

1694473

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Sensor/actuator cable, 3-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12, coding: A, on free cable end and free cable end, cable length: 10 m

Commercial data

Item number	1694473
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	02
Product key	BF1COA
Catalog page	Page 250 (C-2-2019)
GTIN	4017918178345
Weight per piece (including packing)	443.4 g
Weight per piece (excluding packing)	413.5 g
Customs tariff number	85444290
Country of origin	PL



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Technical data

Product properties

Product type	Distributor with cable
Number of positions	3
Application	Standard
No. of cable outlets	2
Shielded	no
Coding	A
sulation characteristics	
osulation characteristics Overvoltage category	II

Connection data

Tightening torque	0.4 Nm (M12 connector)
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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	Zinc die-cast, nickel-plated

Electrical properties

Insulation resistance	≥ 100 MΩ
Nominal voltage U _N	250 V AC
	250 V DC
Nominal current I _N	4 A

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 100

Signaling

Status display	No
Status display present	No

Connector

Connection 1

Туре	Plug straight M12
Coding type	A



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Type free cable end Cable (Pine) Cable (Pine) Cable (Pine) Cable (Pine) Cable weight 10 m Cable weight 23 kg/km UL AWM Style 20549 Number of positions 3 Shielded no Cable type PUR halogen-free black (PUR) Conductor structure signal line 420.010 mm AWG signal line 22 Conductor cross section 3x 0.34 mm² (Signal line) Wire diameter incl. insulation 1.27 mm ±0.02 mm (Signal line) Wire diameter incl. insulation 1.27 mm ±0.02 mm (Signal line) Cuter sheath, asterial PUR External cable diameter 3.85 mm ±0.15 mm Outer sheath, cotor black-gray RAL 7021 Conductor material Bare Cu litz wires Material wire insulation PP Single wire, color brown, blue, black Thickness, insulation PP Single wire, color brown, blue, black Material wire insulation PP Thickness, insulation PP Single wire, color brown, blue, black Mac. conductor resistance nax 58 0/km (at 20 °C) Insulation resistance nax 58 0/km (at 20 °C) Insulation resistance nax 58 0/km (at 20 °C) Nomial voltage, cable \$300 V Smallest bending radius, fixed installation 19 mm Smallest bending radius, movable installation 38 mm Mac. bending radius, movable installation 19 mm Smallest bending radius, movable installation 38 mm Mac. bending radius, movable installation 19 mm Smallest bending radius, movable installation 19 mm Smallest bending radius, movable installation 19 mm	Connection 2	
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Cable weight 23 kg/km UL AWM Style 20549 Number of positions 3 Shielded no Cable type PUR halogen-free black [PUR] Conductor structure signal line 42x 0.10 mm AWG signal line 22 Conductor cross section 3x 0.34 mm² (Signal line) Wire diameter incl. insulation 1.27 mm ±0.02 mm (Signal line) External cable diameter 3.85 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, blue, black Thickness, insulation ≥ 0.21 mm (Core insulation) approx. 0.50 mm (Outer cable sheath) Overall twist 3 wires, twisted Max. conductor resistance ≥ 100 GΩ*km (at 20 °C) Insulation resistance ≥ 100 GΩ*km (at 20 °C) Nominal voltage, cable ≤ 3000 V Test voltage ≥ 3000 V Smallest bending radius, fixed installation 38 mm <t< td=""><td>DLID halagan from black (DLID)</td><td></td></t<>	DLID halagan from black (DLID)	
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Shielded no Cable type PUR halogen-free black [PUR] Conductor structure signal line 42x 0.10 mm AWG signal line 22 Conductor cross section 3x 0.34 mm² (Signal line) Wire diameter incl. insulation 1.27 mm ±0.02 mm (Signal line) External cable diameter 3.85 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, blue, black Thickness, insulation ≥ 0.21 mm (Core insulation) approx. 0.50 mm (Outer cable sheath) Overall twist 3 wires, twisted Max. conductor resistance max. 58 Ω/km (at 20 °C) Insulation resistance ≥ 100 GΩ*km (at 20 °C) Nominal voltage, cable ≤ 300 V Test voltage ≥ 3000 V Smallest bending radius, fixed installation 19 mm Smallest bending radius, movable installation 38 mm Max. bending cycles 100000000	UL AWM Style	20549
