

1699902

https://www.phoenixcontact.com/pc/products/1699902

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, 3-position, Plug angled M8, coding: A, Solder connection, knurl material: Brass, nickel-plated, external cable diameter 3.5 mm ... 5 mm

## Your advantages

· Safe use in the field, thanks to a high degree of protection

### Commercial data

Item number	1699902
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	02
Product key	BF2BIA
Catalog page	Page 18 (C-2-2019)
GTIN	4017918574031
Weight per piece (including packing)	10.43 g
Weight per piece (excluding packing)	9.2 g
Customs tariff number	85366990
Country of origin	DE



1699902

https://www.phoenixcontact.com/pc/products/1699902

### 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	The connector pin assignment can be rotated 90° to the cable
	outlet

### Product properties

Product type	Circular connector (cable-side)
Sensor type	Universal
Number of positions	3
No. of cable outlets	1
Shielded	no
Coding	A
Cable outlet	angled

#### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

#### **Dimensions**

Dimensional drawing	012- M6- M6- M6- M6- M6- M6- M6- M6- M6- M6
Length	34.6 mm
External dimensions	
Outside diameter	3.5 mm 5 mm
Housing	
Diameter housing	12 mm

### Material specifications

Flammability rating according to UL 94	НВ
Seal material	NBR
Material of grip body	PBT
Contact material	CuZn
Contact surface material	Au



1699902

https://www.phoenixcontact.com/pc/products/1699902

Contact carrier material	PA
Material for screw connection	Brass, nickel-plated

#### Connection data

#### Conductor connection

Connection method	Solder connection
Connection cross section	0.08 mm² 0.25 mm² (flexible)
	0.08 mm <sup>2</sup> 0.25 mm <sup>2</sup> (solid)
Connection cross section AWG	28 24 (flexible)
	28 24 (solid)
Stripping length of the individual wire	3 mm
Tightening torque	0.2 Nm (M8 knurl)

### Electrical properties

Rated surge voltage	0.8 kV
Contact resistance	≤ 3 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U <sub>N</sub>	48 V AC
	60 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	angled
Head thread type	M8
Coding	A

#### Cable/line

Signal type/category	Universal	
Stripping length of the individual wire	3 mm	

#### Environmental and real-life conditions

#### Ambient conditions

Degree of protection	IP67
Ambient temperature (operation)	-40 °C 85 °C

### Standards and regulations



1699902

https://www.phoenixcontact.com/pc/products/1699902

#### M8

Standard designation	M8 connector
Standards/specifications	IEC 61076-2-104

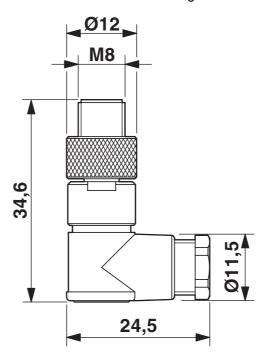
1699902

https://www.phoenixcontact.com/pc/products/1699902



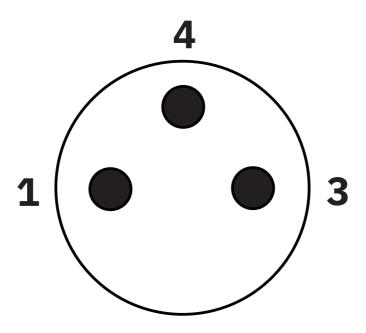
## Drawings

Dimensional drawing



M8 x 1 male plug, angled version

Schematic diagram



Pin assignment M8 male connector, 3-pos.



1699902

https://www.phoenixcontact.com/pc/products/1699902

## **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/pc/products/1699902

<u> </u>	<b>UL Listed</b> Approval ID: FILE E 221474				
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		60 V	4 A	-	-

•	<b>cUL Listed</b> Approval ID: FILE E 22147	4			
		Nominal voltage $U_N$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		60 V	4 A	-	-

**cULus Listed** 



1699902

https://www.phoenixcontact.com/pc/products/1699902

## Classifications

UNSPSC 21.0

#### **ECLASS**

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

39121400



1699902

https://www.phoenixcontact.com/pc/products/1699902

## Environmental product compliance

REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

Phoenix Contact 2024 © - all rights reserved https://www.phoenixcontact.com

PHOENIX CONTACT GmbH & Co. KG Flachsmarktstraße 8 D-32825 Blomberg +49 (0) 5235-3 00 info@phoenixcontact.com