

SUBCON-PLUS-PROFIB/90/PG/IDC - D-SUB bus connector



2313685

<https://www.phoenixcontact.com/us/products/2313685>

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D-SUB connector, 9-pos., pin, 90° cable outlet, bus system: PROFIBUS DP up to 12 Mbps with PG D-SUB socket for connecting a programming device, termination resistor can be switched on via slide switch, pin assignment: 3, 5, 6, 8; IDC terminal block connection

Product description

The D-SUB series, SUBCON-PLUS-PROFIB/... was specially designed for use in PROFIBUS systems up to 12 Mbps. Under field conditions, it allows convenient and fast connection of the incoming and outgoing bus cable. The terminating resistor is already integrated in all versions. It can be connected externally by means of a slide switch. At the same time, the outgoing bus segment is switched off. This makes it easy to start up segment by segment while incorrect terminations are avoided.

Your advantages

- Suitable for all common Fast Connect PROFIBUS cables and RS-485 bus lines



Commercial data

| | |
|--------------------------------------|---------------|
| Item number | 2313685 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Sales key | DN10 |
| Product key | DNC531 |
| GTIN | 4046356514576 |
| Weight per piece (including packing) | 45.3 g |
| Weight per piece (excluding packing) | 41 g |
| Customs tariff number | 85366990 |
| Country of origin | DE |

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Technical data

Notes

Note on application

| | |
|---------------------|-------------------------|
| Note on application | Only for industrial use |
|---------------------|-------------------------|

Product properties

| | |
|----------------|--|
| Product type | Data plug |
| MTTF | 6706 Years (SN 29500 standard, temperature 25°C, operating cycle 21%) |
| | 1817 Years (SN 29500 standard, temperature 40°C, operating cycle 34.25%) |
| | 155 Years (SN 29500 standard, temperature 40°C, operating cycle 100%) |
| Pin assignment | 3, 5, 6, 8 |

Electrical properties

| | |
|---|---------|
| Test voltage | 50 V |
| Maximum power dissipation for nominal condition | 0.025 W |
| Nominal voltage U_N | 5 V |
| Nominal current I_N | 100 mA |

Connection data

| | |
|-------------------|------------|
| Tightening torque | ... 1.2 Nm |
|-------------------|------------|

D-SUB connection

| | |
|-------------------|-----------------|
| Connection method | D-SUB connector |
|-------------------|-----------------|

IDC terminal blocks

| | |
|--|----------------------|
| Connection method | IDC fast connection |
| Conductor cross-section, rigid min. | 0.32 mm ² |
| Conductor cross-section, rigid max. | 1 mm ² |
| Conductor cross-section flexible min. | 0.32 mm ² |
| Conductor cross-section flexible max. | 1 mm ² |
| Single-wire/terminal point, rigid AWG min. | 22 |
| Single-wire/terminal point, rigid AWG max. | 18 |
| Min. AWG conductor cross-section, flexible | 22 |
| Max. AWG conductor cross-section, flexible | 18 |

Programming connection

| | |
|-------------------|--------------|
| Connection method | D-SUB socket |
|-------------------|--------------|

Interfaces

| | |
|------------|-------------|
| Bus system | PROFIBUS DP |
| Signal | PROFIBUS |

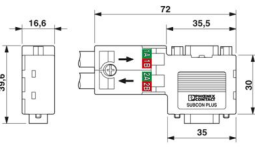
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Dimensions

| | |
|---------------------|--|
| Dimensional drawing |  |
| Width | 16.8 mm |
| Height | 34.8 mm |
| Length | 72 mm |

Material specifications

| | |
|--------------------|--------------------|
| Material (Housing) | ABS (metal-plated) |
|--------------------|--------------------|

Cable/line

| | |
|-------------------------|---------------------------------------|
| External cable diameter | 7.6 mm ... 8.4 mm (Incoming bus line) |
|-------------------------|---------------------------------------|

Mechanical properties

Mechanical data

| | |
|-----------------------------|----------|
| Insertion/withdrawal cycles | > 200 |
| Fixing screws | 4-40 UNC |
| Tightening torque | 0.4 Nm |

Mechanical tests

| | |
|--|---|
| Vibration resistance in accordance with EN 60068-2-6/IEC 60068-2-6 | Vibration (operation): 5g, 10...150 Hz, 2.5 h, in XYZ direction |
| Shock in accordance with EN 60068-2-27/IEC 60068-2-27 | Shock (operation): 15g, 11 ms period, half-sine shock pulse |

