

# SUBCON-PLUS F2 - D-SUB bus connector



2799490

<https://www.phoenixcontact.com/in/products/2799490>

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D-SUB connector, 9-pos. female connector, two 35° cable entries, bus system: CAN, SUCONET K1, K2 (MOELLER), S-BUS (Saia), J-BUS (Merlin Gerin), pin assignment: 2, 3, 4, 5, 7, 9 to two screw connection terminal blocks

## Product description

Two cable infeeds are often required on the D-SUB plugs used in order to build fieldbus systems with RS-485 interfaces. The SUBCON-PLUS plugs range fulfills this requirement and routes the connection to screw terminal blocks – however, duplicated – for two cables. This means clarity during wiring and it simplifies every startup. These plugs are of course also shielded against EMC influences with a metallized housing. In addition, by placing the connection block in either the upper or lower shell, it is possible to select the cable infeed on site from the right or left .

## Your advantages

- Separate terminal blocks for each cable
- Easy assembly thanks to knurled screws
- Can be used universally
- Assembly under field conditions
- High level of EMC
- Flexibility in terms of cable entry selection
- High transmission speed
- Change to the D-SUB orientation through a reversible connection block

## Commercial data

Item number	2799490
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DNC
Product key	DNC521
Catalog page	Page 450 (C-6-2019)
GTIN	4017918156305
Weight per piece (including packing)	75.4 g
Weight per piece (excluding packing)	55.2 g
Customs tariff number	85366990
Country of origin	DE

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## Technical data

### Notes

#### Utilization restriction

CCCex note	Use in potentially explosive areas is not permitted in China.
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### 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	2, 3, 4, 5, 7, 9 on two terminal blocks

### Electrical properties

Nominal voltage $U_N$	50 V DC
Nominal current $I_N$	100 mA
Transmission medium	Copper

### Connection data

#### D-SUB connection

Connection method	D-SUB socket
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#### PCB connection

Connection method	Screw connection
Stripping length	5 mm
Conductor cross section, rigid min.	0.14 mm <sup>2</sup>
Conductor cross section, rigid max.	1.5 mm <sup>2</sup>
Conductor cross section flexible min.	0.14 mm <sup>2</sup>
Conductor cross section flexible max.	1 mm <sup>2</sup>
Single-wire/terminal point, rigid AWG min.	26
Single-wire/terminal point, rigid AWG max.	16
Min. AWG conductor cross section, flexible	26
Max. AWG conductor cross section, flexible	18

### Interfaces

Bus system	PROFIBUS DP
Signal	RS-485

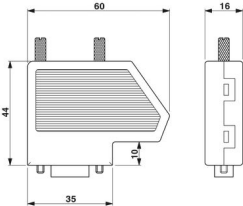
### Dimensions

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Dimensional drawing	
	
Width	16 mm
Height	44 mm
Length	60 mm

### Material specifications

Material Housing	ABS, metal-plated
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### Cable/line

External cable diameter ( )	6 mm ... 10 mm (Incoming bus line)
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### Mechanical properties

Mechanical data	
Insertion/withdrawal cycles	> 200

### 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

EAC	
Identification	EAC

ATEX	
Identification	Ⓔ II 3 G Ex nA IIC T4 Gc X
Note	Please follow the special installation instructions in the documentation!

