

1420943

https://www.phoenixcontact.com/us/products/1420943

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Sensor/actuator cable, 4-position, Plug straight M12, coding: A, on free cable end, cable length: 10 m, with high-grade steel knurl

### Your advantages

- Easy and safe: 100% electrically tested plug-in components
- · Contamination can be detected quickly thanks to the light color

### Commercial data

Item number	1420943
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF03
Product key	BF1CCA
GTIN	4055626249919
Weight per piece (including packing)	374.54 g
Weight per piece (excluding packing)	365.5 g
Customs tariff number	85444290
Country of origin	PL



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### Technical data

### Product properties

Product type	Sensor/actuator cable
Number of positions	4
Application	Food processing industry
No. of cable outlets	1
Shielded	no
Coding	A
Insulation characteristics	
Overvoltage category	II II
Degree of pollution	3

### Material specifications

Material of grip body	PP
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PP
Material for screw connection	Stainless steel

### Electrical properties

Contact resistance	≤ 5 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U <sub>N</sub>	250 V AC
	250 V DC
Nominal current I <sub>N</sub>	4 A
Protective circuit	unwired

### Mechanical properties

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Insertion/withdrawal cycles	≥ 100

### Signaling

Status display	No
Status display present	No

### Connection data

### Conductor connection

Tightening torque	0.4 Nm (M12 connector)
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#### Connector

#### Connection 1



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Туре	Plug straight M12
Number of positions	4
Coding type	A
Number of positions	4

#### Connection 2

Туре	free cable end	

### Cable/line

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### PVC gray [500]

### Dimensional drawing



Cable weight	40 kg/km
UL AWM Style	2464 / 1729 (80°C/300 V)
Number of positions	4
Shielded	no
Cable type	PVC gray [500]
Conductor structure signal line	19x 0.15 mm
AWG signal line	22
Conductor cross section	4x 0.34 mm² (Signal line)
Wire diameter incl. insulation	1.26 mm ±0.05 mm
External cable diameter	4.7 mm ±0.15 mm
Outer sheath, material	PVC
External sheath, color	gray RAL 7001
Conductor material	Bare Cu litz wires
Material wire insulation	PVC
Single wire, color	brown, white, blue, black
Thickness, insulation	≥ 0.23 mm (Core insulation)
Thickness, outer sheath	≥ 0.76 mm
Overall twist	4 wires, twisted
Max. conductor resistance	max. 57 Ω/km (at 20 °C)
Insulation resistance	≥ 200 MΩ*km (at 20 °C)
Nominal voltage, cable	≤ 300 V
Test voltage	≥ 3000 V
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Ambient temperature (operation)	-40 °C 80 °C (cable, fixed installation)



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	-25 °C 80 °C (Cable, flexible installation)
nvironmental and real-life conditions	
Ambient conditions	
Degree of protection	IP65
	IP67
	IP68
	IP69K
Ambient temperature (operation)	-25 °C 90 °C (Plug / socket)
andards and regulations	
M12	
Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101



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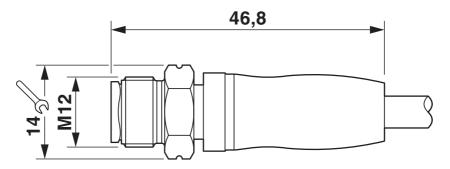
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### Drawings

### Circuit diagram



### Dimensional drawing



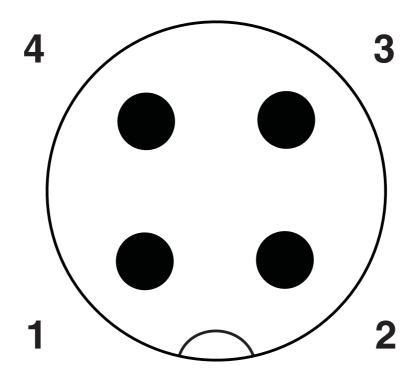
Plug, M12 x 1, straight



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### Schematic diagram



Pin assignment M12 plug, 4-pos., A-coded, view plug side



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### **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1420943

<b>©</b>	<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>
		250 V	4 A	-	-

• <u>®</u>	cUL Listed Approval ID: FILE E 221474				
		Nominal voltage $U_N$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		250 V	4 A	-	-

ERC	EAC-RoHS Approval ID: RU D-DE.HB35.B.00385	
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cULus Listed



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### Classifications

### **ECLASS**

	ECLASS-11.0	27060311
	ECLASS-12.0	27060311
	ECLASS-13.0	27060311
ET	ТІМ	
	ETIM 8.0	EC001855
UN	NSPSC	
	UNSPSC 21.0	26121600



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### Environmental product compliance

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



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#### Accessories

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

### 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

#### SAC BIT M12-W14 - Tool

1212513

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Nut for assembling sensor/actuator cables with M12 connector and M12 connectors for assembly, with a hexagonal knurl wrench size of 14 mm, with 4 mm hexagonal drive



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### CUTFOX-S VDE - Diagonal cutter

1212207

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Diagonal cutter for hard (piano wire) and soft wires, VDE 1000 V AC/1500 V DC tested

### 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  $\varnothing$  of 4.4 to 7 mm, any stripping length



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#### WIREFOX 10 - Stripping tool

1212150

https://www.phoenixcontact.com/us/products/1212150



Stripping tool, for cables and conductors from 0.02 -  $10~\text{mm}^2$ , self-adjusting, stripping length of up to 18 mm, cutting capacity of up to  $10~\text{mm}^2$  stranded/1.5 mm<sup>2</sup> solid, replaceable stripping blade

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