

1641714

https://www.phoenixcontact.com/us/products/1641714

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Connector, Universal, 4-position, Plug straight M12, coding: A, Insulation displacement connection, knurl material: Plastic, external cable diameter 3.5 mm ... 6 mm

## Your advantages

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

#### Commercial data

Item number	1641714
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF31
Product key	BF2CCA
Catalog page	Page 20 (C-2-2019)
GTIN	4017918925161
Weight per piece (including packing)	11.44 g
Weight per piece (excluding packing)	11.7 g
Customs tariff number	85366990
Country of origin	DE



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## 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
Assembly manucions	AVVO 20 conductor cross section upon request

### 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
Degree of pollution	3

#### **Dimensions**

Dimensional drawing	
Length	54 mm
Wrench size, union nut	13 mm
External dimensions	
Outside diameter	3.5 mm 6 mm
Housing	
Diameter housing	16.3 mm

### Material specifications

Flammability rating according to UL 94	V0
Seal material	NBR
Material of grip body	PA 6
Contact material	CuSn
Contact surface material	Ni/Au



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Contact carrier material	TPU
Material for screw connection	Plastic
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

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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 $U_N$	125 V AC
	125 V DC
Nominal current I <sub>N</sub>	4 A

#### Mechanical properties

#### Mechanical data

Insertion/withdrawal cycles	≥ 100

#### Connector

#### Connection 1

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

### Cable/line

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

#### Environmental and real-life conditions

#### Ambient conditions



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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

#### M12

Standard designation	M12 connector
Standards/specifications	according to IEC 61076-2-101



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# Classifications

UNSPSC 21.0

#### **ECLASS**

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

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# Environmental product compliance

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

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