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

in accordance with VW-AUDI-Seat central standard P-VW 3.10.7  
57 65 0

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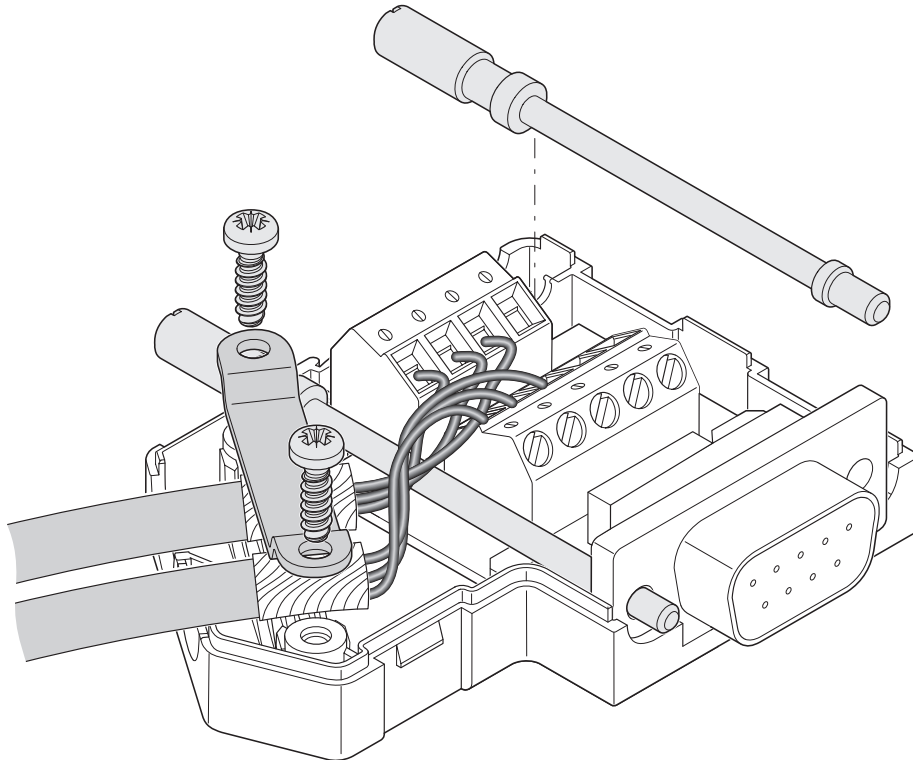
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## Drawings

Schematic diagram



Left-hand side cable entry

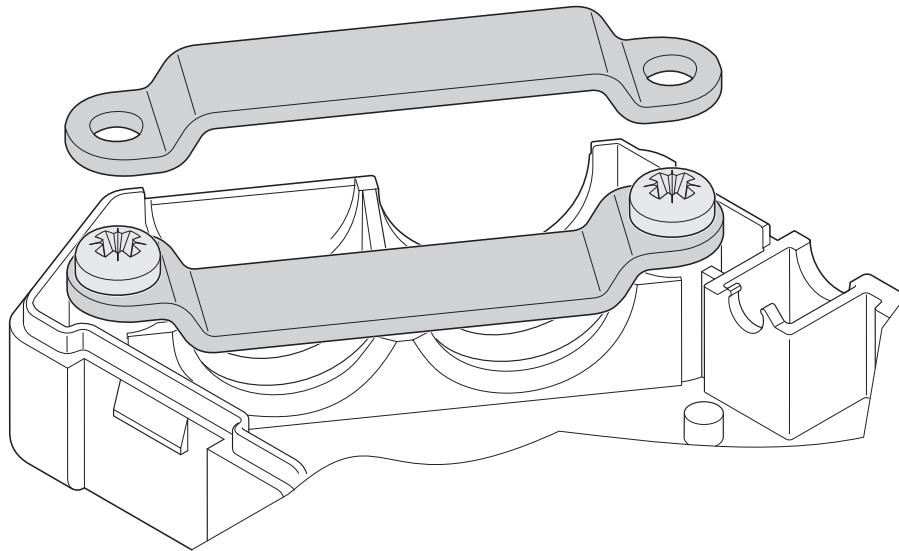
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Schematic diagram



