

## D-SUB bus connector - SUBCON-PLUS-CAN - 2744694

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D-SUB connector, 9-pos. female connector, two cable entries < 35° to one terminal block row, bus system: CAN, CANopen®, SafetyBUS p up to 1 Mbps, termination resistor can be switched on via slide switch, pin assignment: 2, 3, 7; screw connection terminal blocks

### Product Description

The SUBCON-PLUS-CAN/... D-SUB series is specifically designed for use in CAN systems. Under field conditions, it enables the quick and easy connection of the incoming and outgoing bus line.

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.

A special feature of the 35° angled connector is that the internal connection unit can be turned round. Whether the cable is to be inserted from the right or left can thus be decided on-site.

### Your advantages

- ✓ Separate terminal blocks for bus cables
- ✓ High transmission speed
- ✓ Segment-by-segment startup
- ✓ Flexibility in terms of cable entry selection
- ✓ Assembly under field conditions
- ✓ High level of EMC
- ✓ Suitable for bus cables according to CiA Draft Recommendation 303-1 with an outside diameter of 8 mm
- ✓ Termination resistor can be connected
- ✓ Change to the D-SUB orientation through a reversible connection block



### Key Commercial Data

|                                      |               |
|--------------------------------------|---------------|
| Packing unit                         | 1 pc          |
| GTIN                                 |               |
| GTIN                                 | 4017918821760 |
| Weight per Piece (excluding packing) | 60.000 g      |
| Custom tariff number                 | 85366990      |
| Country of origin                    | Germany       |

## D-SUB bus connector - SUBCON-PLUS-CAN - 2744694

### Technical data

#### Dimensions

|                     |       |
|---------------------|-------|
| Max. cable diameter | 10 mm |
| Min. cable diameter | 6 mm  |
| Width               | 16 mm |
| Height              | 44 mm |
| Length              | 60 mm |

#### Ambient conditions

|   |  |
|---|--|
| 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) |
| Degree of protection                    | IP40   |
|   | IP40   |

#### General

|                             |  |
|-----------------------------|--|
| Nominal voltage $U_N$       | 5 V  |
| Nominal current $I_N$       | 100 mA   |
| Bus system                  | CAN, CANopen, SafetyBus-P  |
| Signal                      | CAN  |
|                             | CANopen®   |
|                             | SafetyBUS p  |
| Insertion/withdrawal cycles | > 200  |
| SUBCON fixing screws        | 4-40 UNC   |
| Tightening torque           | 0.4 Nm   |
| Housing material            | ABS, metal-plated  |
| Pin assignment              | 2, 3, 7  |
| 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%)    |

#### Connection data

|                                       |                                     |
|---------------------------------------|-------------------------------------|
| Connection                            | D-SUB connection                    |
| Number of positions                   | 9                                   |
| Connection method                     | D-SUB socket                        |
| Termination resistor                  | 120 Ω (Can be connected externally) |
| Connection                            | PCB connection                      |
| Connection method                     | Screw connection                    |
| Conductor cross section flexible min. | 0.14 mm <sup>2</sup>                |

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### Technical data

#### Connection data

|  |                      |
|--|----------------------|
| Conductor cross section flexible max.      | 1 mm <sup>2</sup>    |
| Conductor cross section solid min.         | 0.14 mm <sup>2</sup> |
| Conductor cross section solid max.         | 1.5 mm <sup>2</sup>  |
| Min. AWG conductor cross section, flexible | 26                   |
| Max. AWG conductor cross section, flexible | 18                   |
| Conductor cross section AWG min.           | 26                   |
| Conductor cross section AWG max.           | 16                   |
| Stripping length                           | 5 mm                 |
| Tightening torque                          | 0.4 Nm               |

#### Conformance/approvals

|                 |   |
|-----------------|---|
| Designation     | EAC   |
| Identification  | EAC   |
| Designation     | ATEX  |
| Identification  | # II 3 G Ex nA IIC T4 Gc X  |
| Additional text | Please follow the special installation instructions in the documentation! |
| Designation     | Corrosive gas test  |
| Identification  | ISA-S71.04-1985 G3 Harsh Group A  |

#### Standards and Regulations

|   |  |
|---|--|
| Free from substances that could impair the application of coating | according to P-VW 3.10.7 57 65 0 VW-AUDI-Seat central standard |
| Connection in acc. with standard                                  | CUL  |

