical engineering are allowed to install and operate the product.</li> </ul>
	<p><b>WARNING:</b> The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property.</p>
	<ul style="list-style-type: none"> <li>• The products are suitable for applications in plant, controller, and electrical device engineering.</li> </ul>
	<ul style="list-style-type: none"> <li>• Assembled products may not be manipulated or improperly opened.</li> </ul>
	<ul style="list-style-type: none"> <li>• Only use mating connectors that are specified in the technical data of the standards listed (e.g. the ones listed in the product accessories online at <a href="https://www.phoenixcontact.com/products">phoenixcontact.com/products</a>).</li> </ul>
	<ul style="list-style-type: none"> <li>• When using the product in direct connection with third-party manufacturers, the user is responsible.</li> </ul>
	<ul style="list-style-type: none"> <li>• For operating voltages &gt; 50 V AC, conductive connector housings must be grounded</li> </ul>
	<ul style="list-style-type: none"> <li>• Ensure that the protective or functional ground has been properly connected.</li> </ul>
	<ul style="list-style-type: none"> <li>• Observe the corresponding technical data. You will find information:             <ul style="list-style-type: none"> <li>o On the product</li> <li>o On the packing label</li> <li>o In the supplied documentation</li> <li>o Online at <a href="https://www.phoenixcontact.com/products">phoenixcontact.com/products</a> under the product</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>• The installation notes/Design In documents online on the download page at <a href="https://www.phoenixcontact.com/products">phoenixcontact.com/products</a> must be observed for this product.</li> </ul>
	<ul style="list-style-type: none"> <li>• Use a protective cap to protect connectors that are not in use. The suitable accessories are available online in the accessory section of the product at <a href="https://www.phoenixcontact.com/products">phoenixcontact.com/products</a></li> </ul>
	<ul style="list-style-type: none"> <li>• The connector warms up in normal operation. Depending on the ambient conditions, the surface of the connector can continue to warm up. In this case, the user is responsible for posting warnings (e.g. DIN EN ISO 13732-1:2008-12).</li> </ul>
	<ul style="list-style-type: none"> <li>• Operate the connector only when it is fully plugged in and interlocked.</li> </ul>
	<ul style="list-style-type: none"> <li>• Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.</li> </ul>

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- Observe the minimum bending radius of the cable. Lay the cable without twisting it.

## Product properties

Product type	Connectors for energy storage
Product family	BPC
Number of positions	1

## Insulation characteristics

Degree of pollution	2
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## Electrical properties

Rated voltage (III/2)	1500 V DC
Nominal voltage ATD	1500 (III/2.00)
	1000 (III/2.00) AC
Rated current	250 A (with 70 mm <sup>2</sup> conductor cross-section, in accordance with IEC 61984)
	200 A (with 50 mm <sup>2</sup> conductor cross-section, in accordance with IEC 61984)
	250 A (with AWG 2/0, in accordance with UL 4128)
Contact resistance	≤ 0.5 mΩ
Insulation resistance	1000 MΩ
Nominal voltage U <sub>N</sub>	1500 V

## Connection data

Connection method	Crimp
Tightening torque	2 ... 2.5 Nm

## Material specifications

Color	black
Material	Polyamide (Housing)
	Copper (Contact)
	Silicon (Seal)
Flammability rating according to UL 94	V0
Seal material	Silicon
Insulating material	PA
Contact material	Cu

## Cable/line

External cable diameter	11.3 mm ... 17 mm
Single wire, cross section	50 mm <sup>2</sup> 70 mm <sup>2</sup>
Stripping length of the individual wire	20 mm ±1 mm

## Mechanical properties

### Mechanical data

Insertion/withdrawal cycles	100
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Insertion force	≤ 75 N
Withdrawal force	≥ 10 N

## Environmental and real-life conditions

### Ambient conditions

Degree of protection (when plugged in)	IP65 (Mating socket) IP65 (Mating socket)
Degree of protection (not plugged in)	IP20
Degree of protection	IP65/IP67
Ambient temperature (operation)	-40 °C ... 80 °C
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Altitude	4000 m

## Standards and regulations

Standards/specifications	IEC 61984:2008
	EN 61984:2008
	UL 4128
	PPP 51090A

## Mounting

Assembly note	We recommend to use the crimping dies and other crimping devices of Jiangsu Bozhiwang Automation Equipment Co., Ltd. for cable crimp connection; Address: No. 39 Kun Lun Road, Xin Bei District, Changzhou, Jiangsu Province, China, Email: <a href="mailto:bwgm2@wire-processor.com">bwgm2@wire-processor.com</a> , die model: BZW-6F
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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/pc/products/1155595>

 <b>TÜV SÜD Type tested</b> Approval ID: 704071905102-03				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
	1500 V	250 A	-	50 - 70

 <b>UL Recognized</b> Approval ID: E511681-20200609				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
	1500 V	250 A	1/0 - 2/0	-

# ES-BPC-C 50-70 BK - Connector



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## Classifications

### ECLASS

ECLASS-11.0	27440390
ECLASS-12.0	27440390
ECLASS-13.0	27440312

### ETIM

ETIM 9.0	EC002641
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### UNSPSC

UNSPSC 21.0	39121400
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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### China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

### EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
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