

1521575

https://www.phoenixcontact.com/us/products/1521575

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.



Connector, Universal, 4-position, Plug straight M12 SPEEDCON, coding: A, Insulation displacement connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 3.5 mm  $\dots$  6 mm

## Your advantages

- · Safe use in the field, thanks to a high degree of protection
- · Save time, thanks to installation with SPEEDCON fast locking system
- · Insulation displacement connection: innovative and time-saving assembly without stripping the single wire

#### Commercial data

Item number	1521575
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF31
Product key	BF2CCA
Catalog page	Page 201 (C-6-2019)
GTIN	4017918953072
Weight per piece (including packing)	13.7 g
Weight per piece (excluding packing)	13.2 g
Customs tariff number	85366990
Country of origin	DE



1521575

https://www.phoenixcontact.com/us/products/1521575

## Technical data

#### Notes

General	NOTE: Observe the permissible bending radii when laying
	conductors, since the degree of protection may be put in jeopardy if the bending forces are too high. Alleviate mechanical
	loads upstream of the connector, e.g. by using cable ties.

### Mounting

Assembly instructions	AWG 20 conductor cross section upon request
Connection method	Insulation displacement connection

### Product properties

Product type	Circular connector (cable-side)
Sensor type	Universal
Number of positions	4
No. of cable outlets	1
Shielded	no
Coding	A
Cable outlet	straight
Insulation characteristics	
Overvoltage category	III

3

### Dimensions

Degree of pollution

Dimensional drawing	13
Length	54 mm
Wrench size, union nut	13 mm
External dimensions	
Outside diameter	3.5 mm 6 mm
Housing	
Diameter housing	16.3 mm
aterial specifications	
Flammability rating according to UL 94	V0
Seal material	NBR

PA 6

CuSn

Material of grip body

Contact material



1521575

https://www.phoenixcontact.com/us/products/1521575

Contact surface material	Ni/Au
Contact carrier material	TPU
Material for screw connection	Zinc die-cast, nickel-plated
Wire insulation material	PVC / PE / PP / rubber

### Connection data

#### Conductor connection

Connection method	Insulation displacement connection
Connection cross section	0.14 mm² 0.34 mm²
Connection cross section AWG	26 22
Tightening torque	0.4 Nm (M12 knurl)
	1.2 Nm (Pressure nut)

#### Pin assignment

Contact   Color (signal designation)   Contact (optional)	1 = BN
	2 = WH
	3 = BU
	4 = BK

## Electrical properties

Rated surge voltage	2.5 kV
Contact resistance	≤ 5 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U <sub>N</sub>	125 V AC
	125 V DC
Nominal current I <sub>N</sub>	4 A

### Mechanical properties

### Mechanical data

monanical data		
	Insertion/withdrawal cycles	≥ 100

## Connector

## Connection 1

Head design	Plug
Head cable outlet	straight
Head thread type	M12
Head locking type	SPEEDCON
Coding	A

### Cable/line

Signal type/category	Universal
External cable diameter ()	3.5 mm 6 mm

### Environmental and real-life conditions



1521575

https://www.phoenixcontact.com/us/products/1521575

#### Ambient conditions

Degree of protection	IP65
	IP67
Ambient temperature (operation)	-25 °C 80 °C (Plug / socket)
Ambient temperature (assembly)	-5 °C 50 °C (During assembly)

### Standards and regulations

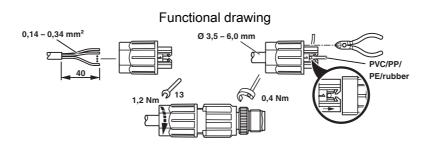
Standard designa	ion	M12 connector
Standards/specific	eations	according to IEC 61076-2-101