Clip bracket

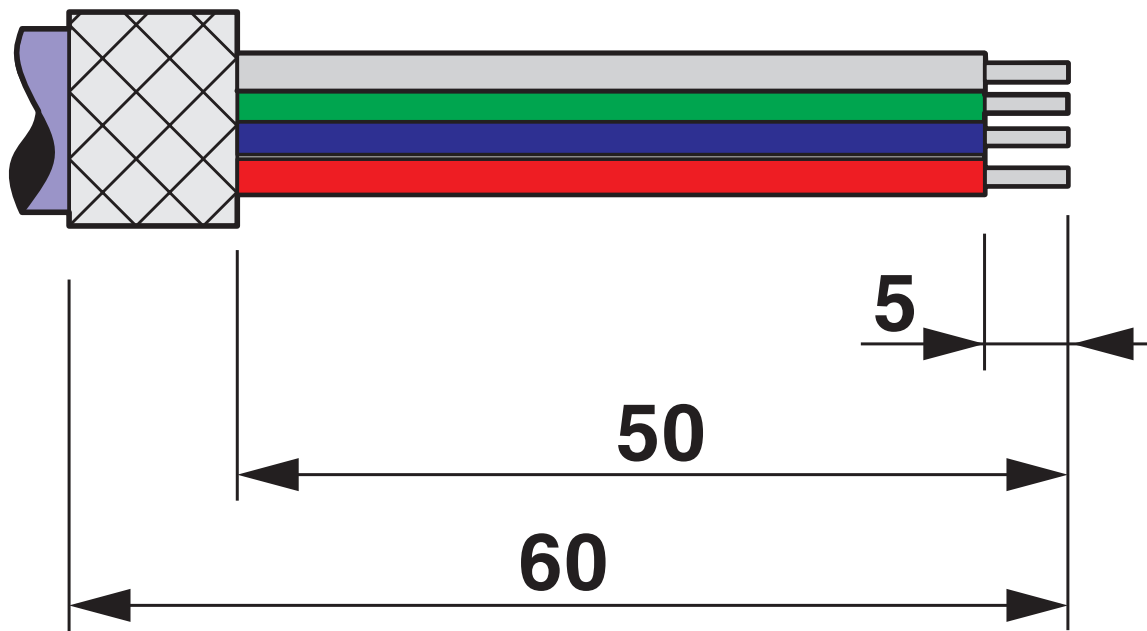
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Schematic diagram



Stripping specifications

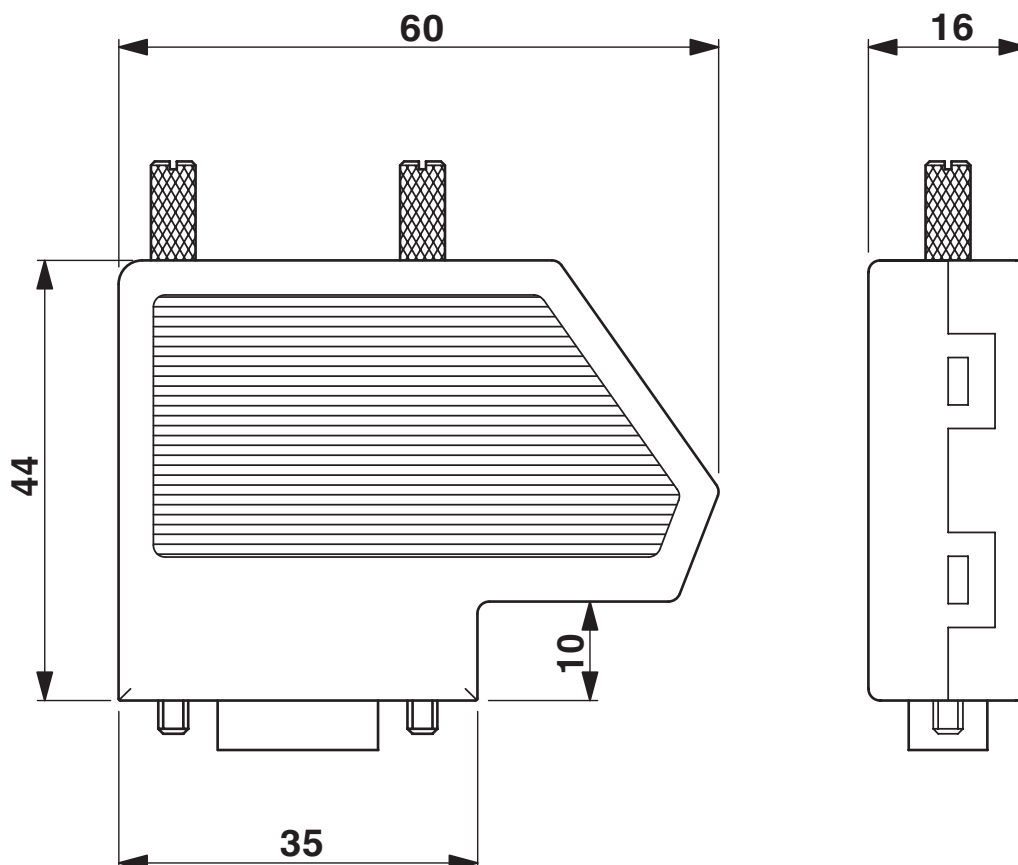
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Dimensional drawing



Dimensional drawing SUBCON-PLUS...



