

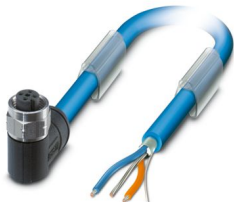
SAC-3P-15,0-961/M12FR VA - Bus system cable



1419090

<https://www.phoenixcontact.com/us/products/1419090>

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, free cable end, on Socket angled M12, coding: A, cable length: 15 m, For Ex area with high-grade steel knurl

Commercial data

Item number	1419090
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF04
Product key	BF1CCG
Catalog page	Page 430 (C-2-2019)
GTIN	4046356541572
Weight per piece (including packing)	953 g
Weight per piece (excluding packing)	953 g
Customs tariff number	85444290
Country of origin	PL

SAC-3P-15,0-961/M12FR VA - Bus system cable



1419090

<https://www.phoenixcontact.com/us/products/1419090>

Technical data

Notes

General	For applications in circuits of intrinsic safety protection type "i". Electrical values following EN 60079-14.
---------	---

Product properties

Product type	Data cable preassembled
Application	Process technology
Sensor type	PROFIBUS PA
Number of positions	3
No. of cable outlets	1
Shielded	yes
Coding	B

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

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 100
-----------------------------	------------

Material specifications

Flammability rating according to UL 94	HB
Seal material	NBR

Connection data

Pin assignment

1 (Socket) | OG (DATA+)

SAC-3P-15,0-961/M12FR VA - Bus system cable



1419090

<https://www.phoenixcontact.com/us/products/1419090>

Contact | Color (signal designation) | Contact (optional)

3 (Socket) | BU (DATA-)

4 (Socket) | SR (shield)

Connector

Connection 1

Type

free cable end

Connection 2

Type

free cable end

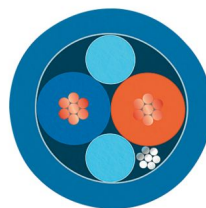
Cable/line

Cable length

15 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 mm² (Signal line)

1x 0.5 mm² (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

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 %

SAC-3P-15,0-961/M12FR VA - Bus system cable



1419090

<https://www.phoenixcontact.com/us/products/1419090>

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-15,0-961/M12FR VA - Bus system cable

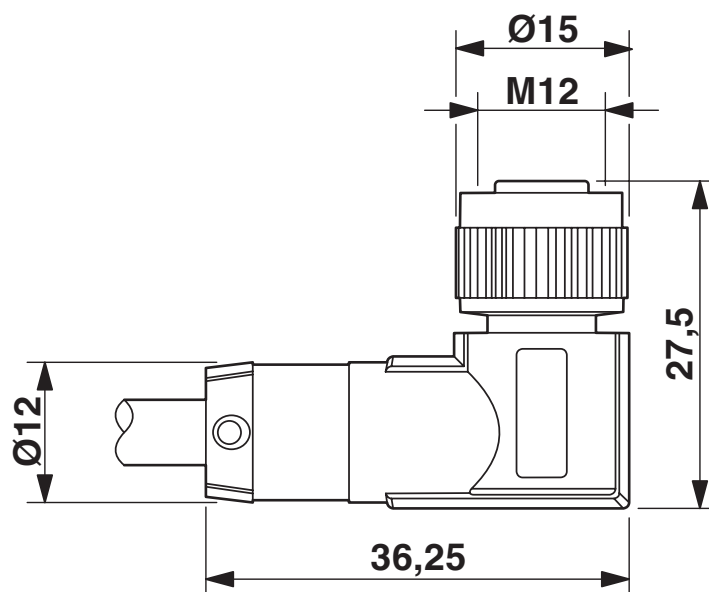
1419090

<https://www.phoenixcontact.com/us/products/1419090>



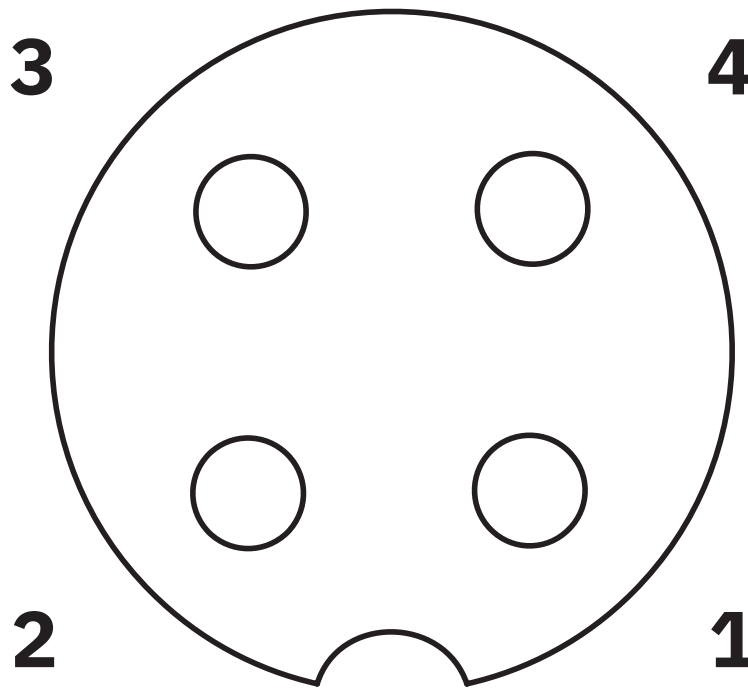
Drawings

Dimensional drawing



M12 x 1 socket, angled

Schematic diagram



Pin assignment M12 socket, 3-pos., A-coded, view female side

SAC-3P-15,0-961/M12FR VA - Bus system cable



1419090

<https://www.phoenixcontact.com/us/products/1419090>

Classifications

ECLASS

ECLASS-11.0	27060307
ECLASS-12.0	27060307
ECLASS-13.0	27060307

ETIM

ETIM 9.0	EC001855
----------	----------

UNSPSC

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

SAC-3P-15,0-961/M12FR VA - Bus system cable



1419090
<https://www.phoenixcontact.com/us/products/1419090>

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 2024 © - 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