

1669783

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Sensor/actuator cable, 5-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12, coding: A, on free cable end, cable length: 5 m

#### Your advantages

• Easy and safe: 100 % electrically tested plug-in components

#### Commercial data

Item number	1669783
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF1CDA
Product key	BF1CDA
Catalog page	Page 201 (C-2-2019)
GTIN	4017918134686
Weight per piece (including packing)	167 g
Weight per piece (excluding packing)	162.1 g
Customs tariff number	85444290
Country of origin	CN



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### Technical data

#### Product properties

Product type	Sensor/actuator cable
Number of positions	5
Application	Standard
No. of cable outlets	1
Shielded	no
Coding	A
Insulation characteristics	
Overvoltage category	II
Degree of pollution	3

#### Material specifications

Flammability rating according to UL 94	НВ
Seal material	NBR
Material of grip body	TPU, hardly inflammable, self-extinguishing
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Material for screw connection	Zinc die-cast, nickel-plated

#### Electrical properties

Insulation resistance	≥ 100 MΩ
Nominal voltage U <sub>N</sub>	48 V AC
	60 V DC
Nominal current I <sub>N</sub>	4 A
Protective circuit	unwired

#### Mechanical properties

Mechanical data	
Insertion/withdrawal cycles	≥ 100

### Signaling

Status display	No
Status display present	No

### Connection data

Conductor connection	
Tightening torque	0.4 Nm (M12 connector)

#### Connector



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#### Connection 1

Туре	Plug straight M12
Number of positions	5
Coding type	A

#### Connection 2

Туре	free cable end

#### Cable/line

Cable length	5 m
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#### PUR halogen-free black [PUR]

Dimensional drawing



Cable weight	33 kg/km
UL AWM Style	20549
Number of positions	5
Shielded	no
Cable type	PUR halogen-free black [PUR]
Conductor structure signal line	42x 0.10 mm
AWG signal line	22
Conductor cross section	5x 0.34 mm² (Signal line)
Wire diameter incl. insulation	1.27 mm 0.05 mm (Signal line)
External cable diameter	4.55 mm ±0.15 mm
Outer sheath, material	PUR
External sheath, color	black-gray RAL 7021
Conductor material	Bare Cu litz wires
Material wire insulation	PP
Single wire, color	brown, white, blue, black, green-yellow
Thickness, insulation	approx. 0.50 mm
Max. conductor resistance	max. 58 Ω/km (at 20 °C)
Insulation resistance	≥ 16 GΩ*km (at 20 °C)
Nominal voltage, cable	300 V
Test voltage	3000 V
Smallest bending radius, fixed installation	23 mm
Smallest bending radius, movable installation	46 mm
Max. bending cycles	4000000
Halogen-free	in accordance with DIN VDE 0472 part 815



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Flame resistance	in accordance with UL 758/1581 FT2
	DIN EN 60332-2-2 (20 s)
Resistance to oil	in accordance with DIN EN 60811-2-1
Other resistance	Highly resistant to acids, alkaline solutions and solvents
	hydrolysis and microbe resistant
	Resistant to salt water
	partly UV-resistant (in accordance with DIN EN ISO 4892-2-A)
Special properties	Flexible cable conduit capable
	Silicone-free
	Free of substances which would hinder coating with paint or varnish
	flexible
Ambient temperature (operation)	-40 °C 80 °C (cable, fixed installation)
	-25 °C 80 °C (Cable, flexible installation)

#### Environmental and real-life conditions

#### Ambient conditions

Degree of protection	IP65
	IP67
	IP68
Ambient temperature (operation)	-25 °C 90 °C (Plug / socket)

### Standards and regulations

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

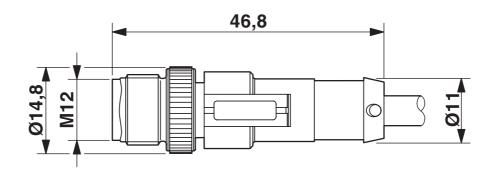


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### Drawings

#### Dimensional drawing



Plug, M12 x 1, straight

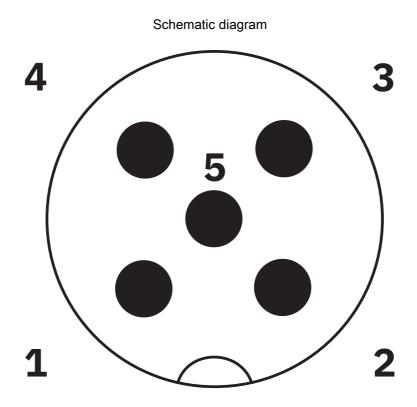
#### Circuit diagram





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Pin assignment M12 male connector, 5-pos., A-coded, male side



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### **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/au/products/1669783

<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>
		125 V	4 A	-	-

cUL Listed 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>
		125 V	4 A	-	-

ERC	EAC-RoHS Approval ID: RU D-DE.HB35.B.00387		
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cULus Listed



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### Classifications

#### **ECLASS**

	ECLASS-11.0	27060311	
	ECLASS-12.0	27060311	
	ECLASS-13.0	27060311	
ETIM			
	ETIM 9.0	EC001855	
UNSPSC			
	UNSPSC 21.0	26121600	



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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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PHOENIX CONTACT PTY Ltd Unit 7, 2-8 South Street Rydalmere NSW 2116 1300 786 411 customerservice@phoenixcontact.com.au