

1072545

https://www.phoenixcontact.com/us/products/1072545

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Data connector, CANopen<sup>®</sup>, DeviceNet<sup>™</sup>, 5-position, unshielded, Socket straight M12, A, Pushlock spring connection, knurl material: Plastic, external cable diameter 4 mm ... 8 mm

### Your advantages

- Time-saving Push-Lock connection: Tool-free connection and disconnection of conductors by opening the contact levers
- · Intuitive connection: Easy assignment of individual litz wires with color-coded and numerical identification of the contact levers
- · Integrated Push-in Technology: Wire rigid and pretreated conductors easily by means of simple, direct insertion
- · Shock- and vibration-resistant connection: Proven spring-cage technology guarantees secure and reliable contacting

### Commercial data

Item number	1072545
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF33
Product key	BF2CEA
GTIN	4063151357672
Weight per piece (including packing)	14.24 g
Weight per piece (excluding packing)	14.24 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.
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### Mounting

Assembly instructions	The wires can be connected both with ferrules and without ferrules
Connection method	Push-lock spring connection

### Product properties

Product type	Circular connector (cable-side)
Sensor type	CANopen <sup>®</sup>
Number of positions	5
Application	Data
No. of cable outlets	1
Shielded	no
Coding	A
Cable outlet	straight

#### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

#### **Dimensions**

Dimensional drawing	0a.56
Length	58 mm
External dimensions	
Outside diameter	4 mm 8 mm
Housing	
Diameter housing	19 mm
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### Material specifications

Flammability rating according to UL 94	V0
Seal material	NBR
Material of grip body	PA 6.6
Contact material	CuSn



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Contact surface material	Ni/Au
Contact carrier material	PA 6.6
Material for screw connection	Plastic

### Connection data

### Conductor connection

Connection method	Push-lock spring connection
Connection cross section	0.14 mm <sup>2</sup> 0.75 mm <sup>2</sup> (without ferrule)
	0.08 mm <sup>2</sup> 0.5 mm <sup>2</sup> (with ferrule)
	0.14 mm² 0.75 mm² (solid)
Connection cross section AWG	26 18 (without ferrule)
	28 20 (with ferrule)
Stripping length of the individual wire	7 mm
Tightening torque	0.4 Nm (M12 knurl)
	0.4 Nm (Connector with coupling sleeve)
	1.5 Nm (Pressure nut with coupling sleeve)

### Pin assignment

Contact   Color (signal designation)   Contact (optional)	1 = GY (shield)
	2 = RD
	3 = BK
	4 = WH
	5 = BU

### Electrical properties

Rated surge voltage	1.5 kV
Contact resistance	≤ 5 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 (2 A when using 0.14 mm² conductors)

### Mechanical properties

#### Mechanical data

Insertion/withdrawal cycles ≥ 100
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### Connector

### Connection 1

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

### Cable/line



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Signal type/category	CANopen <sup>®</sup>
	DeviceNet™
Stripping length of the individual wire	7 mm

### Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP65
	IP67
Ambient temperature (operation)	-40 °C 85 °C (Plug / socket)

### Standards and regulations

### M12

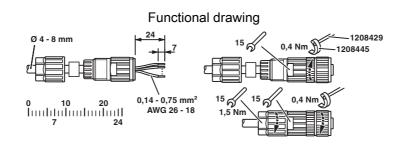
Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101



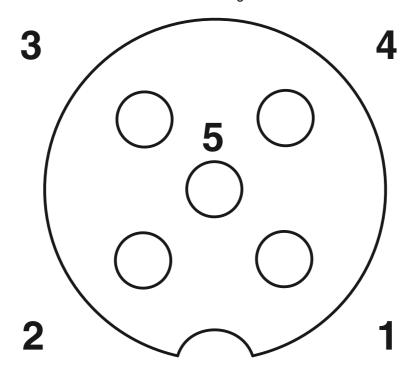
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### **Drawings**



### Schematic diagram



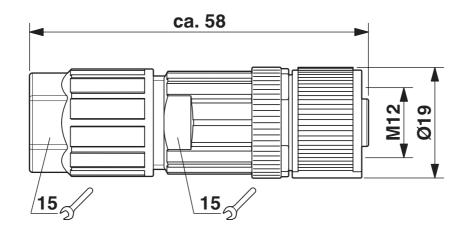
Pin assignment M12 socket, 5-pos., A-coded, socket side view



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### Dimensional drawing



M12 x 1 socket, straight



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### **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1072545

<u> </u>	<b>UL Listed</b> Approval ID: E221474				
		Nominal voltage $U_N$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		250 V	4 A	-	26 - 18

•	<b>cUL Listed</b> Approval ID: E221474				
		Nominal voltage $U_N$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		250 V	4 A	26 - 18	-

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### Classifications

UNSPSC 21.0

### **ECLASS**

ECLASS-11.0	27440102	
ECLASS-12.0	27440116	
ECLASS-13.0	27440116	
ETIM		
ETIM 8.0	EC002635	
UNSPSC		

39121400



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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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### Accessories

PROT-M12 MS-PA-CHAIN - Screw plug

1430899

https://www.phoenixcontact.com/us/products/1430899

M12 sealing cap with fixing band, for sensor cables, for free M12 sockets



### SAC-5P-920/... - Bus system cable

1511504

https://www.phoenixcontact.com/us/products/1511504



Bus system cable, CANopen $^{\text{®}}$ , DeviceNet $^{\text{TM}}$ , 4-position halogen-free, shielded, cable length: Free entry (0.5 ... 400 m)



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### AI 0,25-6 YE - Ferrule

3203024

https://www.phoenixcontact.com/us/products/3203024



Ferrule, sleeve length: 6 mm, length: 10.5 mm, color: yellow

### A 0,25-7-Ferrule

3202478

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Ferrule, length: 7 mm, color: silver



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### A 0,34-7-Ferrule

3009202

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Ferrule, length: 7 mm, color: silver

### A 0,5 - 6 - Ferrule

3200218

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Ferrule, length: 6 mm, color: silver



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### AI 0,5 - 6 WH - Ferrule

3200687

https://www.phoenixcontact.com/us/products/3200687



Ferrule, sleeve length: 6 mm, length: 12 mm, color: white

### 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



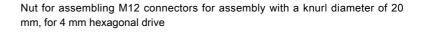
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### SACC BIT M12-D20 - Tool

1208445

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### 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



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### 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

### WIREFOX 2,5 - Stripping tool

1212368

https://www.phoenixcontact.com/us/products/1212368



Stripping tool, for conductors and cables with a conductor cross section from 0. 08 to 2.5 mm, self-adjusting, stripping length adjustable up to 15 mm, cutting capacity up to 6  $\text{mm}^2$  stranded/1.5  $\text{mm}^2$  solid



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### WIREFOX SAC - Stripping tool

1212623

https://www.phoenixcontact.com/us/products/1212623



Stripping pliers, for halogen-free sensor/actuator cables (SAC cables), with PUR and PVC insulation, from  $\emptyset$  of 4.4 to 7 mm, any stripping length

### CRIMPFOX 6H - Crimping pliers

1212046

https://www.phoenixcontact.com/us/products/1212046



Crimping pliers, for ferrules without insulating collar according to DIN 46228 Part 1 and ferrules with insulating collar according to DIN 46228 Part 4, 0.14 mm<sup>2</sup> ... 6 mm<sup>2</sup>, unlockable pressure lock, lateral entry

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