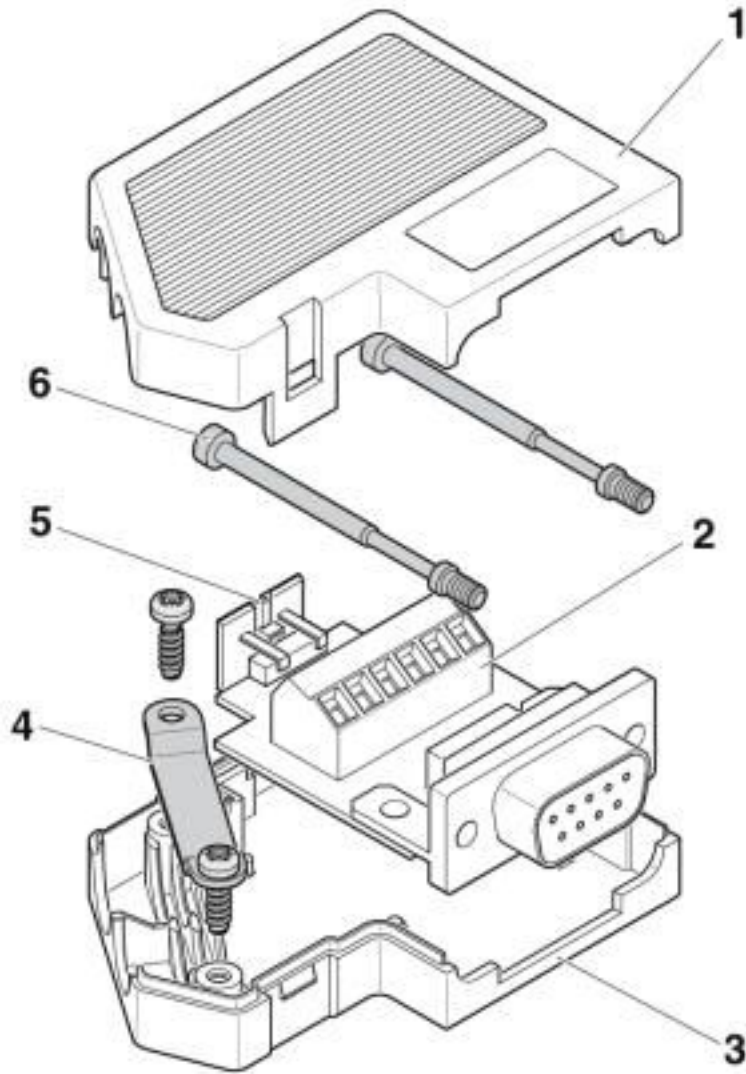
#### Environmental Product Compliance

|            |   |
|------------|---|
| REACH SVHC | Lead 7439-92-1  |
| China RoHS | Environmentally Friendly Use Period = 50 years  |
|            | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