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Conductor structure signal line 42x 0.10 mm AWG signal line 22 Conductor cross section 3x 0.34 mm² (Signal line) Wire diameter incl. insulation 1.27 mm ±0.02 mm (Signal line) External cable diameter 3.85 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, blue, black Thickness, insulation ≥ 0.21 mm (Core insulation) approx 0.50 mm (Outer cable sheath) Overall twist Overall twist 3 wires, twisted Max. conductor resistance max. 58 Ω/km (at 20 °C) Insulation resistance ≥ 100 GΩ*km (at 20 °C) Nominal voltage, cable ≤ 300 V Test voltage ≥ 3000 V Smallest bending radius, fixed installation 19 mm Smallest bending radius, movable installation 38 mm Max. bending cycles 10000000	Shielded	no
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Conductor cross section $3x 0.34 \text{ mm}^2$ (Signal line) Wire diameter incl. insulation $1.27 \text{ mm} \pm 0.02 \text{ mm}$ (Signal line) External cable diameter $3.85 \text{ mm} \pm 0.15 \text{ mm}$ 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, blue, black Thickness, insulation $\geq 0.21 \text{ mm}$ (Core insulation) approx. 0.50 mm (Outer cable sheath) Overall twist 3 wires, twisted Max. conductor resistance max. $58 \Omega/\text{km}$ (at 20 °C) Insulation resistance $\geq 100 \text{ G}\Omega^2\text{km}$ (at 20 °C) Nominal voltage, cable $\leq 300 \text{ V}$ Test voltage $\geq 3000 \text{ V}$ Smallest bending radius, fixed installation 19 mm Smallest bending radius, movable installation 38 mm Max. bending cycles 10000000	Conductor structure signal line	42x 0.10 mm
Wire diameter incl. insulation $1.27 \text{ mm} \pm 0.02 \text{ mm}$ (Signal line)External cable diameter $3.85 \text{ mm} \pm 0.15 \text{ mm}$ Outer sheath, materialPURExternal sheath, colorblack-gray RAL 7021Conductor materialBare Cu litz wiresMaterial wire insulationPPSingle wire, colorbrown, blue, blackThickness, insulation $\geq 0.21 \text{ mm}$ (Core insulation)approx. 0.50 mm (Outer cable sheath)Overall twist 3 wires, twisted Max. conductor resistance $\text{max. } 58 \Omega/\text{km}$ (at 20 °C)Insulation resistance $\geq 100 \text{ G}\Omega^*\text{km}$ (at 20 °C)Nominal voltage, cable $\leq 300 \text{ V}$ Test voltage $\geq 3000 \text{ V}$ Smallest bending radius, fixed installation19 mmSmallest bending radius, movable installation38 mmMax. bending cycles 10000000	AWG signal line	22
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Single wire, color brown, blue, black Thickness, insulation ≥ 0.21 mm (Core insulation) approx. 0.50 mm (Outer cable sheath) Overall twist 3 wires, twisted Max. conductor resistance max. 58 Ω/km (at 20 °C) Insulation resistance ≥ 100 GΩ*km (at 20 °C) Nominal voltage, cable ≤ 300 V Test voltage ≥ 3000 V Smallest bending radius, fixed installation 19 mm Smallest bending radius, movable installation 38 mm Max. bending cycles 10000000	Conductor material	Bare Cu litz wires
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Overall twist 3 wires, twisted Max. conductor resistance max. 58 Ω/km (at 20 °C) Insulation resistance ≥ 100 GΩ*km (at 20 °C) Nominal voltage, cable ≤ 300 V Test voltage ≥ 3000 V Smallest bending radius, fixed installation 19 mm Smallest bending radius, movable installation 38 mm Max. bending cycles 10000000	Thickness, insulation	≥ 0.21 mm (Core insulation)
Max. conductor resistancemax. $58 \Omega/km$ (at 20 °C)Insulation resistance $\geq 100 G\Omega^*km$ (at 20 °C)Nominal voltage, cable $\leq 300 V$ Test voltage $\geq 3000 V$ Smallest bending radius, fixed installation19 mmSmallest bending radius, movable installation38 mmMax. bending cycles10000000		approx. 0.50 mm (Outer cable sheath)
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Test voltage ≥ 3000 V Smallest bending radius, fixed installation 19 mm Smallest bending radius, movable installation 38 mm Max. bending cycles 10000000	Insulation resistance	≥ 100 GΩ*km (at 20 °C)
Smallest bending radius, fixed installation 19 mm Smallest bending radius, movable installation 38 mm Max. bending cycles 10000000	Nominal voltage, cable	≤ 300 V
Smallest bending radius, movable installation 38 mm Max. bending cycles 10000000	Test voltage	≥ 3000 V
Max. bending cycles 10000000	Smallest bending radius, fixed installation	19 mm
	Smallest bending radius, movable installation	38 mm
Halogen-free in accordance with DIN VDE 0472 part 815	Max. bending cycles	10000000
	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
	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
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

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