Environmental and real-life conditions

Ambient conditions

| | |
|--|--|
| Degree of protection | IP40 |
| Ambient temperature (operation) | -20 °C ... 75 °C |
| Ambient temperature (storage/transport) | -25 °C ... 80 °C |
| Altitude | ≤ 5000 m (For restrictions, see the manufacturer's declaration for altitude operation) |
| Permissible humidity (operation) | 10 % ... 95 % (non-condensing) |
| Permissible humidity (storage/transport) | 5 % ... 95 % (non-condensing) |

Approvals

Corrosive gas test

| | |
|----------------|----------------------------------|
| Identification | ISA-S71.04-1985 G3 Harsh Group A |
|----------------|----------------------------------|

Standards and regulations

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Free from substances that could impair the application of coating

VDMA 24364:2018-05

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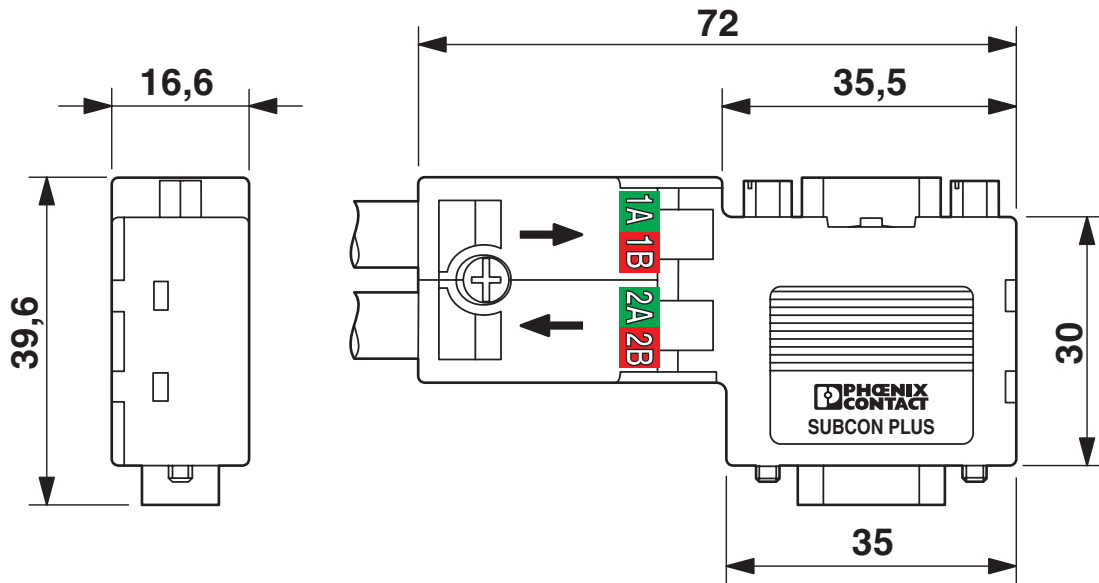


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Drawings

Dimensional drawing



Dimensional drawing

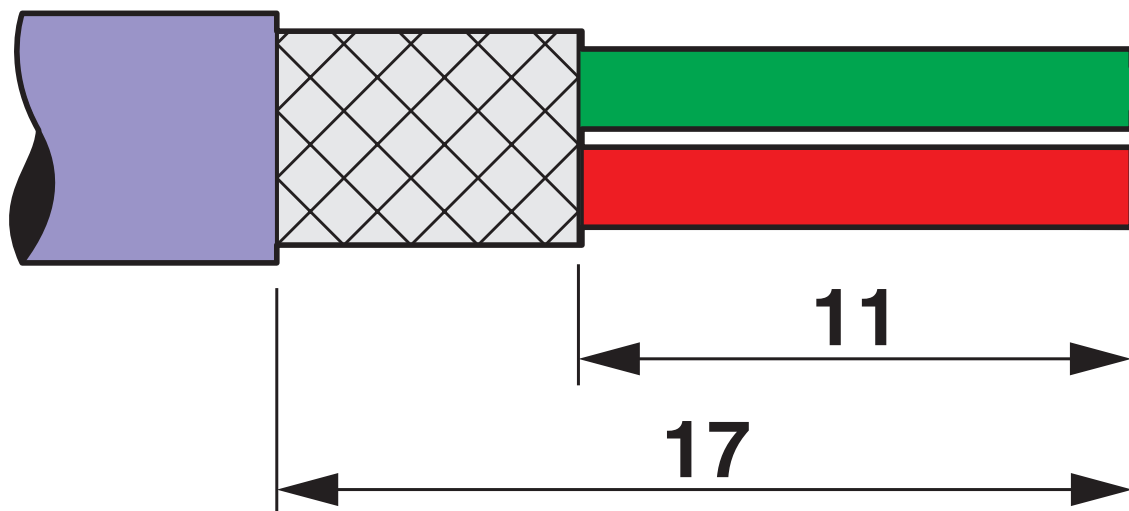
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Schematic diagram