### Drawings

# D-SUB bus connector - SUBCON-PLUS-CAN - 2744694

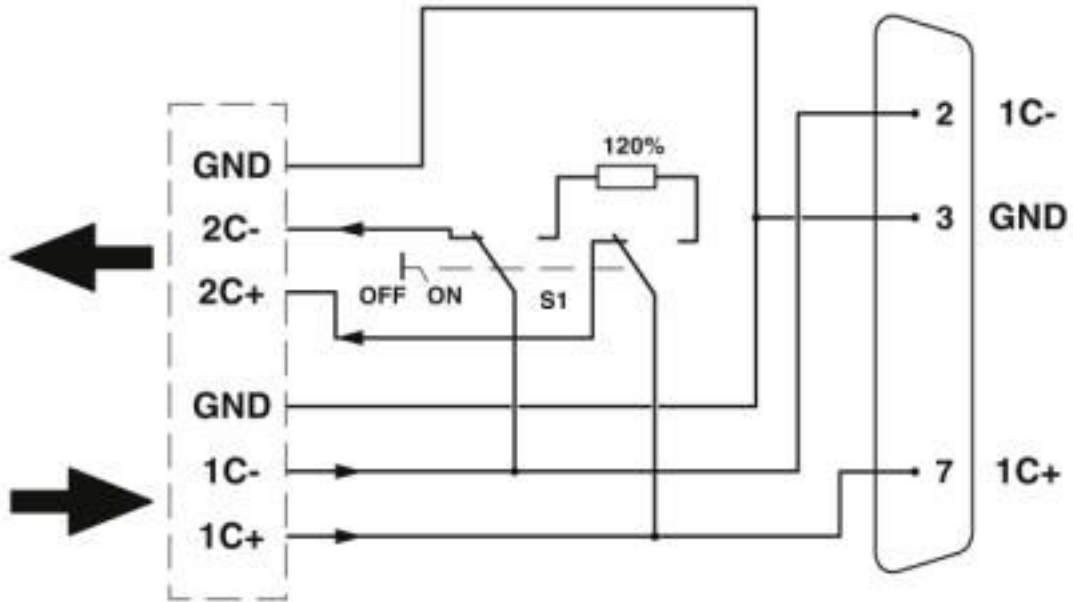
Schematic diagram



Function elements

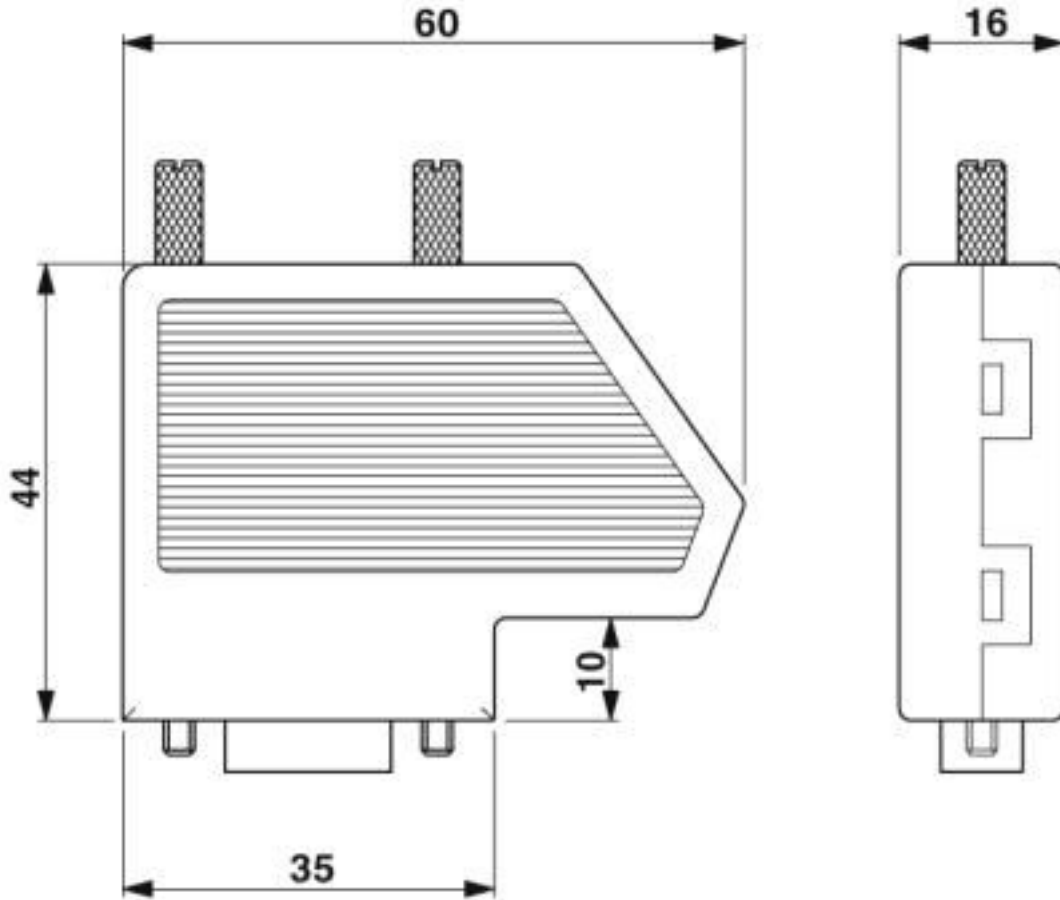
# D-SUB bus connector - SUBCON-PLUS-CAN - 2744694

