

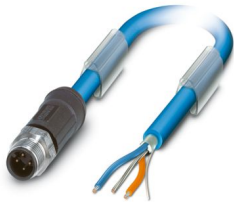
# SAC-3P-M12MS/ 2,0-961 VA - Bus system cable



1419092

<https://www.phoenixcontact.com/us/products/1419092>

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.



Bus system cable, PROFIBUS PA (31.25 kbps), 3-position, PVC, blue RAL 5015, shielded, Plug straight M12, coding: A, on free cable end, cable length: 2 m, For Ex area with high-grade steel knurl

## Commercial data

Item number	1419092
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF04
Product key	AF1CCG
GTIN	4046356541596
Weight per piece (including packing)	153.7 g
Weight per piece (excluding packing)	144.1 g
Customs tariff number	85444290
Country of origin	PL

# SAC-3P-M12MS/ 2,0-961 VA - Bus system cable



1419092

<https://www.phoenixcontact.com/us/products/1419092>

## Technical data

### Product properties

Product type	Data cable preassembled
Application	Process technology
Number of positions	3
No. of cable outlets	1
Shielded	yes
Coding	A

### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

### Interfaces

Bus system	PROFIBUS PA
Signal type/category	PROFIBUS PA, 31.25 kbps

### Signaling

Status display	no
Status display present	no

### Electrical properties

Nominal voltage $U_N$	48 V AC
	60 V DC
Nominal current $I_N$	4 A
Transmission medium	Copper
Transmission speed	31.25 kbps

### Mechanical properties

#### Mechanical data

Insertion/withdrawal cycles	$\geq 100$
-----------------------------	------------

### Material specifications

Flammability rating according to UL 94	HB
Seal material	NBR

### Connection data

#### Connection assignment

Contact   Color (signal designation)   Contact (optional)	1 (Plug)   OG (DATA+)
	3 (Plug)   BU (DATA-)
	4 (Plug)   SR (shield)

### Connector

# SAC-3P-M12MS/ 2,0-961 VA - Bus system cable



1419092

<https://www.phoenixcontact.com/us/products/1419092>

## Connection 1

Type	Plug straight M12
Number of positions	3
Coding type	A (Standard)
Material	CuSn (Contact) Ni/Au (Contact surface) TPU GF (Contact carrier) TPU, hardly inflammable, self-extinguishing (Grip body) Stainless steel (Screw connection)
Ambient temperature (operation)	-25 °C ... 90 °C

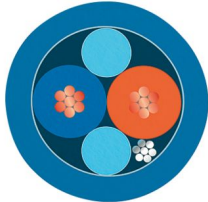
## Connection 2

Type	free cable end
------	----------------

## Cable/line

Cable length	2 m
--------------	-----

## Fieldbus FOUNDATION/PROFIBUS PA, blue [961]

Dimensional drawing	
Cable weight	56.552 kg/km
Number of positions	2
Shielded	yes
Cable type	Fieldbus FOUNDATION/PROFIBUS PA, blue [961]
Conductor structure	2xAWG18/7 + 1xAWG20/7
Signal speed	0.66 c
Conductor structure signal line	7x 0.40 mm
AWG signal line	18
Conductor cross-section	2x 0.75 mm <sup>2</sup> (Signal line) 1x 0.5 mm <sup>2</sup> (Drain wire)
Wire diameter incl. insulation	2.24 mm ±0.05 mm
External cable diameter	7.50 mm ±0.25 mm
Outer sheath, material	PVC
External sheath, color	blue RAL 5015
Conductor material	Tin-plated Cu litz wires
Material wire insulation	PO (Signal line)
Single wire, color	blue, orange
Thickness, insulation	0.50 mm

# SAC-3P-M12MS/ 2,0-961 VA - Bus system cable



1419092

<https://www.phoenixcontact.com/us/products/1419092>

Thickness, outer sheath	1.00 mm
Twisted pairs	2 cores to the pair
Overall twist	One pair with one drain wire and fillers for core
Optical shield covering	100 %
Max. conductor resistance	≤ 19.35 Ω/km (Signal line) 26 Ω/km (shield)
Cable capacity	147 pF/m (at 1 kHz, core/shield) ≤ 3.94 pF/m (capacitance unbalance)
Working capacitance	78 nF (at 1 kHz)
Cable impedance	100 Ω ±20 % (At 31.25 kHz)
Nominal voltage, cable	300 V
Smallest bending radius, fixed installation	75 mm
Tensile strength	260 N
Shield attenuation	3.00 dB/km (at 39 kHz)
Flame resistance	UL 1685 (CSA FT 4) UL 1685 (vertical tray) UL 1666 (riser)
Special properties	UL standards PLTC-ER and ITC
Ambient temperature (operation)	-40 °C ... 105 °C (cable, fixed installation)

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP65
	IP67
	IP68
	IP69K

# SAC-3P-M12MS/ 2,0-961 VA - Bus system cable

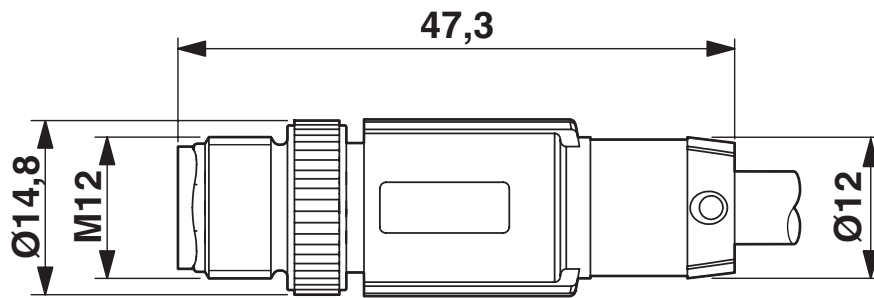


1419092

<https://www.phoenixcontact.com/us/products/1419092>

## Drawings

Dimensional drawing



Plug, M12 x 1, straight, shielded

# SAC-3P-M12MS/ 2,0-961 VA - Bus system cable

1419092

<https://www.phoenixcontact.com/us/products/1419092>

Schematic diagram



Pin assignment M12 plug, 3-pos., A-coded, view male side

Circuit diagram



Contact assignment of the M12 plug

# SAC-3P-M12MS/ 2,0-961 VA - Bus system cable



1419092

<https://www.phoenixcontact.com/us/products/1419092>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1419092>



**EAC-RoHS**

Approval ID: RU D-DE.HB35.B.00387



**cULus Listed**

Approval ID: E221474

# SAC-3P-M12MS/ 2,0-961 VA - Bus system cable



1419092

<https://www.phoenixcontact.com/us/products/1419092>

## Classifications

### ECLASS

ECLASS-13.0	27060307
ECLASS-15.0	27060307

### UNSPSC

UNSPSC 21.0	26121600
-------------	----------

# SAC-3P-M12MS/ 2,0-961 VA - Bus system cable



1419092

<https://www.phoenixcontact.com/us/products/1419092>

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

### EF3.1 Climate Change

CO2e kg	1.639 kg CO2e
---------	---------------

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)