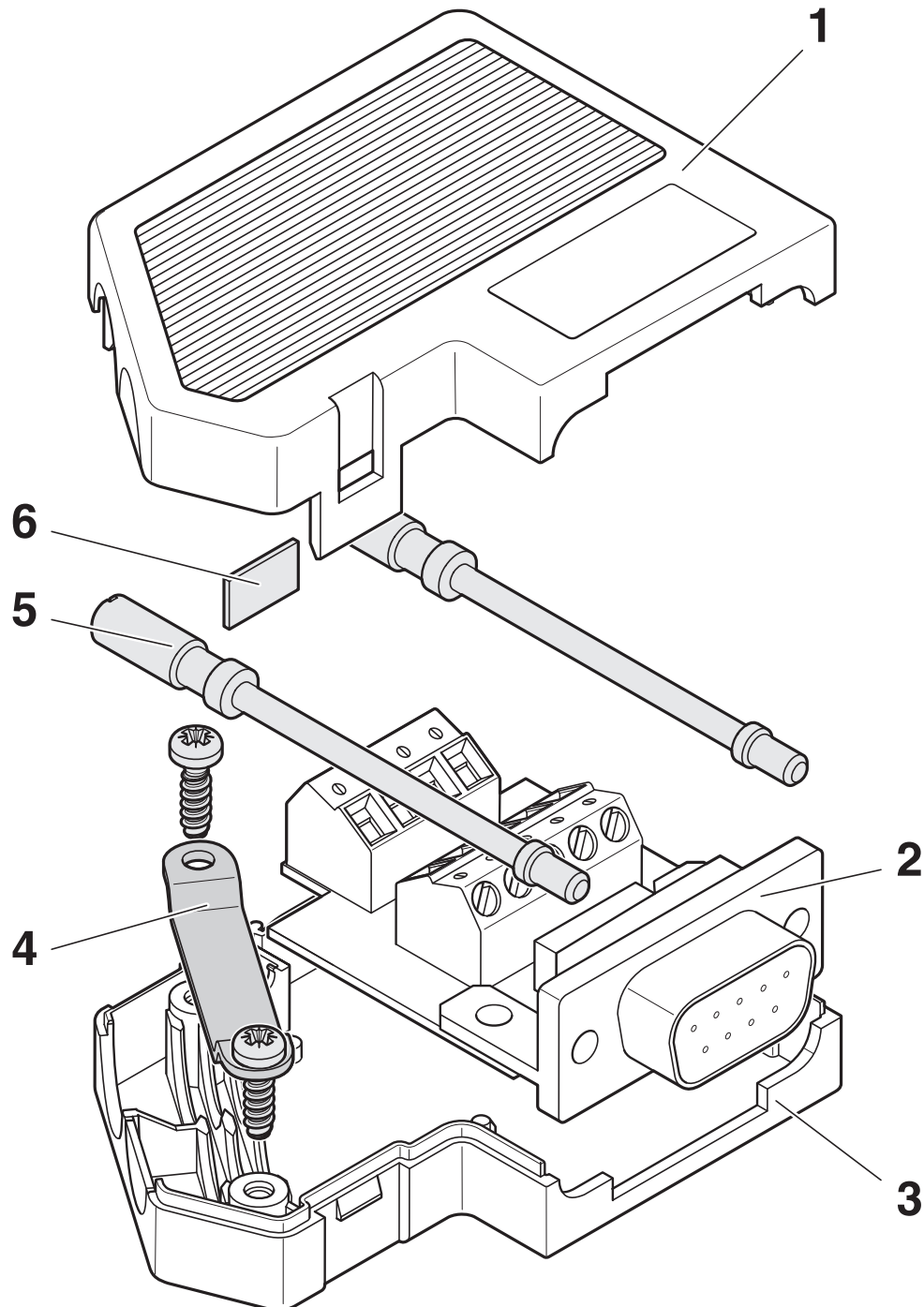
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Schematic diagram



