

SUBCON-PLUS F2 - D-SUB bus connector



2799490

<https://www.phoenixcontact.com/us/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



RS-485



Commercial data

Item number	2799490
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DN10

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Product key	DNC521
GTIN	4017918156305
Weight per piece (including packing)	58 g
Weight per piece (excluding packing)	55.2 g
Customs tariff number	85366990
Country of origin	DE

SUBCON-PLUS F2 - D-SUB bus connector



2799490

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

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 ²
Conductor cross-section, rigid max.	1.5 mm ²
Conductor cross-section flexible min.	0.14 mm ²
Conductor cross-section flexible max.	1 mm ²
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
Tightening torque	0.22 Nm ... 0.25 Nm

Interfaces

Bus system	PROFIBUS DP
Signal	RS-485

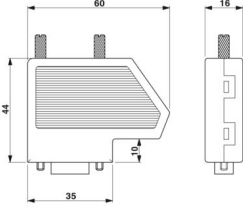
Dimensions

SUBCON-PLUS F2 - D-SUB bus connector



2799490

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

Dimensional drawing	
Width	16 mm
Height	44 mm
Length	60 mm

Material specifications

Color (Housing)	white aluminium (RAL 9006)
Material (Housing)	ABS (metal-plated)

Cable/line

External cable diameter	6 mm ... 10 mm (Incoming bus line)
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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	IP20
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

ATEX

Identification	Ⓔ II 3 G Ex ec IIC T4 Gc
Certificate	PxCIF14ATEX2744267X

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2799490

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Note	Please follow the special installation instructions in the documentation!
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Corrosive gas test

Identification	ISA-S71.04-1985 G3 Harsh Group A
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Standards and regulations

Free from substances that could impair the application of coating	VDMA 24364:2018-05
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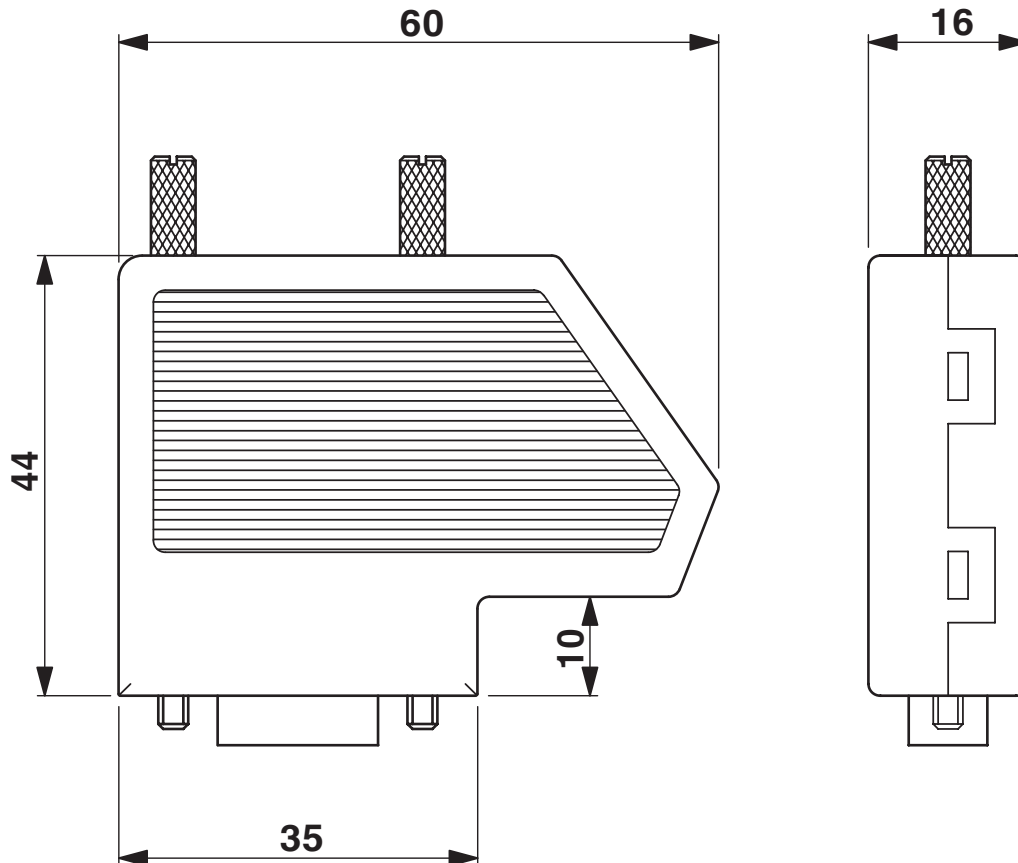
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Drawings

Dimensional drawing



Dimensional drawing SUBCON-PLUS...

