

1552463

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Sensor/actuator cable, 4-position, Special mixture on PVC base, black RAL 9005, Plug straight M12, coding: A, on free cable end, cable length: 1.5 m, for the food industry, with high-grade steel knurl

Commercial data

Item number	1552463
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	BF03
Product key	BF1CCA
Catalog page	Page 212 (PC-2011)
GTIN	4046356155564
Weight per piece (including packing)	67.6 g
Weight per piece (excluding packing)	67.6 g
Customs tariff number	85444290
Country of origin	DE



1552463

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Technical data

Product properties

Product type	Sensor/actuator cable
Application	Food processing industry
Number of positions	4
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
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	Stainless steel

Electrical properties

Insulation resistance	≥ 100 MΩ
Nominal voltage U _N	48 V AC
	60 V DC
Nominal current I _N	4 A

Mechanical properties

Mec	hanical	data

Insertion/withdrawal cycles	≥ 100
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Signaling

Status display	No
Status display present	No

Connection data

Conductor connection

Tightening torque	0.4 Nm (M12 connector)

Connector

Connection 1

T	Discolarish M40
Type	Plug straight M12



1552463

https://www.phoenixcontact.com/us/products/1552463

Number of positions	4
Coding type	A
Connection 2	
Connection 2 Type	free cable end

Cable/line

Cable length	1.5 m

PVC black FDA [511]

Dimensional drawing



Number of positions 4 Shielded no Cable type PVC black FDA [511] Conductor structure signal line 42x 0.10 mm AWG signal line 22 Conductor cross section 0.34 mm² Wire diameter incl. insulation 1.52 mm ±0.05 mm External cable diameter 5.20 mm ±0.2 mm Outer sheath, material Special mixture on PVC base External sheath, color black RAL 9005 Conductor material Bare Cu litz wires Material wire insulation PVC Single wire, color brown, white, blue, black Overall twist 4 wires, twisted Nominal voltage, cable 300 V Test voltage 1500 V Resistance to oil good oil-resistance Other resistance UV resistant Special properties FDA compliant Ambient temperature (operation) -40 °C 80 °C (cable, fixed installation)		
Cable type PVC black FDA [511] Conductor structure signal line 42x 0.10 mm AWG signal line 22 Conductor cross section 0.34 mm² Wire diameter incl. insulation 1.52 mm ±0.05 mm External cable diameter 5.20 mm ±0.2 mm Outer sheath, material Special mixture on PVC base External sheath, color black RAL 9005 Conductor material Bare Cu litz wires Material wire insulation PVC Single wire, color brown, white, blue, black Overall twist 4 wires, twisted Nominal voltage, cable 300 V Test voltage 1500 V Resistance to oil good oil-resistance Other resistance UV resistant Special properties FDA compliant Ambient temperature (operation) -40 °C 80 °C (cable, fixed installation)	Number of positions	4
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External cable diameter Outer sheath, material Special mixture on PVC base External sheath, color black RAL 9005 Conductor material Bare Cu litz wires Material wire insulation PVC Single wire, color brown, white, blue, black Overall twist A wires, twisted 1500 V Resistance to oil Other resistance Other resistance Other resistance Special properties Ambient temperature (operation) 5.20 mm ±0.2 mm 6.20 viets wires PVC Single wire, color 5.20 mm ±0.2 mm 5.20 mm ±0.2 mm 6.20 viets wires 6.20 viets	Conductor cross section	0.34 mm²
Outer sheath, material External sheath, color Conductor material Material wire insulation Single wire, color Single wire, color Overall twist Nominal voltage, cable Test voltage Resistance to oil Other resistance Other resistance Special properties Ambient temperature (operation) Special mixture on PVC base black RAL 9005 Bare Cu litz wires PVC Single wire, color brown, white, blue, black 4 wires, twisted 300 V 1500 V good oil-resistance UV resistant Silicone-free FDA compliant 40 °C 80 °C (cable, fixed installation)	Wire diameter incl. insulation	1.52 mm ±0.05 mm
External sheath, color Conductor material Bare Cu litz wires Material wire insulation PVC Single wire, color brown, white, blue, black Overall twist 4 wires, twisted Nominal voltage, cable Test voltage 1500 V Resistance to oil Other resistance Other resistance Special properties FDA compliant Ambient temperature (operation) black RAL 9005 Bare Cu litz wires PVC brown, white, blue, black 4 wires, twisted 300 V UV resistant Silicone-free FDA compliant -40 °C 80 °C (cable, fixed installation)	External cable diameter	5.20 mm ±0.2 mm
Conductor material Material wire insulation PVC Single wire, color brown, white, blue, black Overall twist A wires, twisted Nominal voltage, cable 1500 V Resistance to oil Other resistance UV resistant Silicone-free Special properties FDA compliant Ambient temperature (operation) Bare Cu litz wires Bare Cu litz wires Bare Cu litz wires PVC Bare Cu litz wires PVC brown, white, blue, black 4 wires, twisted 1500 V UV resistant Silicone-free Special properties FDA compliant -40 °C 80 °C (cable, fixed installation)	Outer sheath, material	Special mixture on PVC base
Material wire insulation PVC Single wire, color brown, white, blue, black Overall twist 4 wires, twisted Nominal voltage, cable 300 V Test voltage 1500 V Resistance to oil good oil-resistance Other resistance UV resistant Silicone-free Special properties FDA compliant Ambient temperature (operation) -40 °C 80 °C (cable, fixed installation)	External sheath, color	black RAL 9005
Single wire, color Overall twist A wires, twisted 4 wires, twisted 300 V Test voltage 1500 V Resistance to oil Other resistance UV resistant Silicone-free Special properties FDA compliant Ambient temperature (operation) brown, white, blue, black 4 wires, twisted 300 V 1500 V	Conductor material	Bare Cu litz wires
Overall twist 4 wires, twisted Nominal voltage, cable 300 V Test voltage 1500 V Resistance to oil good oil-resistance Other resistance UV resistant Silicone-free Special properties FDA compliant Ambient temperature (operation) 4 wires, twisted 500 V FDA Compliant -40 °C 80 °C (cable, fixed installation)	Material wire insulation	PVC
Nominal voltage, cable Test voltage 1500 V Resistance to oil Other resistance UV resistant Silicone-free Special properties FDA compliant Ambient temperature (operation) 300 V 1500 V good oil-resistance UV resistant Silicone-free FDA compliant -40 °C 80 °C (cable, fixed installation)	Single wire, color	brown, white, blue, black
Test voltage 1500 V Resistance to oil good oil-resistance Other resistance UV resistant Silicone-free Special properties FDA compliant Ambient temperature (operation) -40 °C 80 °C (cable, fixed installation)	Overall twist	4 wires, twisted
Resistance to oil good oil-resistance Other resistance UV resistant Silicone-free Special properties FDA compliant Ambient temperature (operation) FDA compliant -40 °C 80 °C (cable, fixed installation)	Nominal voltage, cable	300 V
Other resistance UV resistant Silicone-free Special properties FDA compliant Ambient temperature (operation) -40 °C 80 °C (cable, fixed installation)	Test voltage	1500 V
Silicone-free Special properties FDA compliant Ambient temperature (operation) -40 °C 80 °C (cable, fixed installation)	Resistance to oil	good oil-resistance
Special properties FDA compliant Ambient temperature (operation) -40 °C 80 °C (cable, fixed installation)	Other resistance	UV resistant
Ambient temperature (operation) -40 °C 80 °C (cable, fixed installation)		Silicone-free
	Special properties	FDA compliant
-5 °C 90 °C (Cable, flexible installation)	Ambient temperature (operation)	-40 °C 80 °C (cable, fixed installation)
		-5 °C 90 °C (Cable, flexible installation)