Function elements

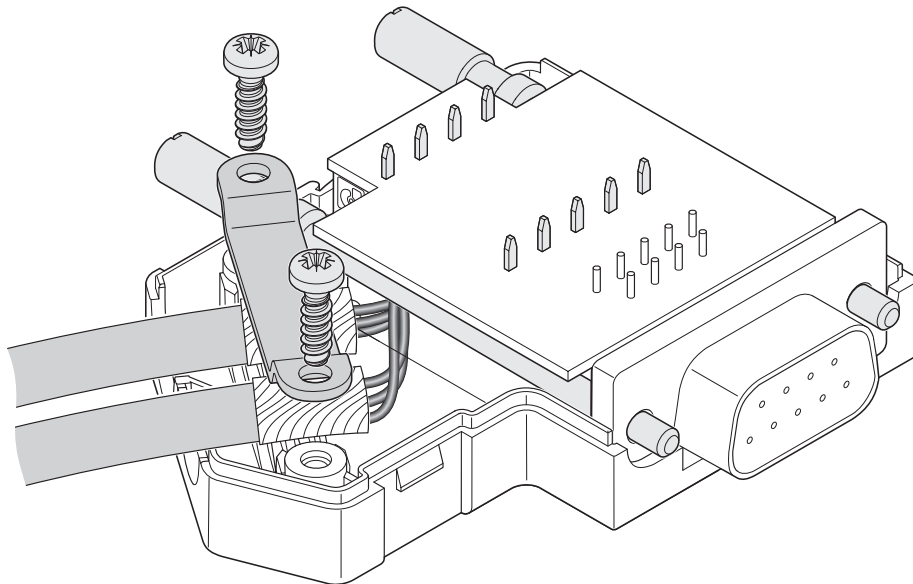
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Schematic diagram



Right-hand side cable entry

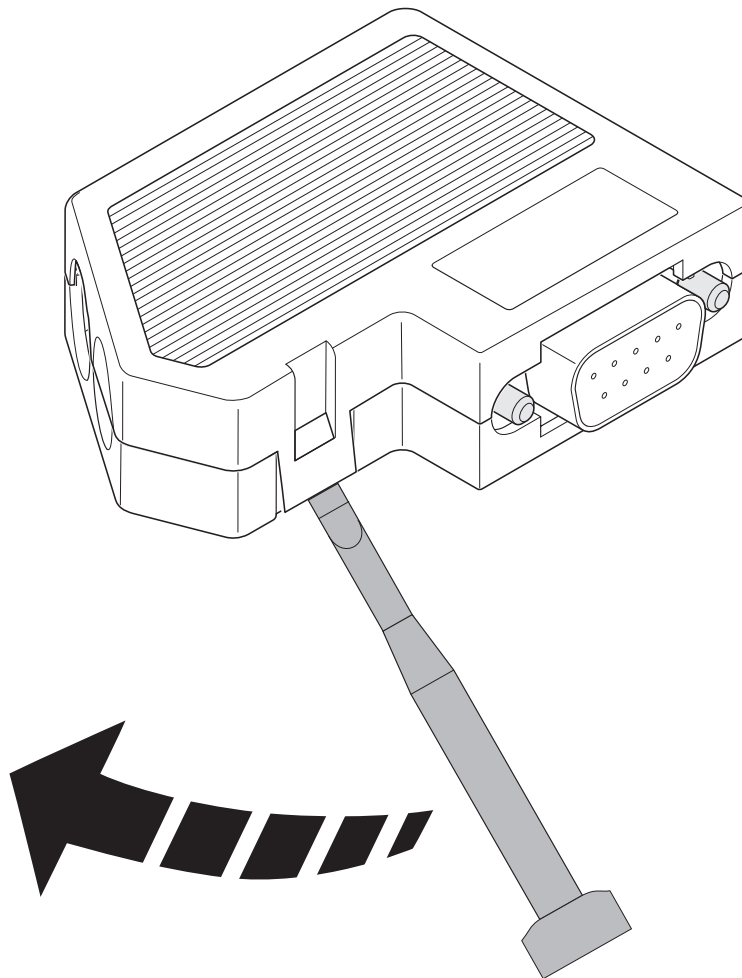
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Schematic diagram



Opening the housing

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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/in/products/2799490>



**cUL Recognized**  
Approval ID: FILE E 238705



**UL Recognized**  
Approval ID: FILE E 238705



**ATEX**  
Approval ID: PxCIF14ATEX2744267X

**cULus Recognized**

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## Classifications

### ECLASS

ECLASS-11.0	27440302
ECLASS-12.0	27440302
ECLASS-13.0	27440302

### ETIM

ETIM 9.0	EC001132
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### 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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