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Schematic diagram



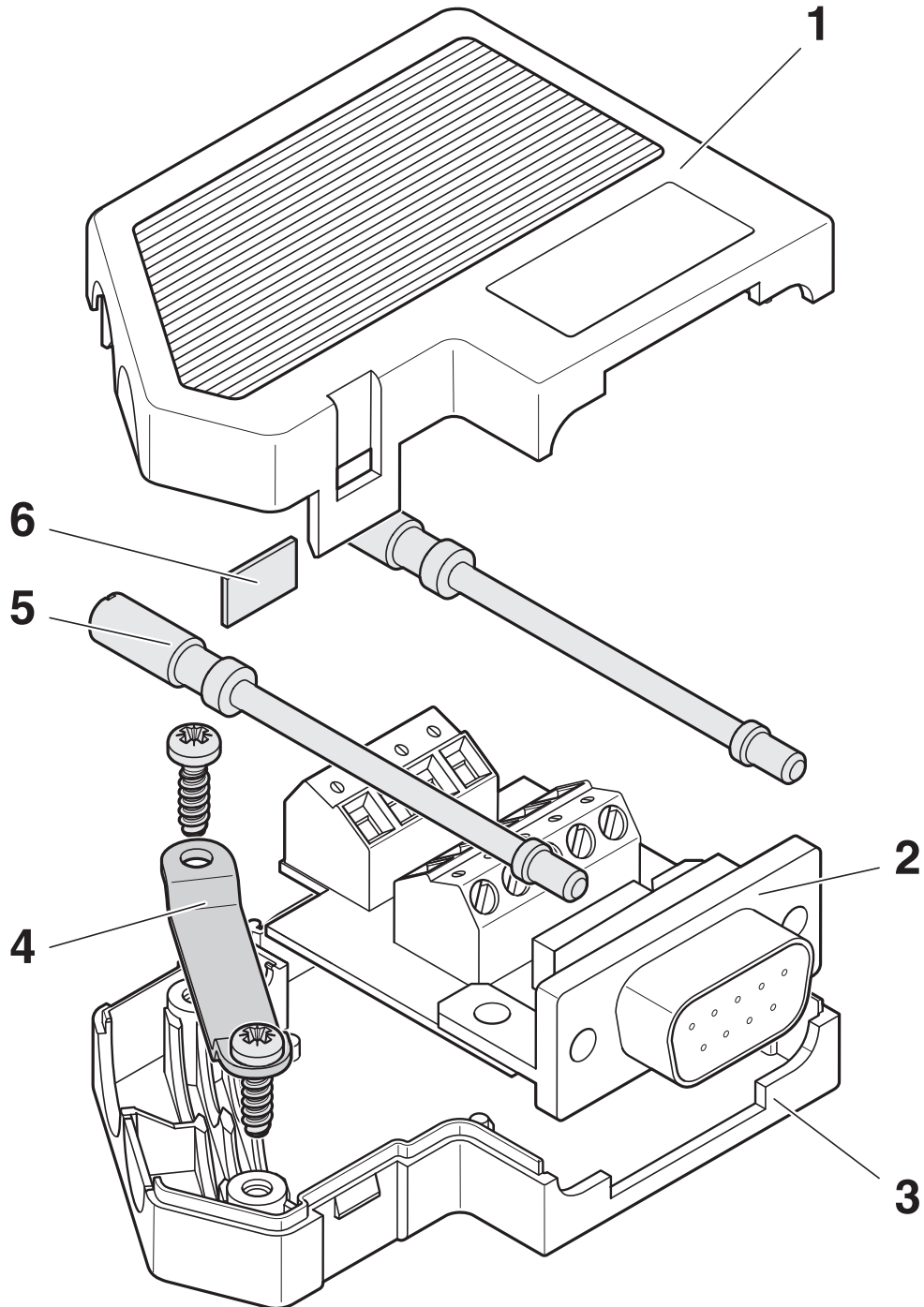
Stripping specifications

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