Environmental and real-life conditions

Ambient conditions	
	IP65



1552463

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Degree of protection	IP67
	IP68
	IP69K
Ambient temperature (operation)	-40 °C 105 °C (Plug / socket)
Standards and regulations	
Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101

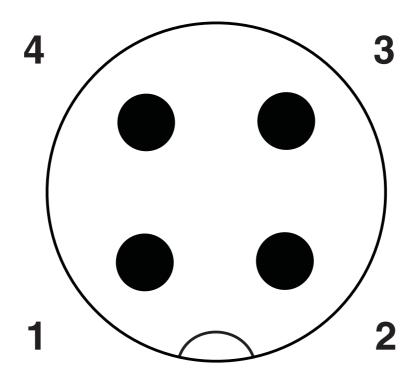


1552463

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Drawings





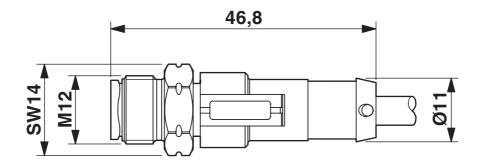
Pin assignment M12 plug, 4-pos., A-coded, view plug side



1552463

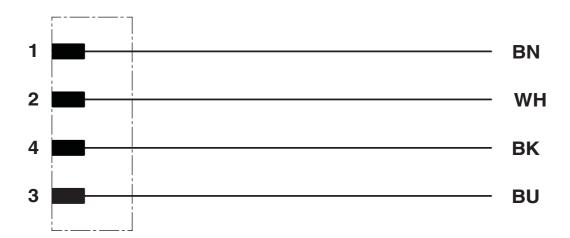
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Dimensional drawing



Plug, M12 x 1, straight, shielded

Circuit diagram





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Classifications

ECLASS

ECLASS-11.0	27060311
ECLASS-13.0	27060311



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Environmental product compliance

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.
EU REACH SVHC	
REACH candidate substance (CAS No.)	No substance above 0.1 wt%



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Accessories

SACC-M12FS-4CON-PG 7-VA - Connector

1553242

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Connector, Universal, 4-position, Socket straight M12, coding: A, Screw connection, knurl material: Stainless steel 1.4404, cable gland Pg7, external cable diameter 4 mm ... 6 mm

SACC-M12FR-4CON-PG 7-VA - Connector

1553284

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Connector, Universal, 4-position, Socket angled M12, coding: A, Screw connection, knurl material: Stainless steel 1.4404, cable gland Pg7, external cable diameter 4 mm ... 6 mm



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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

SAC BIT M12-W14 - Tool

1212513

https://www.phoenixcontact.com/us/products/1212513



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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