1681172

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Connector, Universal, 3-position, Socket straight M8, A, Solder connection, knurl material: Nickel-plated brass, 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	BF2
Product Key	BF2BIA
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

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 mechanica loads upstream of the connector, e.g. by using cable ties.
unting	
Connection method	Solder connection
oduct properties	
Product type	Circular connector (cable-side)
Number of positions	3
Sensor type	Universal
No. of cable outlets	1
Shielded	no
Coding	A
Cable outlet	straight
nsulation characteristics	
Overvoltage category	II
Degree of pollution	3

Dimensions

Contact surface material

Contact carrier material

Dimensional drawing	
Length	37 mm
External dimensions	
Outside diameter	3.5 mm 5 mm
Housing	
Diameter housing	12 mm
Material specifications	
Flammability rating according to UL 94	HB
Seal material	NBR
Material of grip body	PBT
Contact material	CuZn

Au

PA

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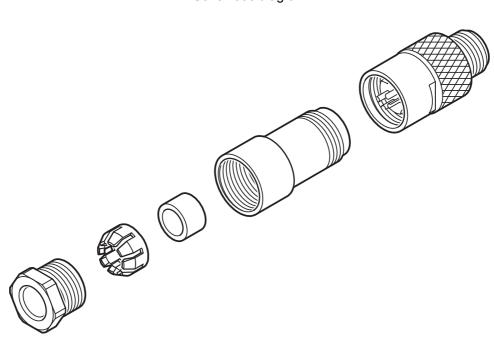
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Material for screw connection	Nickel-plated brass
Connection data	
Conductor connection	
Connection method	Solder connection
Connection cross section	0.08 mm ² 0.25 mm ² (flexible)
	0.08 mm ² 0.25 mm ² (solid)
Connection cross section AWG	28 24 (flexible)
	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 _N	48 V AC
	60 V DC
Nominal current I _N	4 A
Mechanical properties	
Mechanical data	
Mechanical data Insertion/withdrawal cycles	≥ 100
	≥ 100
Insertion/withdrawal cycles	≥ 100
Insertion/withdrawal cycles Connector	≥ 100 Socket
Insertion/withdrawal cycles Connector Connection 1	
Insertion/withdrawal cycles Connector Connection 1 Head design	Socket
Insertion/withdrawal cycles Connector Connection 1 Head design Head cable outlet	Socket straight
Insertion/withdrawal cycles Connector Connection 1 Head design Head cable outlet Head thread type	Socket straight M8
Insertion/withdrawal cycles Connector Connection 1 Head design Head cable outlet Head thread type Coding	Socket straight M8
Insertion/withdrawal cycles Connector Connection 1 Head design Head cable outlet Head thread type Coding Cable/line	Socket straight M8 A
Insertion/withdrawal cycles Connector Connection 1 Head design Head cable outlet Head thread type Coding Coding Signal type/category	Socket straight M8 A Universal
Insertion/withdrawal cycles Connector Connection 1 Head design Head cable outlet Head thread type Coding Cable/line Signal type/category Stripping length of the individual wire	Socket straight M8 A Universal
Insertion/withdrawal cycles Connector Connection 1 Head design Head cable outlet Head thread type Coding Coding Cable/line Signal type/category Stripping length of the individual wire Environmental and real-life conditions	Socket straight M8 A Universal
Insertion/withdrawal cycles Connector Connection 1 Head design Head cable outlet Head thread type Coding Cable/line Signal type/category Stripping length of the individual wire Environmental and real-life conditions Ambient conditions Degree of protection	Socket straight M8 A Universal 3 mm
Insertion/withdrawal cycles Connector Connection 1 Head design Head cable outlet Head thread type Coding Coding Cable/line Signal type/category Stripping length of the individual wire Environmental and real-life conditions Ambient conditions Degree of protection Ambient temperature (operation)	Socket straight M8 A Universal 3 mm
Insertion/withdrawal cycles Connector Connection 1 Head design Head cable outlet Head thread type Coding Coding Cable/line Signal type/category Stripping length of the individual wire Environmental and real-life conditions Ambient conditions Degree of protection	Socket straight M8 A Universal 3 mm



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Drawings



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



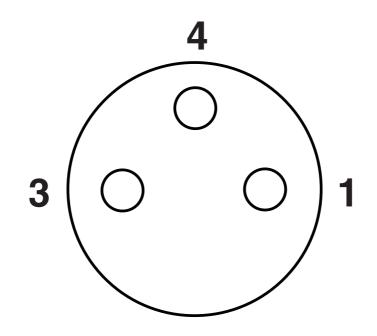
Schematic diagram



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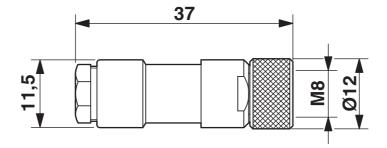
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Schematic diagram



Pin assignment M8 socket, 3-pos.

Dimensional drawing



Socket M8 x 1, straight



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Approvals

	UL Listed Approval ID: FILE E 221474				
		Nominal Voltage U _N	Nominal Current I _N	Cross Section AWG	Cross Section mm ²
		60 V	4 A	-	-
•	CUL Listed Approval ID: FILE E 221474				
		Nominal Voltago II	Nominal Current I	Cross Section AWC	Cross Section mm^2

Nominal Voltage U _N	Nominal Current I _N	Cross Section AWG	Cross Section mm ²
60 V	4 A	-	-

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Classifications

ECLASS

ECLASS-12.0 27440116 ECLASS-13.0 27440116	ECLASS-11.0	27440102
ECLASS-13.0 27440116	ECLASS-12.0	27440116
	ECLASS-13.0	27440116

ETIM

	ETIM 8.0	EC002635
UN	ISPSC	
	UNSPSC 21.0	39121400



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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"

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Accessories

SACC-M 8-SET/2,2-3,5 - Connector

1436945 https://www.phoenixcontact.com/in/products/1436945



Sensor/actuator connector, accessories, pressure screw and seal, for unshielded M8 connector, cable diameter 2.2 mm - 3.5 mm

TSD 02 SAC - Torque screwdriver

1208487

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SACC BIT M8-D12 - Tool

1208474

https://www.phoenixcontact.com/in/products/1208474



Nut for assembling M8 connectors with longitudinal knurl and a knurl diameter of 12 mm, for 4 mm hexagonal drive

PROT-M 8 MS-PA-CHAIN - Screw plug

1430860 https://www.phoenixcontact.com/in/products/1430860

M8 sealing cap made of plastic with fixing band for sensor cables, for M8 sockets



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TSD-M 1,2NM - Torque screwdriver

1212224

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

TSD-M SAC-BIT ADAPTER - Adapter insert

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



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

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SAC-3P-100,0-PUR/0,25 - Cable reel

1501689

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By the meter, Cable reel, PUR halogen-free, black-gray RAL 7021, 3-wire, color single wire: brown, blue, black, cable length: 100 m

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