

1694651

https://www.phoenixcontact.com/us/products/1694651

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Sensor/actuator cable, 5-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12, coding: A, with 3 LEDs, on Socket angled M12, coding: A, with 3 LEDs, cable length: 1.5 m

# Your advantages

- Easy and safe: 100 % electrically tested plug-in components
- · Convenient: increased machine availability thanks to quick and easy diagnostics

#### Commercial data

Item number	1694651
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF03
Product key	BF1CDA
Catalog page	Page 201 (C-2-2019)
GTIN	4017918459246
Weight per piece (including packing)	69 g
Weight per piece (excluding packing)	67.2 g
Customs tariff number	85444290
Country of origin	PL



1694651

https://www.phoenixcontact.com/us/products/1694651

# Technical data

## Product properties

Product type	Sensor/actuator cable
Application	Standard
Number of positions	5
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>	24 V DC
Nominal current I <sub>N</sub>	4 A

## Mechanical properties

Mec	hanical	data

Insertion/withdrawal cycles	≥ 100
-----------------------------	-------

## Signaling

Status display	3 LEDs
Status display present	Yes

### Connection data

#### Conductor connection

Tightening torque	0.4 Nm (M12 connector)

## Connector

#### Connection 1

Туре	Plug straight M12



1694651

https://www.phoenixcontact.com/us/products/1694651

Number of positions	5
Coding type	A

### Connection 2

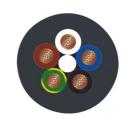
Туре	Socket angled M12
Number of positions	5
Coding type	A

### Cable/line

Cable length	1.5 m

### 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	РР
Single wire, color	brown, white, blue, black, green-yellow
Thickness, insulation	approx. 0.50 mm
Max. conductor resistance	max. 58 $\Omega$ /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
Flame resistance	in accordance with UL 758/1581 FT2



1694651

https://www.phoenixcontact.com/us/products/1694651

	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)
	-40 °C 80 °C (cable, fixed installation)
	-5 °C 80 °C (Cable, flexible installation)

## Standards and regulations

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

Phoenix Contact 2024 © - all rights reserved https://www.phoenixcontact.com

Phoenix Contact USA 586 Fulling Mill Road Middletown, PA 17057, United States (+717) 944-1300 info@phoenixcon.com