

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's documentation. Our General Terms of Use for Downloads are valid (http://phoenixcontact.com/download)



D-SUB connector, 9-pos., male connector, cable entry < 35°, 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; screw connection terminal blocks

### **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. 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

- ▼ Termination resistor can be connected
- ☑ Cable entry under 35°
- Change to the D-SUB orientation through a reversible connection block
- Metal housing for high level of immunity to interference at maximum transmission speed
- ✓ Vibration and shock resistance according to EN 50155
- Suitable for all common Fast Connect PROFIBUS cables and RS-485 bus lines





### **Key Commercial Data**

Packing unit	1 pc
GTIN	4 017918 960490
GTIN	4017918960490
Sales Key	07

### Technical data

#### Note

Utilization restriction	Use in potentially explosive areas is not permitted in China.

#### **Dimensions**



# Technical data

## Dimensions

Max. cable diameter	8.4 mm
Min. cable diameter	7.6 mm
Width	16.6 mm
Height	39.4 mm
Length	58 mm

### Ambient conditions

Ambient temperature (operation)	-20 °C 75 °C
Ambient temperature (storage/transport)	-25 °C 80 °C
Altitude	$\leq 5000$ m (For restrictions, see the manufacturer's declaration for altitude operation)
Degree of protection	IP40

### General

Nominal voltage U <sub>N</sub>	5 V
Nominal current I <sub>N</sub>	100 mA
Bus system	PROFIBUS DP
Signal	PROFIBUS
Insertion/withdrawal cycles	> 200
SUBCON fixing screws	4-40 UNC
Tightening torque	0.4 Nm
Housing material	ABS, metal-plated
Pin assignment	3, 5, 6, 8
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 connector
Termination resistor	390 Ω
	220 Ω
	390 Ω (Can be connected externally)
Connection	PCB connection
Connection method	Screw connection
Conductor cross section flexible min.	0.14 mm²
Conductor cross section flexible max.	1 mm²
Conductor cross section solid min.	0.14 mm²
Conductor cross section solid max.	1.5 mm²
Min. AWG conductor cross section, flexible	26

10/29/2020 Page 2 / 12



# Technical data

## Connection data

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
Connection	Programming connection
Number of positions	9
Connection method	D-SUB socket

## 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

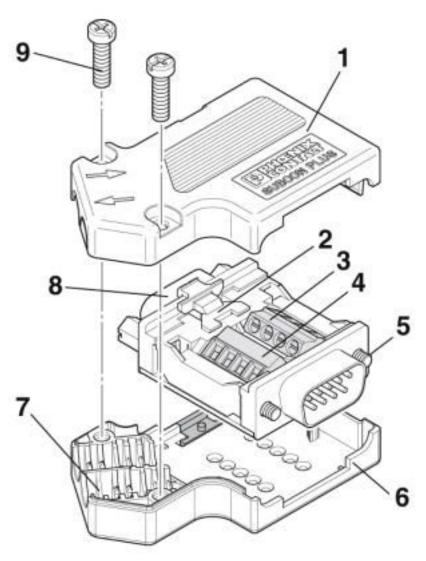
## **Environmental Product Compliance**

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"

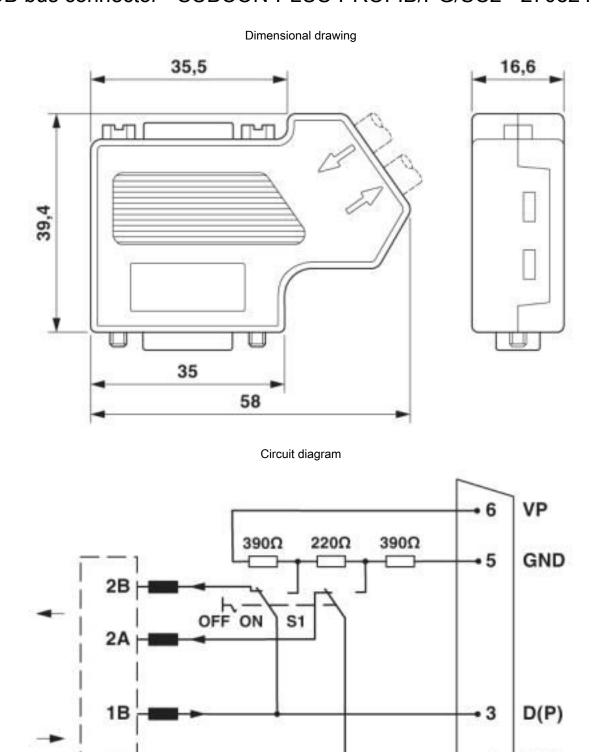
# Drawings









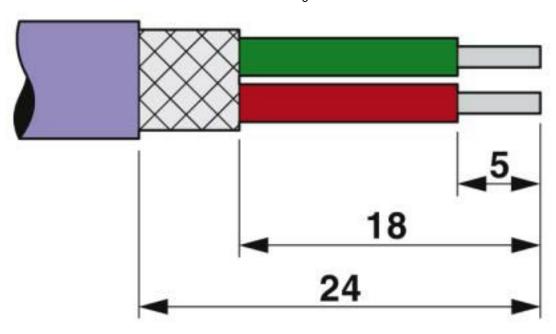


Functional diagram of the connector range SUBCON-PLUS-PROFIB/...

