

# SUBCON-PLUS-F/AX 9 - D-SUB bus connector



2311797

<https://www.phoenixcontact.com/us/products/2311797>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



D-SUB connector, 9-pos. female connector, axial version with two cable entries, universal type for all systems, pin assignment: 1, 2, 3, 4, 5, 6, 7, 8, 9 to screw connection terminal block

## Product description

The 9-pos. version of the SUBCON-... connector range is not just suitable for INTERBUS, but is positively ideal. A whole host of further applications are opened up by having all the connections assigned to their own 1 mm<sup>2</sup> screw terminal block. The range covers SUBCON plugs for point-to-point connections with a cable infeed in 9, 15 and 25-pos. male or female versions.

## Your advantages

- Assembly under field conditions
- Separate terminal blocks for each cable
- High transmission speed
- Easy assembly thanks to knurled screws
- High level of EMC
- Can be used universally



**RS-485**



**RS-232**

**RS-422**

# SUBCON-PLUS-F/AX 9 - D-SUB bus connector



2311797

<https://www.phoenixcontact.com/us/products/2311797>

## Commercial data

Item number	2311797
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DN10
Product key	DNC511
GTIN	4046356293945
Weight per piece (including packing)	38.5 g
Weight per piece (excluding packing)	34 g
Customs tariff number	85366990
Country of origin	DE

# SUBCON-PLUS-F/AX 9 - D-SUB bus connector



2311797

<https://www.phoenixcontact.com/us/products/2311797>

## Technical data

### Notes

#### Utilization restriction

CCCex note	Use in potentially explosive areas is not permitted in China.
------------	---

### 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	All connections are 1:1 on the screw terminal block

### Electrical properties

Nominal voltage $U_N$	50 V
Nominal current $I_N$	100 mA

### Connection data

Tightening torque	... 0.4 Nm
-------------------	------------

#### D-SUB connection

Connection method	D-SUB socket
Tightening torque	0.4 Nm

#### PCB connection

Connection method	Screw connection
Stripping length	4.5 mm
Conductor cross-section, rigid min.	0.14 mm <sup>2</sup>
Conductor cross-section, rigid max.	0.5 mm <sup>2</sup>
Conductor cross-section flexible min.	0.14 mm <sup>2</sup>
Conductor cross-section flexible max.	0.5 mm <sup>2</sup>
Single-wire/terminal point, rigid AWG min.	26
Single-wire/terminal point, rigid AWG max.	20
Min. AWG conductor cross-section, flexible	26
Max. AWG conductor cross-section, flexible	20
Tightening torque	0.12 Nm ... 0.15 Nm

### Interfaces

Bus system	Universal type for all systems
Signal	RS-232
	RS-422
	RS-485

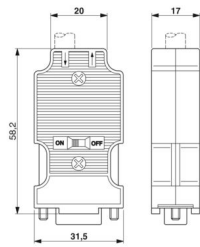
# SUBCON-PLUS-F/AX 9 - D-SUB bus connector



2311797

<https://www.phoenixcontact.com/us/products/2311797>

## Dimensions

Dimensional drawing	
Width	17 mm
Height	31.5 mm
Length	58.2 mm

## Material specifications

Color (Housing)	white aluminium (RAL 9006)
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	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

### Corrosive gas test

# SUBCON-PLUS-F/AX 9 - D-SUB bus connector



2311797

<https://www.phoenixcontact.com/us/products/2311797>

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

## Standards and regulations

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

# SUBCON-PLUS-F/AX 9 - D-SUB bus connector

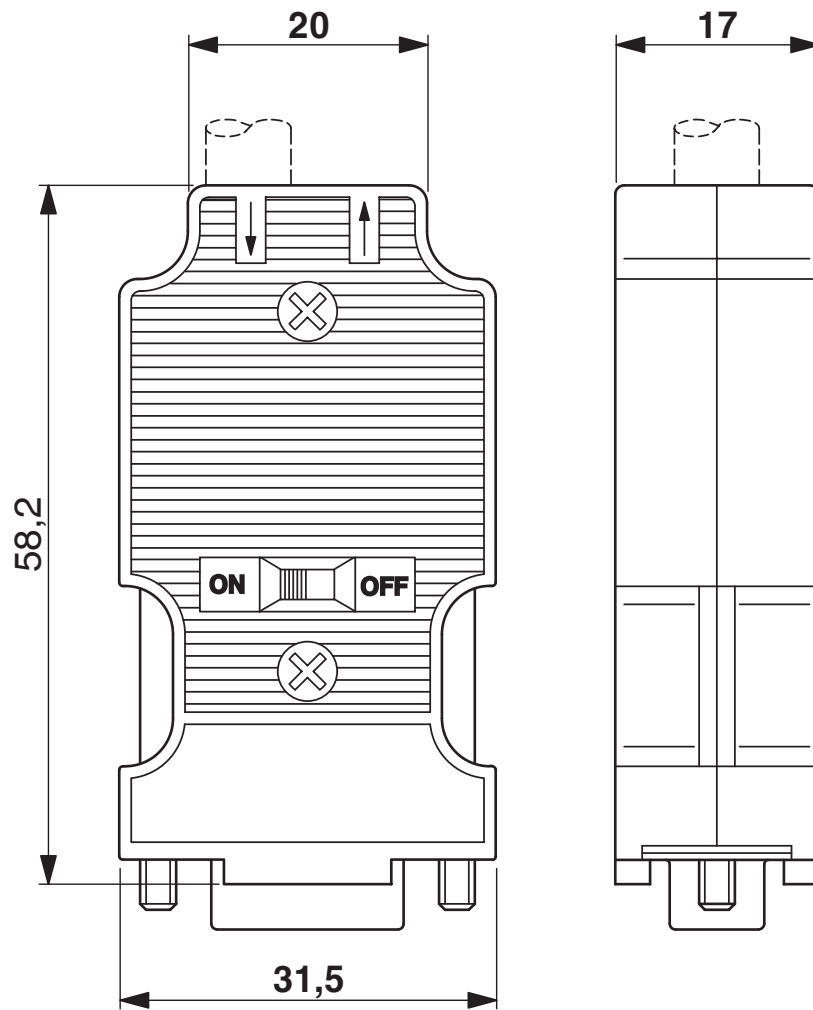


2311797

<https://www.phoenixcontact.com/us/products/2311797>

## Drawings

Dimensional drawing



Dimensional drawing SUBCON-PLUS-.../AX...

# SUBCON-PLUS-F/AX 9 - D-SUB bus connector



2311797

<https://www.phoenixcontact.com/us/products/2311797>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2311797>



**cULus Recognized**  
Approval ID: E238705

# SUBCON-PLUS-F/AX 9 - D-SUB bus connector



2311797

<https://www.phoenixcontact.com/us/products/2311797>

## Classifications

### ECLASS

ECLASS-13.0	27440302
ECLASS-15.0	27440322

### ETIM

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

### UNSPSC

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

# SUBCON-PLUS-F/AX 9 - D-SUB bus connector



2311797

<https://www.phoenixcontact.com/us/products/2311797>

## 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%
-------------------------------------	----------------------------

Phoenix Contact 2026 © - all rights reserved  
<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)