

# ST-7EP1N8A8003 - Cable connector



1607735

<https://www.phoenixcontact.com/us/products/1607735>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Cable connector, straight, Screw locking mechanism, M17, number of positions: 7+PE, contact connection type: Pin, shielded: yes, degree of protection: IP67, cable diameter range: 5 mm ... 8 mm, number of positions: 8, connection method: Crimp connection, series: ST, Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1242354

## 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	1607735
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	AB35
Product key	ABRBEA
Catalog page	Page 136 (C-2-2019)
GTIN	4046356274357
Weight per piece (including packing)	73.9 g
Weight per piece (excluding packing)	63.7 g
Customs tariff number	85366990
Country of origin	DE

# ST-7EP1N8A8003 - Cable connector



1607735

<https://www.phoenixcontact.com/us/products/1607735>

## Technical data

### Notes

General	Order crimp contacts Ø 1 mm separately
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>

# ST-7EP1N8A8003 - Cable connector



1607735

<https://www.phoenixcontact.com/us/products/1607735>

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

## Mounting

Connection method	Crimp connection
-------------------	------------------

## Product properties

Product type	Circular connector (cable-side)
Number of positions	8
Connection profile	7+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
Gasket and O-ring material	FPM
Housing material	Metal

## Connection data

### Conductor connection

Connection method	Crimp connection
-------------------	------------------

## Electrical properties

### Contact

Contact diameter	1 mm
Max. current	14 A
Nominal voltage $U_N$	630 V
Overvoltage category	III
Degree of pollution	3
Rated surge voltage	6 kV

### Contact

Contact diameter	1 mm
------------------	------

## Connector

Type	straight
Direction of rotation	Standard

## Cable/line

External cable diameter	5 mm ... 8 mm
-------------------------	---------------

# ST-7EP1N8A8003 - Cable connector



1607735

<https://www.phoenixcontact.com/us/products/1607735>

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP67
Ambient temperature (operation)	-40 °C ... 125 °C
Altitude	2000 m

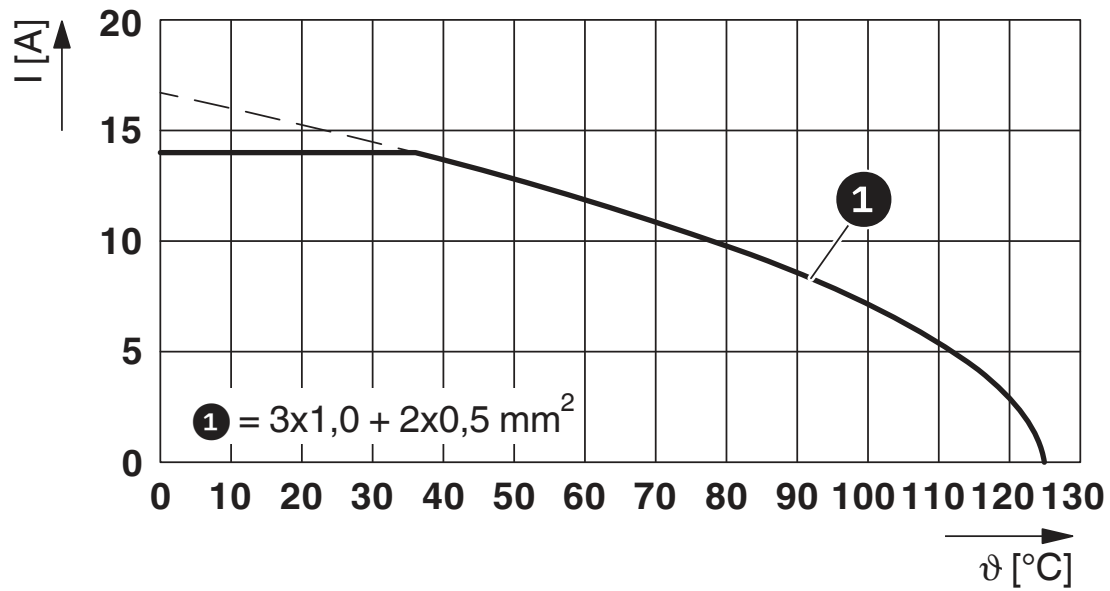
# ST-7EP1N8A8003 - Cable connector

1607735

<https://www.phoenixcontact.com/us/products/1607735>

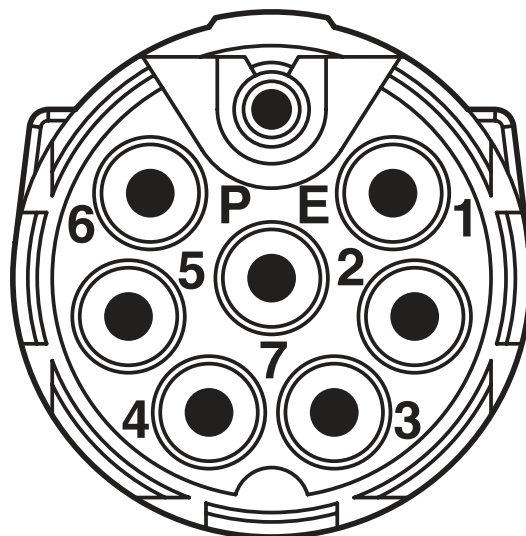
## Drawings

Diagram



$I$  = current strength,  $\vartheta$  = ambient temperature, 3x 14 A + 2x 2 A constant