D(N)



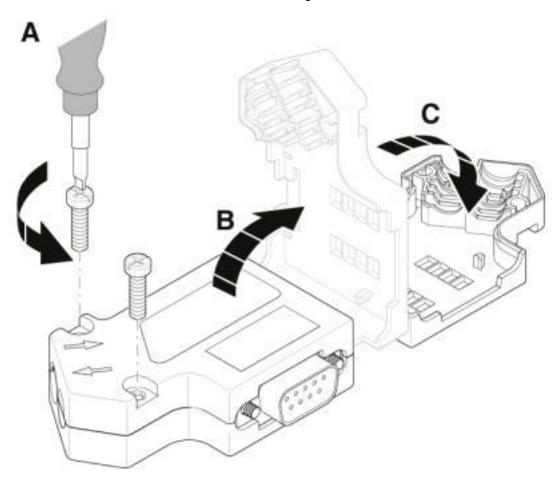
Schematic diagram



Stripping specifications

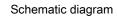


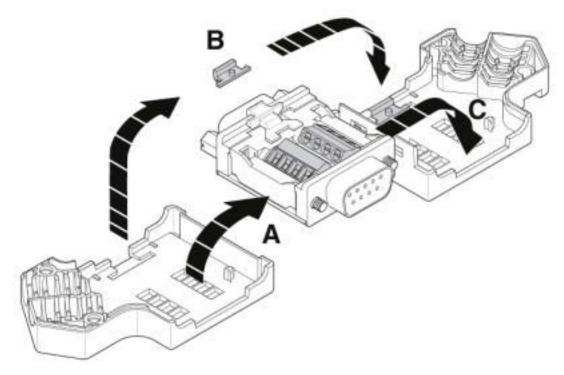




Right-hand side cable entry

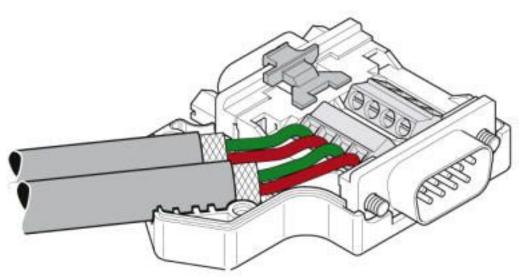






Right-hand side cable entry

Schematic diagram



Left-hand side cable entry

# Classifications

eCl@ss

eCl@ss 10.0.1	27440302
eoi@ss 10.0.1	21440302



# Classifications

## eCl@ss

eCl@ss 11.0	27440302
eCl@ss 4.0	27140800
eCl@ss 4.1	27140800
eCI@ss 5.0	27143400
eCl@ss 5.1	27143400
eCl@ss 6.0	27143400
eCl@ss 7.0	27440302
eCI@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
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



## Approvals

CSA http://www.csagroup.org/services-industries/product-listing/ 2437602

UL Recognized http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm FILE E 238705

CUL Recognized http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm FILE E 238705

EAC EAC-Zulassung

#### Accessories

Accessories

Data cable by the meter

Bus system cable - PSM-CABLE-PROFIB/FC - 2744652



By the meter, Bus system cable, PROFIBUS (12 Mbps), shielded, PVC FR VI/PVC, Violet, 2-wire (1X2XAWG22/1), color single wire: Red, green, cable length: Free entry (1.0 ... 1000.0 m)

### Data plug

Stripping tool - PSM-STRIP-FC/PROFIB - 2744623



Quick stripping tool for PROFIBUS cable, type Fast Connect



#### Accessories

D-SUB bus connector - SUBCON-PLUS-PROFIB/SC2 - 2708232



D-SUB connector, 9-pos., male connector, cable entry < 35°, bus system: PROFIBUS DP up to 12 Mbps, termination resistor can be switched on via slide switch, pin assignment: 3, 5, 6, 8; screw connection terminal blocks

#### D-SUB bus connector - SUBCON-PLUS-PROFIB/90/PG/IDC - 2313685



D-SUB connector, 9-pos., male connector, cable entry < 90°, 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

#### D-SUB bus connector - SUBCON-PLUS-PROFIB/AX/SC - 2744380



D-SUB connector, 9-pos., male connector, axial version with two cable entries, bus system: PROFIBUS DP up to 12 Mbps, termination resistor can be switched on via slide switch, pin assignment: 3, 5, 6, 8; screw connection terminal blocks

### Screwdriver tools

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

### Screwdriver - SZK PH1 VDE - 1205150



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

### Stripping tool



### Accessories

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

### Terminal resistor

Termination resistor - PSI-TERMINATOR-PB-TBUS - 2702636



Active termination resistor for PROFIBUS and RS-485 bus systems, redundant power supply, routing of the supply voltage via DIN rail connector, electrical isolation, switchable termination, integrated programming interface

Phoenix Contact 2020 © - all rights reserved http://www.phoenixcontact.com

PHOENIX CONTACT GmbH & Co. KG Flachsmarktstr. 8 32825 Blomberg Germany Tel. +49 5235 300

Fax +49 5235 3 41200

http://www.phoenixcontact.com