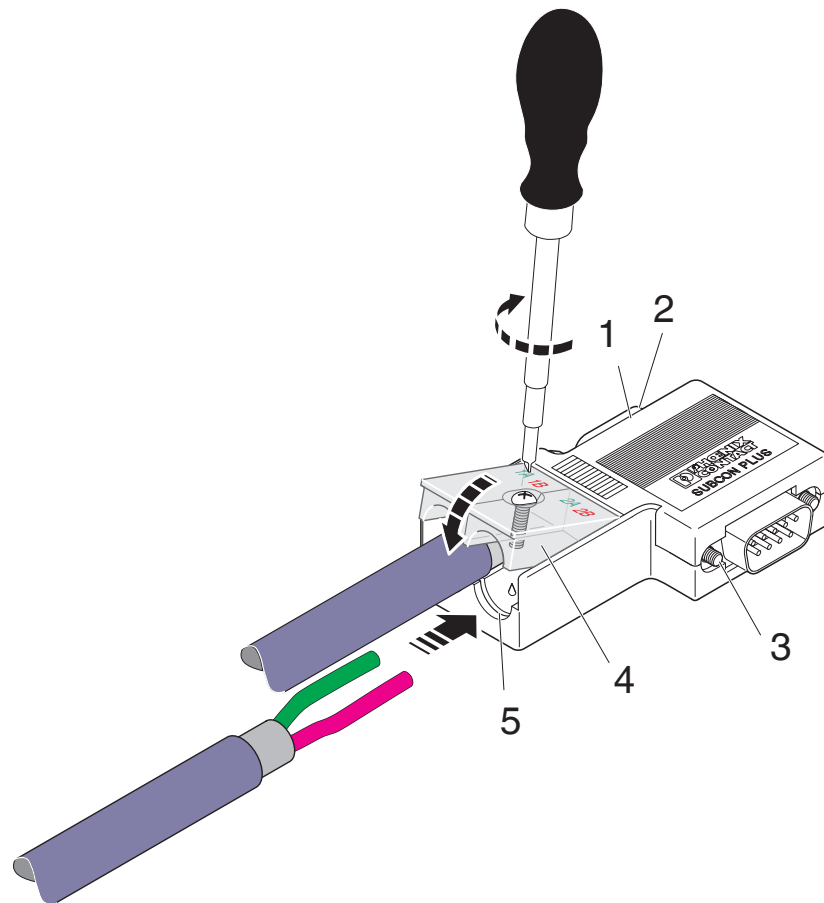
Stripping specifications

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Schematic diagram



Connecting cables

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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2313685>



cUL Recognized
Approval ID: E238705



UL Recognized
Approval ID: E238705



CSA
Approval ID: 2437602

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Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-13.0 | 27440302 |
| ECLASS-15.0 | 27440322 |

ETIM

| | |
|-----------|----------|
| ETIM 10.0 | EC001132 |
|-----------|----------|

UNSPSC

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

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Environmental product compliance

EU RoHS

| | |
|---|------|
| Fulfills EU RoHS substance requirements | Yes |
| Exemption | 6(c) |

China RoHS

| | |
|--|---|
| Environment friendly use period (EFUP) | EFUP-50 |
| | An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required. |

EU REACH SVHC

| | |
|-------------------------------------|--------------------------------------|
| REACH candidate substance (CAS No.) | Lead(CAS: 7439-92-1) |
| SCIP | 6e693fba-aa8c-4817-8c85-6fd1fb0461a7 |

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