Block diagram



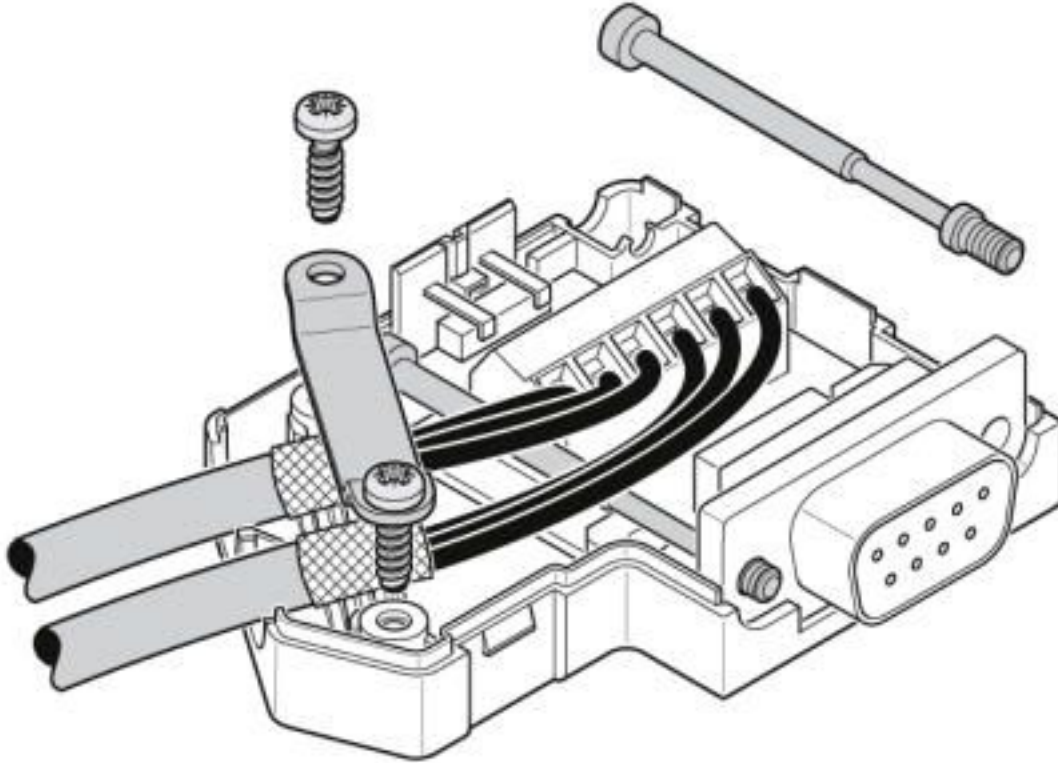
# D-SUB bus connector - SUBCON-PLUS-CAN - 2744694

Dimensional drawing



## D-SUB bus connector - SUBCON-PLUS-CAN - 2744694

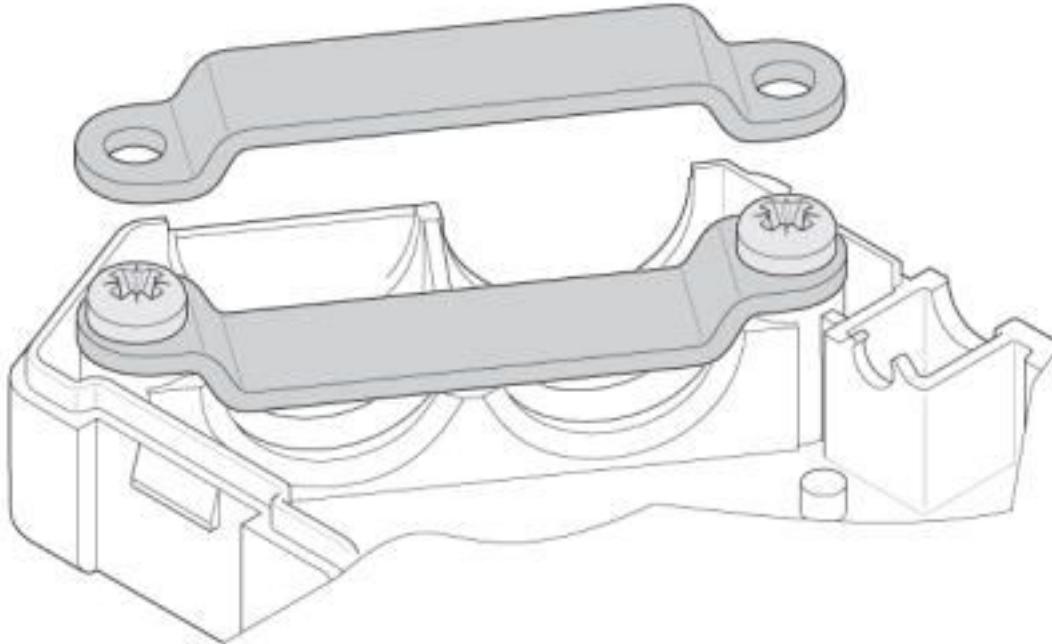
Schematic diagram



Connection of the cables

## D-SUB bus connector - SUBCON-PLUS-CAN - 2744694

Schematic diagram



Clip bracket

### Classifications

eCl@ss

|               |          |
|---------------|----------|
| eCl@ss 10.0.1 | 27440302 |
| eCl@ss 4.0    | 27140800 |
| eCl@ss 4.1    | 27140800 |
| eCl@ss 5.0    | 27143400 |
| eCl@ss 5.1    | 27143400 |
| eCl@ss 6.0    | 27143400 |
| eCl@ss 7.0    | 27440302 |
| eCl@ss 8.0    | 27440302 |
| eCl@ss 9.0    | 27440302 |

