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Sensor/actuator cable, 5-position, PVC, black RAL 9005, free cable end, on Socket angled M12, coding: A, cable length: 5 m

Your advantages

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

Commercial data

Item number	1431801
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	NULL
Product key	BF1CDA
GTIN	4046356506502
Weight per piece (including packing)	257.8 g
Weight per piece (excluding packing)	257.8 g
Customs tariff number	85444290
Country of origin	CN

SAC-5P-5,0-PVC/M12FR B-L - Sensor/actuator cable



1431801

<https://www.phoenixcontact.com/us/products/1431801>

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	HB
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	$\geq 100 \text{ M}\Omega$
Nominal voltage U_N	60 V
Nominal current I_N	4 A

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 100
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Signaling

Status display	no
Status display present	No

Connector

Connection 1

Type	free cable end
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Connection 2

Type	Socket angled M12
Number of positions	5
Coding type	A

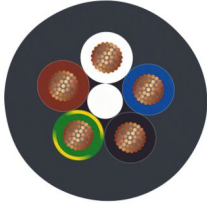
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Cable/line

Cable length	5 m
PVC black [PVC]	
Dimensional drawing	
Cable weight	51 kg/km
UL AWM Style	2464 / 1729 (80°C/300 V)
Number of positions	5
Shielded	no
Cable type	PVC black [PVC]
Conductor structure signal line	42x 0.10 mm
AWG signal line	22
Conductor cross section	5x 0.34 mm ² (Signal line)
Wire diameter incl. insulation	1.45 mm ±0.02 mm
External cable diameter	5.90 mm ±0.15 mm
Outer sheath, material	PVC
External sheath, color	black RAL 9005
Conductor material	Bare Cu litz wires
Material wire insulation	PVC
Single wire, color	brown, white, blue, black, green-yellow
Thickness, insulation	≥ 0.23 mm (Core insulation)
Thickness, outer sheath	≥ 0.76 mm
Overall twist	5 wires around filler to the core
Max. conductor resistance	max. 58 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
Smallest bending radius, fixed installation	30 mm
Smallest bending radius, movable installation	59 mm
Flame resistance	As per UL-Style 2464 according to UL 758/1581 FT1
Resistance to oil	according to DIN EN 60811-2-1, 168 h at 90 °C
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)
	-25 °C ... 80 °C (Cable, flexible installation)

Standards and regulations

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

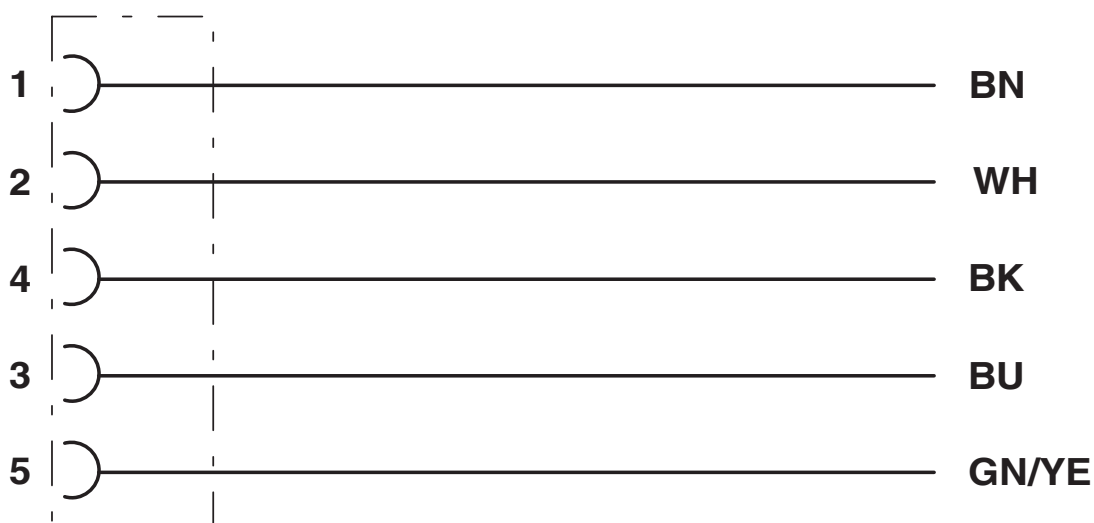
Drawings

Schematic diagram



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

Circuit diagram



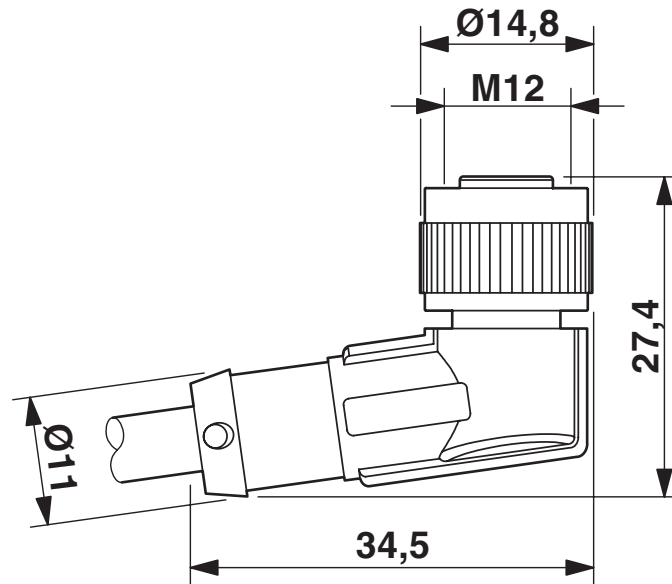
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Dimensional drawing



M12 x 1 socket, angled

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Classifications

ECLASS

ECLASS-11.0	27060311
ECLASS-13.0	27060311

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