

# ST-3ES1N8A8004 - Cable connector



1607684

<https://www.phoenixcontact.com/us/products/1607684>

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Cable connector, straight, Screw locking mechanism, M17, number of positions: 3+PE, contact connection type: Socket, shielded: yes, degree of protection: IP67, cable diameter range: 8 mm . .. 10 mm, number of positions: 4, connection method: Crimp connection, series: ST, Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1237412

## Your advantages

- Consistent EMC protection for reliable connection solutions in the industrial environment
- Crimping connection: vibration- and temperature-resistant assembly
- Flexible use: reliably connect various cable diameters
- Molded designs with preassembled cables on one or both sides

## Commercial data

Item number	1607684
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB35
Product key	ABRBEA
Catalog page	Page 136 (C-2-2019)
GTIN	4046356273893
Weight per piece (including packing)	75.05 g
Weight per piece (excluding packing)	61 g
Customs tariff number	85366990
Country of origin	DE

# ST-3ES1N8A8004 - Cable connector



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## Technical data

### Notes

General	Order crimp contacts Ø 2 mm separately
Safety note	
Safety note	<p>WARNING: 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>• WARNING: 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><li>• WARNING: 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><li>• The products are suitable for applications in plant, controller, and electrical device engineering.</li><li>• When operating the connectors in outdoor applications, they must be separately protected against environmental influences.</li><li>• Assembled products may not be manipulated or improperly opened.</li><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><li>• When using the product in direct connection with third-party manufacturers, the user is responsible.</li><li>• For operating voltages &gt; 50 V AC, conductive connector housings must be grounded</li><li>• Ensure that the protective or functional ground has been properly connected.</li><li>• VDE 0100/1.97 § 411.1.3.2 and DIN EN 60 204/11.98 § 14.1.3 are applicable when combining several circuits in a cable and/or connector</li><li>• Only use tools recommended by Phoenix Contact</li><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><li>• Operate the connector only when it is fully plugged in and interlocked.</li><li>• Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.</li><li>• Observe the minimum bending radius of the cable. Lay the cable without twisting it.</li><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</li></ul>

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warnings (e.g. DIN EN ISO 13732-1:2008-12).

## Mounting

Connection method	Crimp connection
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## Product properties

Product type	Circular connector (cable-side)
Number of positions	4
Connection profile	3+PE
Application	Power
Series	ST
Shielded	yes
Coding	N
Thread type	M17

## Material specifications

Seal material	FPM
Housing material	Turned parts: copper zinc alloy (CuZn), die-cast parts: zinc (GD-Zn)
Insulator material	PA 6.6
Contact material	Cu alloy
Contact surface	pre-nickel plated, gold-plated
Gasket and O-ring material	FPM
Housing material	Metal

## Connection data

### Conductor connection

Connection method	Crimp connection
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## Electrical properties

### Contact

Contact diameter	2 mm
Max. current	25 A
Nominal voltage $U_N$	630 V
Overvoltage category	III
Degree of pollution	3
Rated surge voltage	6 kV

### Contact

Contact diameter	2 mm
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## Connector

Type	straight
Direction of rotation	Standard

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## Connection 1

Head design	Socket
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## Cable/line

External cable diameter	8 mm ... 10 mm
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## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP67
Ambient temperature (operation)	-40 °C ... 125 °C
Altitude	3000 m

