ST-7EP1N8A8004 - Cable connector

1607737

https://www.phoenixcontact.com/us/products/1607737

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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: 8 mm ... 10 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.: 1242356

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	1607737
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	4046356274371
Weight per piece (including packing)	63 g
Weight per piece (excluding packing)	63 g
Customs tariff number	85366990
Country of origin	DE

Technical data

Notes

General	Order crimp contacts Ø 1 mm separately

Safety note

Safety note	WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property.
	• 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.
	• 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.
	• The products are suitable for applications in plant, controller, and electrical device engineering.
	• When operating the connectors in outdoor applications, they must be separately protected against environmental influences.
	• Assembled products may not be manipulated or improperly opened.
	• 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 phoenixcontact.com/products).
	• When using the product in direct connection with third-party manufacturers, the user is responsible.
	• For operating voltages > 50 V AC, conductive connector housings must be grounded
	• Ensure that the protective or functional ground has been properly connected.
	• 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
	• Only use tools recommended by Phoenix Contact
	• The installation notes/Design In documents online on the download page at phoenixcontact.com/products must be observed for this product.
	• Operate the connector only when it is fully plugged in and interlocked.
	• Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.
	• Observe the minimum bending radius of the cable. Lay the cable without twisting it.
	• 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).

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	8 mm ... 10 mm

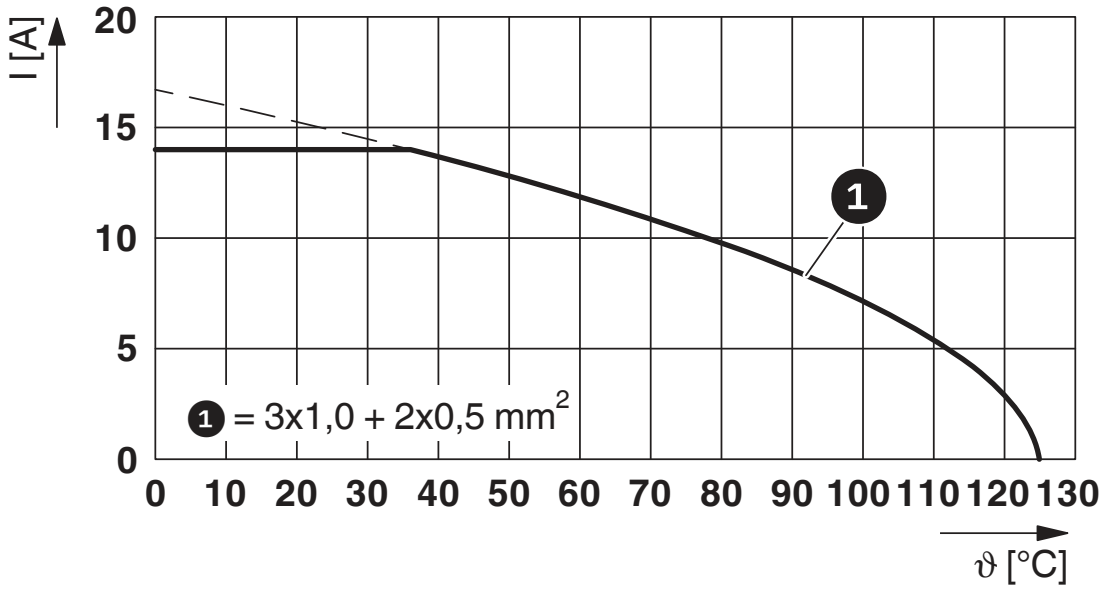
Environmental and real-life conditions

Ambient conditions

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

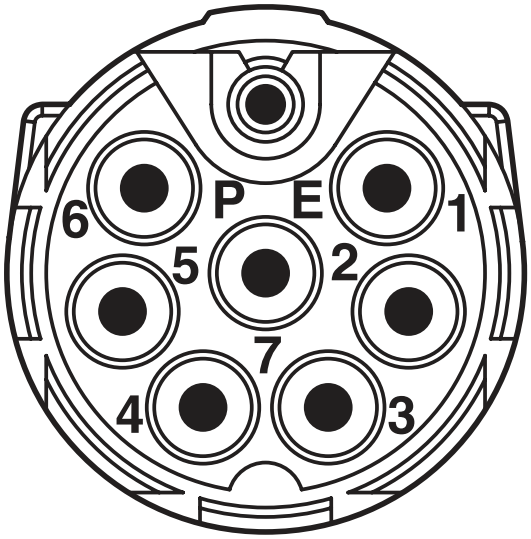
Drawings

Diagram



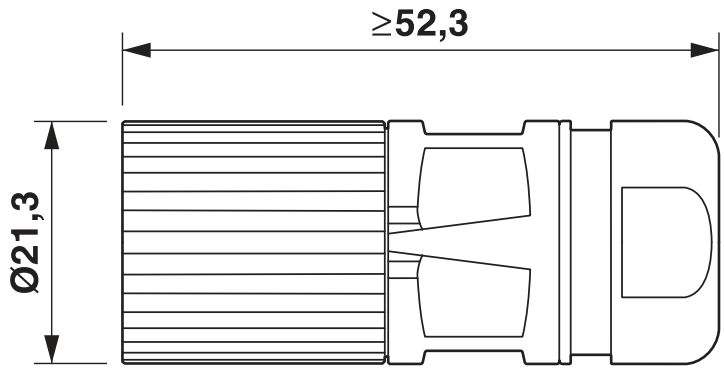
I = current strength, ϑ = ambient temperature, 3x 14 A + 2x 2 A constant

Schematic diagram



Connector pin assignment

Dimensional drawing



Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1607737

UL Recognized
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	-	-

cUL Recognized
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	-	-

cUL Recognized
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	-	-

UL Recognized
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	-	-

EAC
Approval ID: B.01687

UL Listed
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

cUL Listed
Approval ID: E468743-20210825

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2

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

cULus Listed

Classifications

ECLASS

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

ETIM

ETIM 8.0	EC002635

UNSPSC

UNSPSC 21.0	39121400

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”

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^2 ... 0.25 mm^2, 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^2 ... 1 mm^2, Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1243215

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-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-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-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

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