

# CA-12F1N8A9503 - Coupler connector



1620003

<https://www.phoenixcontact.com/us/products/1620003>

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The figure shows the product with assembled crimp contacts. Please order crimp contacts separately.

M23, Coupler connector, application: Signal, series: CA, straight, shielded: yes, for standard and SPEEDCON interlock, No. of pos.: 12, Direction of rotation: Standard, contact connection type: Socket, Crimp connection, cable diameter range: 6 mm ... 10 mm, coding: N. This product is in the process of being discontinued. This product must no longer be considered for new projects. Please contact your sales representative for alternatives. Alternative products: 1629118

## Your advantages

- Safe use in the field, thanks to high degree of protection
- Connector for flexible on-site assembly
- Consistent EMC protection for reliable connection solutions in the industrial environment
- Crimping connection: vibration- and temperature-resistant assembly

## Commercial data

|                                      |                                |
|--------------------------------------|--------------------------------|
| Item number                          | 1620003                        |
| Packing unit                         | 1 pc                           |
| Minimum order quantity               | 1 pc                           |
| Note                                 | Made to order (non-returnable) |
| Sales key                            | AB31                           |
| Product key                          | ABRAEG                         |
| GTIN                                 | 4046356819916                  |
| Weight per piece (including packing) | 92.4 g                         |
| Weight per piece (excluding packing) | 89.47 g                        |
| Customs tariff number                | 85366990                       |
| Country of origin                    | DE                             |

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## Technical data

### Notes

|                    |  |
|--------------------|--|
| Order information: | Order crimp contacts Ø 1 mm separately |
|--------------------|--|

### Product properties

|              |                                 |
|--------------|---------------------------------|
| Product type | Circular connector (cable-side) |
|--------------|---------------------------------|

### Connector

#### Connection 1

|             |        |
|-------------|--------|
| Head design | Socket |
|-------------|--------|

#### Insulating body

|   |   |
|---|---|
| Note  | Order information: Order crimp contacts Ø 1 mm separately |
| Coding  | N   |
| Material (Insulating body)                      | PA 6.6  |
| Connection method                               | Crimp connection  |
| Contact switching type                          | Socket  |
| Application                                     | Signal  |
| Number of positions                             | 12  |
| Direction of rotation                           | Standard  |
| Connection profile                              | 12  |
| Number (Signal contacts)                        | 12  |
| Contact diameter (Signal contacts)              | 1 mm  |
| Litz wires Min. cross section (Signal contacts) | 0.06 mm <sup>2</sup>                                      |
| Litz wires Max. cross section (Signal contacts) | 1 mm <sup>2</sup>   |
| Rated current Contact (Signal contacts)         | 8 A (for max. connection cross section)                   |
| Rated voltage Contact (Signal contacts)         | 48 V AC<br>74 V DC  |
| Rated surge voltage                             | 1.5 kV  |
| Overvoltage category                            | III   |
| Degree of pollution                             | 3   |

#### Housing

|                                   |  |
|-----------------------------------|--|
| Type                              | Coupling housing   |
| Thread type                       | M23  |
| Design                            | straight   |
| Type of locking                   | for standard and SPEEDCON interlock                                  |
| Pg screw connection               | none   |
| Housing material                  | Turned parts: copper zinc alloy (CuZn), die-cast parts: zinc (GD-Zn) |
| Material for screw connection     | CuZn   |
| Degree of protection (plugged in) | IP67   |

#### Seal

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|                         |                |
|-------------------------|----------------|
| External cable diameter | 6 mm ... 10 mm |
| Seal material           | FPM            |

## Environmental and real-life conditions

### Ambient conditions

|                                 |                   |
|---------------------------------|-------------------|
| Ambient temperature (operation) | -40 °C ... 125 °C |
|---------------------------------|-------------------|

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## Drawings

Schematic diagram



Contact chamber numbering (view of plug-in side), standard socket

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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1620003>

|  <b>cUL Recognized</b><br>Approval ID: E335019-20141210 |                       |                       |                   |                             |
|--|-----------------------|-----------------------|-------------------|-----------------------------|
|  | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
| keine  |                       |                       |                   |                             |
|  | 48 V                  | 6 A                   | 18                | -                           |

|  <b>UL Recognized</b><br>Approval ID: E335019-20141210 |                       |                       |                   |                             |
|---|-----------------------|-----------------------|-------------------|-----------------------------|
|   | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
| keine   |                       |                       |                   |                             |
|   | 48 V                  | 8 A                   | 18                | -                           |

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## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-13.0 | 27440116 |
| ECLASS-15.0 | 27440116 |

### ETIM

|           |          |
|-----------|----------|
| ETIM 10.0 | EC002635 |
|-----------|----------|

### UNSPSC

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

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## Environmental product compliance

### EU RoHS

|   |                    |
|---|--------------------|
| Fulfills EU RoHS substance requirements | Yes, No exemptions |
|---|--------------------|

### China RoHS

|  |  |
|--|--|
| Environment friendly use period (EFUP) | EFUP-E                                   |
|  | No hazardous substances above the limits |

### EU REACH SVHC

|                                     |                            |
|-------------------------------------|----------------------------|
| REACH candidate substance (CAS No.) | No substance above 0.1 wt% |
|-------------------------------------|----------------------------|

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