ETIM

|          |          |
|----------|----------|
| ETIM 2.0 | EC001132 |
| ETIM 3.0 | EC001132 |
| ETIM 4.0 | EC001132 |
| ETIM 5.0 | EC001132 |
| ETIM 6.0 | EC001132 |



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## Classifications

### ETIM

|          |          |
|----------|----------|
| ETIM 7.0 | EC001132 |
|----------|----------|

### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 30211802 |
| UNSPSC 7.0901 | 39121402 |
| UNSPSC 11     | 39121402 |
| UNSPSC 12.01  | 39121402 |
| UNSPSC 13.2   | 39121522 |
| UNSPSC 18.0   | 39121522 |
| UNSPSC 19.0   | 39121522 |
| UNSPSC 20.0   | 39121522 |
| UNSPSC 21.0   | 39121522 |

## Approvals

### Approvals

#### Approvals


CSA / UL Recognized / cUL Recognized / EAC / cULus Recognized


#### Ex Approvals

#### ATEX

### Approval details

|     |   |   |         |
|-----|---|---|---------|
| CSA |  | <a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a> | 2437602 |
|-----|---|---|---------|

|               |   |   |               |
|---------------|---|---|---------------|
| UL Recognized |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 238705 |
|---------------|---|---|---------------|

|                |   |   |               |
|----------------|---|---|---------------|
| cUL Recognized |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 238705 |
|----------------|---|---|---------------|

## D-SUB bus connector - SUBCON-PLUS-CAN - 2744694

### Approvals



### Accessories

#### Accessories

#### Data plug

#### D-SUB bus connector - SUBCON-PLUS-CAN/PG - 2708119



D-SUB connector, 9-pos. socket, cable entry < 35°, bus system: CAN, CANopen®, SafetyBUS p up to 1 Mbps, with PG D-SUB socket for connecting a programming device, termination resistor can be switched on via slide switch, pin assignment: 2, 3, 7, 9; screw terminal blocks

#### D-SUB bus connector - SUBCON-PLUS-CAN/AX - 2306566



D-SUB connector, 9-pos. female connector, axial version with two cable entries, bus system: CAN, CANopen, SafetyBUS p; pin assignment: 2, 3, 7; screw connection terminal blocks

#### D-SUB bus connector - SUBCON-PLUS-CAN/90/M12 - 2902323



D-SUB plug, 9-pos., socket, assignment: 2, 3, 5, 6, 7, 9; two M12 cable glands (A-coded) under 90°. Bus system: CAN, CANopen®. Termination resistor via separate M12 terminator.

## D-SUB bus connector - SUBCON-PLUS-CAN - 2744694

### Accessories

D-SUB bus connector - SUBCON-PLUS-CAN/35/M12 - 2902325



D-SUB plug, 9-pos., socket, assignment: 2, 3, 5, 6, 7, 9; two M12 cable glands (A-coded) under 35°. Bus system: CAN, CANopen®. Termination resistor via separate M12 terminator.

D-SUB bus connector - SUBCON-PLUS-CAN/AX/M12 - 2902326



D-SUB plug, 9-pos., socket, assignment: 2, 3, 5, 6, 7, 9; two M12 cable glands (A-coded) under 180° (axial). Bus system: CAN, CANopen®. Termination resistor via separate M12 terminator.

### Screwdriver tools

Screwdriver - SZK PH1 VDE - 1205150



Screwdriver, PH crosshead, VDE insulated, size: PH 1 x 80 mm, 2-component grip, with non-slip grip

Screwdriver - SZF 0-0,4X2,5 - 1204504



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.4 x 2.5 x 75 mm, 2-component grip, with non-slip grip

### Stripping tool

Stripping pliers - QUICK WIREFOX 6 - 1204384



Stripping tool for cables with PVC insulation, stripping range: 0.08 to 6 mm<sup>2</sup>, wire cutting up to 6 mm<sup>2</sup> flexible or 4 mm<sup>2</sup> rigid

## D-SUB bus connector - SUBCON-PLUS-CAN - 2744694

### Accessories

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