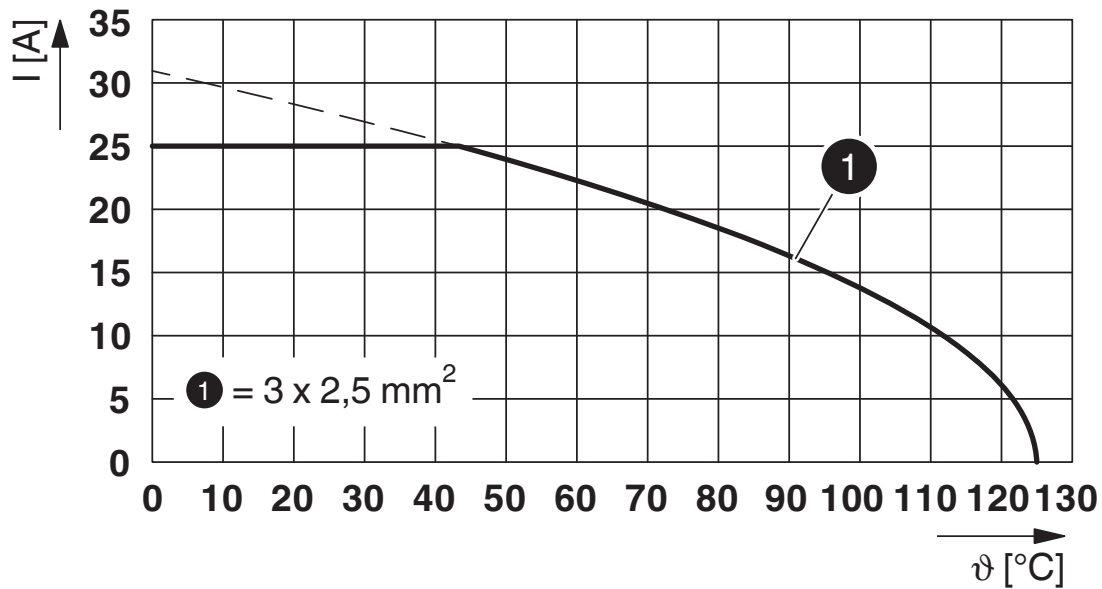
# ST-3ES1N8A8004 - Cable connector

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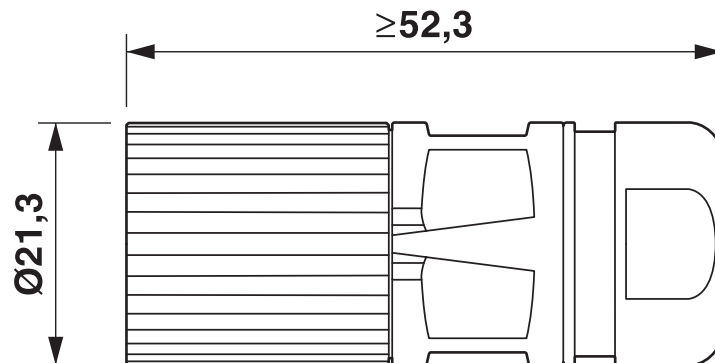
## Drawings

Diagram



$I$  = current strength,  $\vartheta$  = ambient temperature,  $3 \times 25 \text{ A}$

Dimensional drawing

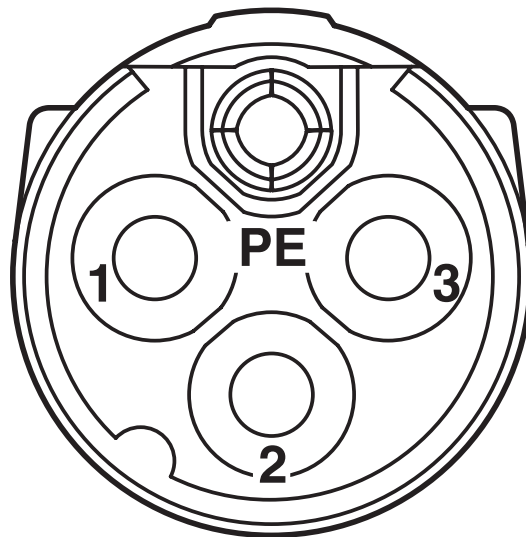


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Schematic diagram



Connector pin assignment

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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1607684>



**cUL Recognized**  
Approval ID: E335019-20111129



**UL Recognized**  
Approval ID: E335019-20111129



**EAC**  
Approval ID: B.01687



**UL Listed**  
Approval ID: E468743-20210825

	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
Power	600 V	20 A	-	- 14



**cUL Listed**  
Approval ID: E468743-20210825

	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
Power	600 V	18 A	- 14	-



**UL Recognized**  
Approval ID: E153698-20140124



**cUL Recognized**  
Approval ID: E153698-20140124

**cULus Listed**

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## Classifications

### ECLASS

ECLASS-11.0	27440102
ECLASS-12.0	27440116
ECLASS-13.0	27440116

### ETIM

ETIM 8.0	EC002635
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### UNSPSC

UNSPSC 21.0	39121400
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## Environmental product compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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## Accessories

### ST-20KS010 - Crimp contact

1607657

<https://www.phoenixcontact.com/us/products/1607657>



Crimp contact, Socket, turned, contact diameter: 2 mm, crimp range: 0.25 mm<sup>2</sup> .. 1 mm<sup>2</sup>, Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1237423

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### ST-20KS020 - Crimp contact

1607658

<https://www.phoenixcontact.com/us/products/1607658>



Crimp contact, Socket, turned, Single contact, contact diameter: 2 mm, crimp range: 1 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>, Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1237423

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## ST-Z0007 - Protective cap

1607777

<https://www.phoenixcontact.com/us/products/1607777>



Plastic protection cap for connectors with M17 knurled nut and M17 SPEEDCON knurled nut

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## ST-Z0016 - Color-coding

1617993

<https://www.phoenixcontact.com/us/products/1617993>



Color-coding, color: green

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<https://www.phoenixcontact.com/us/products/1607684>

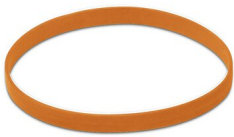


### ST-Z0017 - Color-coding

1618049

<https://www.phoenixcontact.com/us/products/1618049>

Color-coding, color: orange



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### ST-Z0018 - Color-coding

1618050

<https://www.phoenixcontact.com/us/products/1618050>

Color-coding, color: black



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### ST-Z0002 - Square mounting flange with O-ring

1607771

<https://www.phoenixcontact.com/us/products/1607771>



Square mounting flange with O-ring, Axial O-ring, 4x Ø2,7, series: ST

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### ST-Z0003 - Square mounting flange with O-ring

1607772

<https://www.phoenixcontact.com/us/products/1607772>



Square mounting flange with O-ring, Axial O-ring, 4xM3, series: ST

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## ST-Z0004 - Square mounting flange

1607773

<https://www.phoenixcontact.com/us/products/1607773>

Square mounting flange, 4x Ø2,7, series: ST



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## ST-Z0005 - Square mounting flange

1607775

<https://www.phoenixcontact.com/us/products/1607775>

Square mounting flange, 4xM3, series: ST



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