Schematic diagram



Function elements

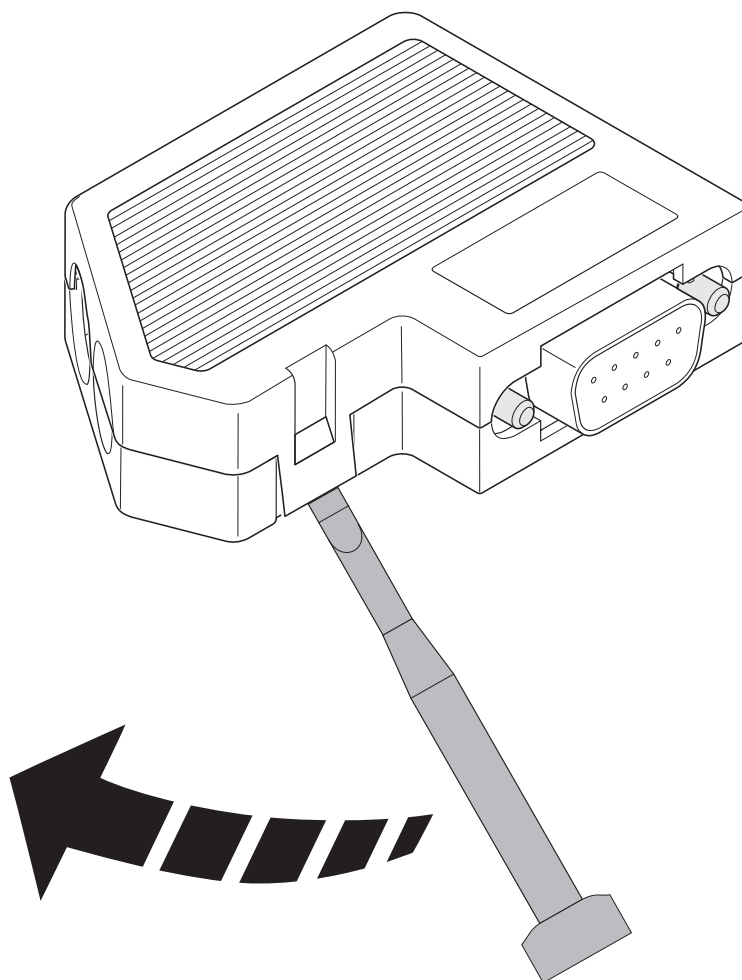
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Schematic diagram



