#### 1069481

https://www.phoenixcontact.com/us/products/1069481

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M17, Cable connector, series: M17 PRO, straight, shielded: yes, Screw locking mechanism, No. of pos.: 3+PE, contact connection type: Pin, contact diameter 1.5 mm, Crimp connection, cable diameter range: 3.5 mm ... 6.5 mm, coding: N, Item is lead-free in accordance with RoHS II without Exemption 6c (Pb <0.1%)

## 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

## Commercial data

| Item number                          | 1069481       |
|--------------------------------------|---------------|
| Packing unit                         | 1 pc          |
| Minimum order quantity               | 1 pc          |
| Sales key                            | AB36          |
| Product key                          | ABRBAA        |
| GTIN                                 | 4055626744186 |
| Weight per piece (including packing) | 22.22 g       |
| Weight per piece (excluding packing) | 22.22 g       |
| Customs tariff number                | 85366990      |
| Country of origin                    | DE            |

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## Technical data

| General     | Order 4 x Ø 1.5 mm crimp contacts separately  |
|-------------|---|
| afety 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.<br>The products must be regularly inspected for damage.<br>Decommission defective products immediately. Replace<br>damaged products. Repairs are not possible.  |
|             | WARNING: Only electrically qualified personnel may install an 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.   |
|             | <ul> <li>When operating the connectors in outdoor applications, they<br/>must be separately protected against environmental influences.</li> </ul>  |
|             | <ul> <li>Assembled products may not be manipulated or improperly<br/>opened.</li> </ul>   |
|             | <ul> <li>Only use mating connectors that are specified in the technical<br/>data of the standards listed (e.g. the ones listed in the product<br/>accessories online at phoenixcontact.com/products).</li> </ul>  |
|             | When using the product in direct connection with third-party manufacturers, the user is responsible.  |
|             | <ul> <li>For operating voltages &gt; 50 V AC, conductive connector<br/>housings must be grounded</li> </ul>   |
|             | 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<br>are applicable when combining several circuits in a cable and/or<br>connector   |
|             | Only use tools recommended by Phoenix Contact   |
|             | <ul> <li>The installation notes/Design In documents online on the<br/>download page at phoenixcontact.com/products must be<br/>observed for this product.</li> </ul>  |
|             | <ul> <li>Operate the connector only when it is fully plugged in and<br/>interlocked.</li> </ul>   |
|             | • 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.   |
|             | <ul> <li>The connector warms up in normal operation. Depending on the<br/>ambient conditions, the surface of the connector can continue to<br/>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).

## Product properties

Product type

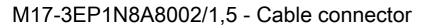
Circular connector (cable-side)

## Connector

| Coding                                       | N                                 |  |  |
|--|-----------------------------------|--|--|
| Insulation body material                     | PA 6.6                            |  |  |
| Insertion/withdrawal cycles                  | 100                               |  |  |
| Connection method                            | Crimp connection                  |  |  |
| Contact switching type                       | Pin, contact diameter 1.5 mm      |  |  |
| Application                                  | Power                             |  |  |
| Number of positions                          | 4                                 |  |  |
| Connection profile                           | 3+PE                              |  |  |
| Contact diameter Power contacts              | 1.5 mm                            |  |  |
| Litz wire cross-section Power contacts min.  | 0.25 mm <sup>2</sup>              |  |  |
| Litz wire cross-section Power contacts max.  | 2.5 mm <sup>2</sup>               |  |  |
| Rated current Power contacts                 | 20 A                              |  |  |
| Note   | for max. connection cross section |  |  |
| Rated voltage                                | 630 V                             |  |  |
| Rated surge voltage                          | 6 kV                              |  |  |
| Overvoltage category                         | III                               |  |  |
| Degree of pollution                          | 3                                 |  |  |
| Contact diameter Signal contacts             | 1.5 mm                            |  |  |
| Litz wire cross-section Signal contacts min. | 0.25 mm <sup>2</sup>              |  |  |
| Litz wire cross-section Signal contacts max. | 2.5 mm <sup>2</sup>               |  |  |
| Installation height                          | 3000 m                            |  |  |
| Housing                                      |                                   |  |  |
| Housing material                             | GD-Zn                             |  |  |
| Type of locking                              | Screw locking mechanism           |  |  |
| Pg screw connection                          | none                              |  |  |
| Degree of protection (plugged in)            | IP67                              |  |  |
|  | IP68, 24 h / 2 m                  |  |  |
| Thread type                                  | M17                               |  |  |
| al   |                                   |  |  |
| External cable diameter                      | 3.5 mm 6.5 mm                     |  |  |

