

1681172

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Connector, Universal, 3-position, Socket straight 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	1681172
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF35
Product key	AF2BIA
Catalog page	Page 18 (C-2-2019)
GTIN	4017918157524
Weight per piece (including packing)	9.13 g
Weight per piece (excluding packing)	6.92 g
Customs tariff number	85366990
Country of origin	DE



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## Technical data

#### Notes

Assembly note	NOTE: Observe the permissible bending radii when routing cables, since the degree of protection may be at risk if the bending forces are too high. Reduce mechanical loads upstream of the connector, e.g., by using cable ties.
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## 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	straight

#### Insulation characteristics

modulation of all action of the	
Overvoltage category	II
Degree of pollution	3

#### **Dimensions**

37 3 5 5
37 mm
3.5 mm 5 mm
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
Contact carrier material	PA
Material for screw connection	Brass, nickel-plated

### Connection data



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#### Conductor connection

Connection method	Solder connection
Connection cross section	0.08 mm <sup>2</sup> 0.25 mm <sup>2</sup> (flexible)
	0.08 mm² 0.25 mm² (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	Socket
Head cable outlet	straight
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

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

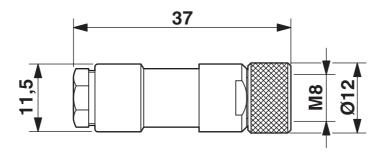


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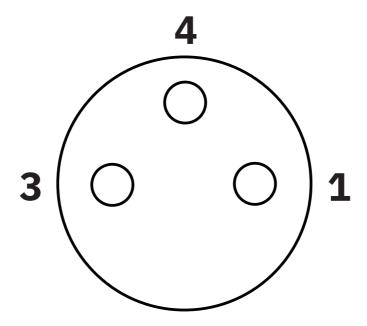
# Drawings

### Dimensional drawing



Socket M8 x 1, straight

Schematic diagram



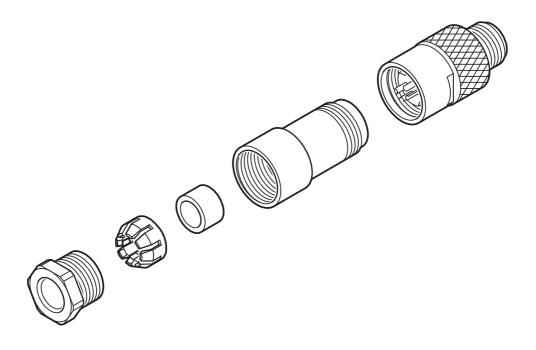
Pin assignment M8 socket, 3-pos.



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## Schematic diagram



- 1 = pressure screw
- 2 = clamp-type cage
- 3 = gasket
- 4 = housing
- 5 = male or female insert



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# **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1681172

<u>®</u>	<b>UL Listed</b> Approval ID: FILE E 22147	4			
		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	-	-



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# Classifications

UNSPSC 21.0

	ECLASS-13.0	27440116
ΕT	ТМ	
	ETIM 9.0	EC002635
UNSPSC		

39121400



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# Environmental product compliance

#### EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(c)
China RoHS	
Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.
EU REACH SVHC	
REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	ccf4cf92-9235-46fb-bae6-9421893552c0

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