Opening the housing

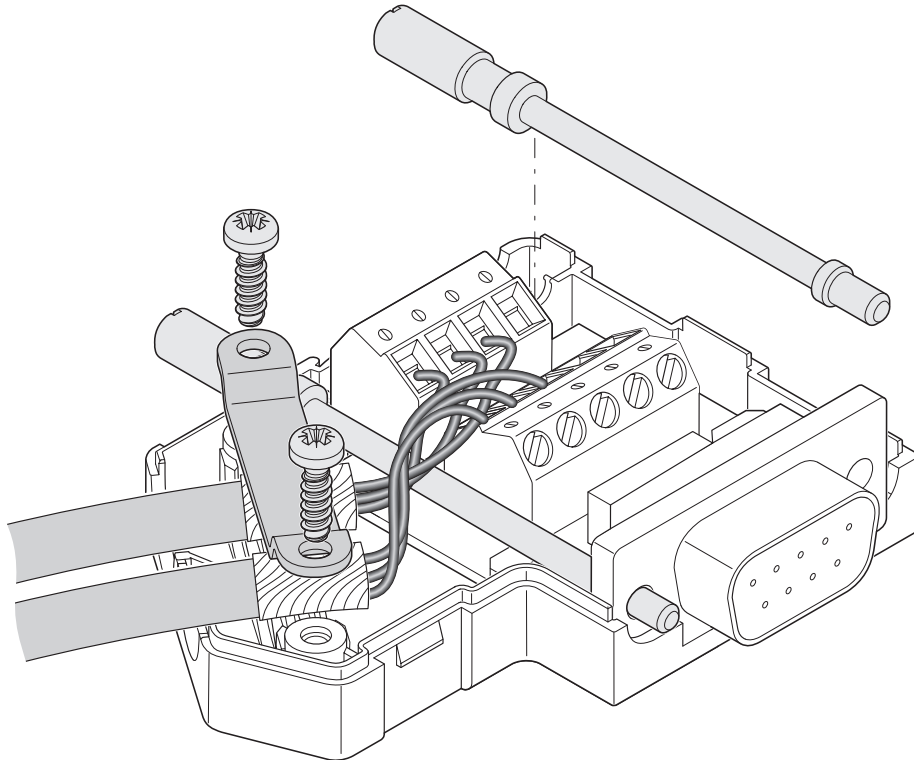
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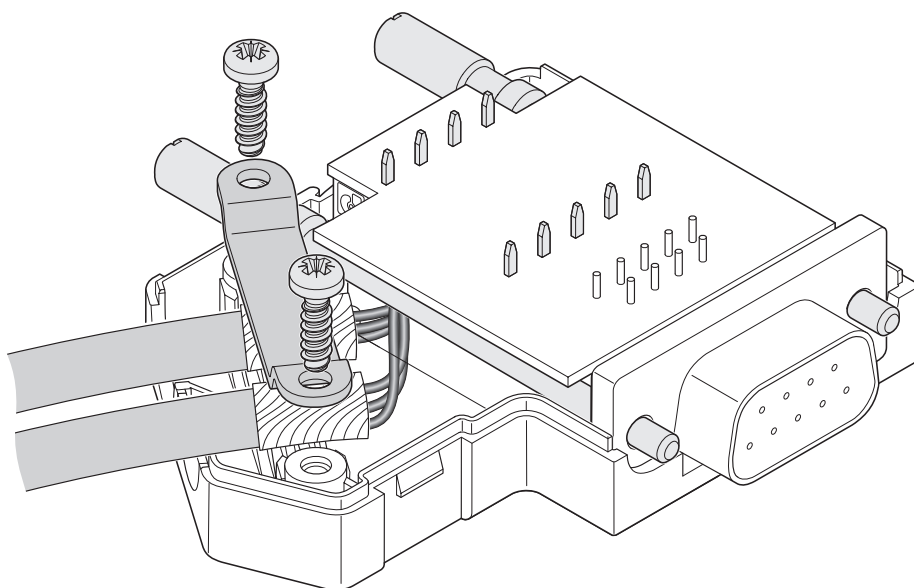
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Schematic diagram



Left-hand side cable entry

Schematic diagram



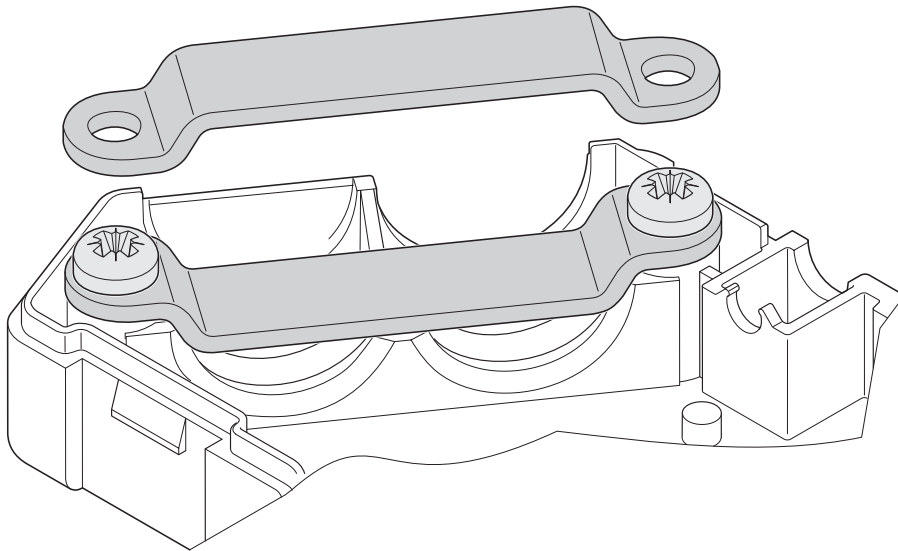
Right-hand side cable entry

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Schematic diagram



Clip bracket

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Classifications

ECLASS

ECLASS-13.0	27440302
ECLASS-15.0	27440322

ETIM

ETIM 10.0	EC001132
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UNSPSC

UNSPSC 21.0	39121400
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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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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EF3.1 Climate Change

CO2e kg	0.382 kg CO2e
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