## Environmental and real-life conditions

Ambient conditions



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Ambient temperature (operation)

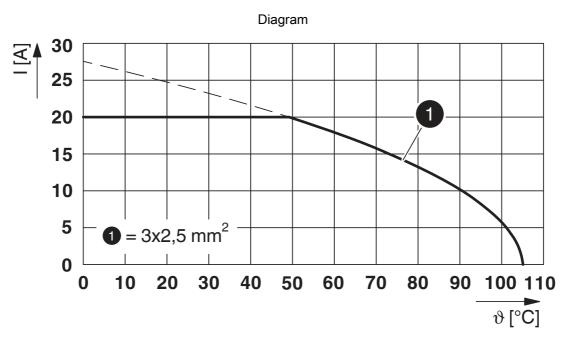
-40 °C ... 105 °C (see derating curve)



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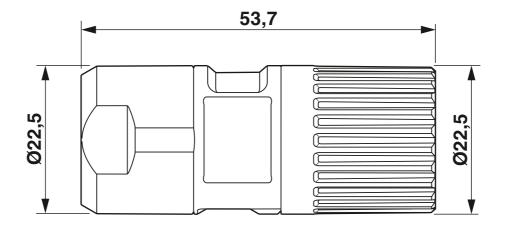
https://www.phoenixcontact.com/us/products/1069481

## Drawings

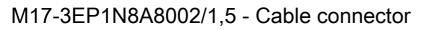


I = current strength,  $\vartheta$  = ambient temperature, 3x 20 A

Dimensional drawing



Dimensional drawing

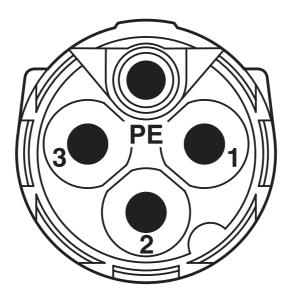


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Schematic diagram



Connector pin assignment

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## Classifications

## ECLASS

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

## ETIM

|        | ETIM 8.0    | EC002635 |  |
|--------|-------------|----------|--|
| UNSPSC |             |          |  |
|        | UNSPSC 21.0 | 39121400 |  |

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## Environmental product compliance

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

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Accessories

ST-15KP0,25-2,50 - Crimp contact

1213852 https://www.phoenixcontact.com/us/products/1213852



Crimp contact, Pin, turned, contact diameter: 1.5 mm, crimp range:  $0.25 \text{ mm}^2 \dots 2.5 \text{ mm}^2$ , Item is lead-free in accordance with RoHS II without Exemption 6c (Pb <0.1%)

## ST-Z0077 - Metal protective cap

1627217 https://www.phoenixcontact.com/us/products/1627217



Metal protective cap, degree of protection: IP67, series: ST, Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1245441

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M17-Z0011 - Tool

### 1089155

https://www.phoenixcontact.com/us/products/1089155

Nut for assembling M17-PRO series cable connectors and for 4 mm hexagonal drive



## TSD-M 1,2NM - Torque screwdriver

1212224 https://www.phoenixcontact.com/us/products/1212224



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0. 3 - 1.2  $\rm Nm$ 

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## TSD-M SAC-BIT ADAPTER - Adapter insert

### 1212600

https://www.phoenixcontact.com/us/products/1212600



Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits

## PROT-M17PRO-IT-IP20 - Plastic protective cap

1055709 https://www.phoenixcontact.com/us/products/1055709



Plastic protective cap, M17, degree of protection: IP20, series: M17 PRO

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## PROT-M17PRO-IT-IP67 - Plastic protective cap

### 1055707

https://www.phoenixcontact.com/us/products/1055707



Plastic protective cap, M17, degree of protection: IP67, series: M17 PRO

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