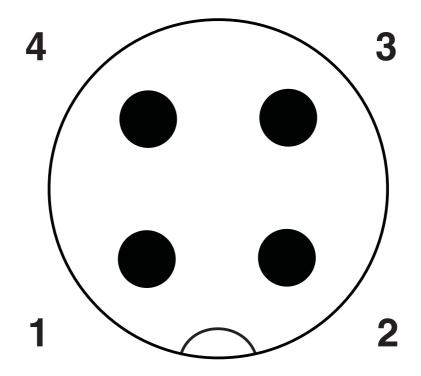
https://www.phoenixcontact.com/us/products/1521575



# **Drawings**



Schematic diagram



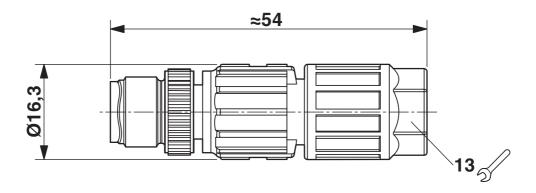
Pin assignment M12 plug, 4-pos., A-coded, view plug side



1521575

https://www.phoenixcontact.com/us/products/1521575

## Dimensional drawing



Plug, M12 x 1, straight



1521575

https://www.phoenixcontact.com/us/products/1521575

## **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1521575

.71	<b>cUL Recognized</b> Approval ID: FILE E 11897	6			
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		300 V	4 A	-	-

UL Recognized Approval ID: FILE E 118976					
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		300 V	4 A	-	-

EHC	EAC
LIIL	Approval ID: RU C-DE.BL08.B.00511

cULus Recognized



1521575

https://www.phoenixcontact.com/us/products/1521575

# Classifications

### **ECLASS**

	ECLASS-11.0	27440102		
	ECLASS-12.0	27440116		
	ECLASS-13.0	27440116		
ETIM				
	ETIM 9.0	EC002635		

### **UNSPSC**

UNSPSC 21.0	39121400



1521575

https://www.phoenixcontact.com/us/products/1521575

# Environmental product compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e	
	No hazardous substances above threshold values	



1521575

https://www.phoenixcontact.com/us/products/1521575

#### Accessories

### PROT-M12 FS-PA-CHAIN - Sealing cap

1430873

https://www.phoenixcontact.com/us/products/1430873

 $\,$  M12 sealing cap made of plastic with fixing band, for sensor cables, for free M12 plugs



### SAC-4P-100,0-PUR/0,25 - Cable reel

1501692

https://www.phoenixcontact.com/us/products/1501692



By the meter, Cable reel, PUR halogen-free, black-gray RAL 7021, 4-wire, color single wire: brown, white, blue, black, cable length: 100 m



1521575

https://www.phoenixcontact.com/us/products/1521575

#### SAC-4P-100,0-PUR/0,34 - Cable reel

1501663

https://www.phoenixcontact.com/us/products/1501663



By the meter, Cable reel, PUR halogen-free, black-gray RAL 7021, 4-wire, color single wire: brown, white, blue, black, cable length: 100 m

### TSD 04 SAC - Torque screwdriver

1208429

https://www.phoenixcontact.com/us/products/1208429



Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors



1521575

https://www.phoenixcontact.com/us/products/1521575

#### SAC BIT M12-D15 - Tool

1208432

https://www.phoenixcontact.com/us/products/1208432



Nut for assembling sensor/actuator cables with M12 connector and M12 connectors for assembly, with a knurl diameter of 15 mm, for 4 mm hexagonal drive

### TSD-M 1,2NM - Torque screwdriver

1212224

https://www.phoenixcontact.com/us/products/1212224



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0. 3 - 1.2 Nm



1521575

https://www.phoenixcontact.com/us/products/1521575

## TSD-M SAC-BIT ADAPTER - Adapter insert

1212600

https://www.phoenixcontact.com/us/products/1212600



Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits

#### SAC BIT QUICKON-W13 - Tool

1212033

https://www.phoenixcontact.com/us/products/1212033

Nut for assembling pressure nuts with 13 mm wrench size, for 4 mm hexagonal drive



Phoenix Contact 2023 © - 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