Schematic diagram



Connector pin assignment

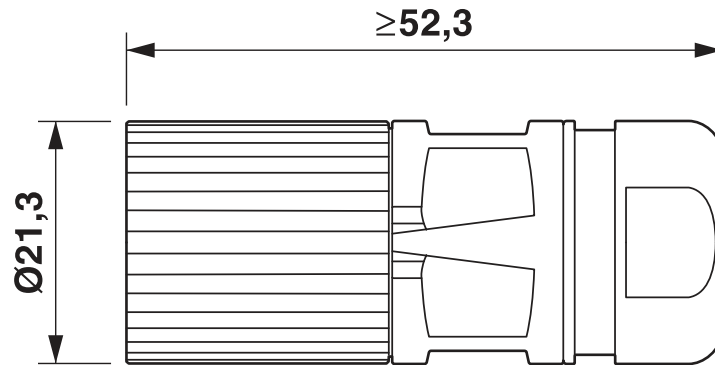
# ST-7EP1N8A8003 - Cable connector

1607735

<https://www.phoenixcontact.com/us/products/1607735>



Dimensional drawing



# ST-7EP1N8A8003 - Cable connector





1607735


<https://www.phoenixcontact.com/us/products/1607735>


## Approvals


To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1607735>


 <b>UL Recognized</b> Approval ID: E153698-20140124				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
Power	600 V	5 A	-	-
Signal	600 V	4 A	-	-


 <b>cUL Recognized</b> Approval ID: E153698-20140124				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
Power	600 V	5 A	-	-
Signal	600 V	4 A	-	-

 <b>cUL Recognized</b> Approval ID: FILE E 335019				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
Power	600 V	5 A	-	-
Signal	600 V	4 A	-	-

 <b>UL Recognized</b> Approval ID: FILE E 335019				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
Power	600 V	5 A	-	-
Signal	600 V	4 A	-	-

 <b>EAC</b> Approval ID: B.01687				
--	--	--	--	--

 <b>UL Listed</b> Approval ID: E468743-20210825				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
Power	600 V	10 A	-	- 18
Signal	60 V	2 A	-	- 18

 <b>cUL Listed</b> Approval ID: E468743-20210825				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$

# ST-7EP1N8A8003 - Cable connector



1607735

<https://www.phoenixcontact.com/us/products/1607735>

Power	600 V	8 A	- 18	-
Signal	60 V	2 A	- 18	-

**cULus Listed**



# ST-7EP1N8A8003 - Cable connector



1607735

<https://www.phoenixcontact.com/us/products/1607735>

## Classifications

### ECLASS

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

### ETIM

ETIM 8.0	EC002635
----------	----------

### UNSPSC

UNSPSC 21.0	39121400
-------------	----------

# ST-7EP1N8A8003 - Cable connector



1607735

<https://www.phoenixcontact.com/us/products/1607735>

## 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"

# ST-7EP1N8A8003 - Cable connector



1607735

<https://www.phoenixcontact.com/us/products/1607735>

## Accessories

### ST-10KP010 - Crimp contact

1618255

<https://www.phoenixcontact.com/us/products/1618255>



Crimp contact, Pin, turned, Single contact, contact diameter: 1 mm, crimp range: 0.06 mm<sup>2</sup> ... 0.25 mm<sup>2</sup>, Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1243215

---

### ST-10KP035 - Crimp contact

1618458

<https://www.phoenixcontact.com/us/products/1618458>



Crimp contact, Pin, turned, contact diameter: 1 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.: 1243215

## ST-7EP1N8A8003 - Cable connector

1607735

<https://www.phoenixcontact.com/us/products/1607735>



## 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

---

## ST-Z0016 - Color-coding

1617993

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



Color-coding, color: green

# ST-7EP1N8A8003 - Cable connector

1607735

<https://www.phoenixcontact.com/us/products/1607735>



## ST-Z0017 - Color-coding

1618049

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

Color-coding, color: orange



---

## ST-Z0018 - Color-coding

1618050

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

Color-coding, color: black



# ST-7EP1N8A8003 - Cable connector

1607735

<https://www.phoenixcontact.com/us/products/1607735>

## 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

---

## 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

# ST-7EP1N8A8003 - Cable connector

1607735

<https://www.phoenixcontact.com/us/products/1607735>



## ST-Z0004 - Square mounting flange

1607773

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

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



---

## ST-Z0005 - Square mounting flange

1607775

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

Square mounting flange, 4xM3, series: ST



---

Phoenix Contact 2023 © - all rights reserved  
<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)