

## Cable connector - M17-8EP1N8A8004 - 1629020

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Cable connector, straight, shielded: yes, Screw locking, M17, No. of pos.: 5+3+PE, type of contact: Pin, Crimp connection, cable diameter range: 8.5 mm ... 12 mm, coding:N

### Your advantages

- ✓ Solutions with cross-manufacturer compatibility for standard and fast locking systems
- ✓ Reliable under the harshest conditions: cable connectors with vibration brake
- ✓ Modern, consistent design for highly convenient operation
- ✓ Easy, cost-effective cable assembly: uniform shielding of M17 to M40

RoHS

### Key Commercial Data

Packing unit	1 pc
Custom tariff number	85366990
Country of origin	Germany

### Technical data

#### Temperature range

Ambient temperature	-40 °C ... 105 °C (see derating curve)
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#### Standards and Regulations

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

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### Technical data

#### Standards and Regulations

	packaging indicates that only personnel familiar with electrical engineering are allowed to install and operate the product.
	<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>When operating the connectors in outdoor applications, they must be separately protected against environmental influences.</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>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> </ul>
	<ul style="list-style-type: none"> <li>Only use tools recommended by Phoenix Contact</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>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>
	<ul style="list-style-type: none"> <li>Observe the minimum bending radius of the cable. Lay the cable without twisting it.</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>

#### Data of the insulating body

Coding	N
Contact connection method	Crimp connection
Type of contacts	Pin
Application	Power
Number of positions	9
Contact diameter of power contacts	1 mm
Litz wire cross section of power contacts min.	0.06 mm <sup>2</sup>
Litz wire cross section of power contacts max.	1 mm <sup>2</sup>
Rated current for power contacts	14 A
Note	for max. connection cross section
Rated voltage	630 V

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### Technical data

#### Data of the insulating body

Rated surge voltage	6 kV
Overvoltage category	III
Degree of pollution	3
Contact diameter of signal contacts	0.6 mm
Litz wire cross section of signal contacts min.	0.06 mm <sup>2</sup>
Litz wire cross section of signal contacts max.	0.5 mm <sup>2</sup>
Nominal current per signal contact	3.6 A
Note	for max. connection cross section
Rated voltage of signal contact	60 V
Rated surge voltage	1.5 kV
Overvoltage category	III
Degree of pollution	3
Note	for max. connection cross section
Installation height	2000 m

#### Housing data

Housing material	GD-Zn
Type of locking	Screw locking
Degree of protection (when plugged in)	IP67
	IP68, 24 h / 2 m
Thread type	M17

#### Cable seal data

Cable diameter	8.5 mm ... 12 mm
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#### Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

### Drawings

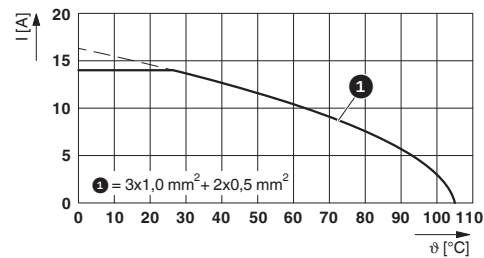
Cable connector - M17-8EP1N8A8004 - 1629020

Schematic diagram



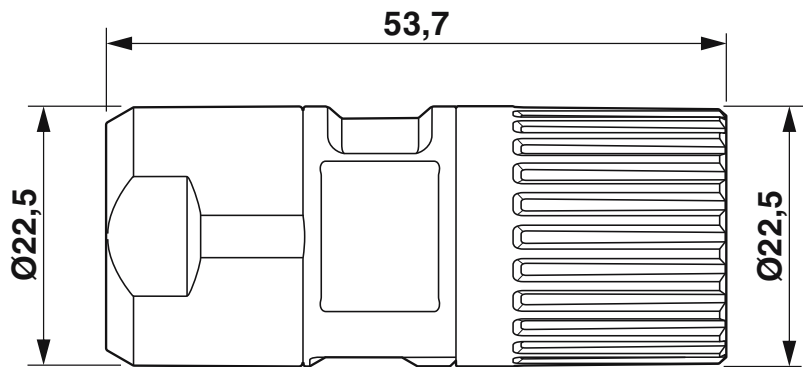
Connector pin assignment

Diagram



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

Dimensional drawing



Dimensional drawing

Classifications

eCl@ss

eCl@ss 10.0.1	27440102
eCl@ss 11.0	27440102
eCl@ss 9.0	27440102

ETIM

ETIM 6.0	EC002061
ETIM 7.0	EC002635

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### Classifications

#### UNSPSC

UNSPSC 18.0	39121413
UNSPSC 19.0	39121413
UNSPSC 20.0	39121413
UNSPSC 21.0	39121413

### Accessories

#### Accessories

##### Crimp contact

Crimp contact - ST-06KP010 - 1607577



Crimp contact, turned, contact diameter: 0.6 mm, crimp range: 0.06 mm² ... 0.25 mm²

Crimp contact - ST-06KP020 - 1607578



Crimp contact, turned, contact diameter: 0.6 mm, crimp range: 0.14 mm² ... 0.34 mm²

Crimp contact - ST-06KP030 - 1607579



Crimp contact, turned, contact diameter: 0.6 mm, crimp range: 0.34 mm² ... 0.5 mm²

Crimp contact - ST-10KP010 - 1618255



Crimp contact, turned, Single contact, contact diameter: 1 mm, crimp range: 0.06 mm² ... 0.25 mm²

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### Accessories

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Crimp contact - ST-10KP035 - 1618458



Crimp contact, turned, contact diameter: 1 mm, crimp range: 0.25 mm<sup>2</sup> ... 1 mm<sup>2</sup>

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### Protective cover

Metal protective cap - ST-Z0077 - 1627217



Metal protection cap with steel wire and loop for M17 connectors with knurled nut for fastening to the cable