

1698989

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Sensor/actuator cable, 5-position, PUR, black, shielded, Plug straight M12, coding: A, on Socket straight M12, coding: A, cable length: 1.5 m, spiraled

Commercial data

Item number	1698989
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF18
Product key	AF1ICA
GTIN	4067923264397
Weight per piece (including packing)	370 g
Weight per piece (excluding packing)	370 g
Country of origin	US



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Technical data

Notes

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CE note	The products are offered exclusively for export outside the EU
	and the European Economic Area.

Product properties

Product type	Sensor/actuator cable
Application	Standard, U.S. cables
Number of positions	5
No. of cable outlets	1
Special properties	Coil cords are rated to 100,000 cycles when extended no greater than three times the retracted length and not subject to any adverse or abusive conditions.
Shielded	yes
Coding	A

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
Outer sheath, material	PUR

Electrical properties

Insulation resistance	≥ 10 MΩ
Nominal voltage U _N	125 V AC
	125 V DC
Nominal current I _N	1.2 A

Mechanical properties

Med	hani	cal c	łata.

Insertion/withdrawal cycles	≥ 100

Signaling

Status display	no
Status display present	no

Connection data



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Conductor connection

Tightening torque	0.4 Nm (M12 connector)
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Connector

Connection 1

Туре	Plug straight M12
Number of positions	5
Coding type	A

Connection 2

Туре	Socket straight M12
Number of positions	5
Coding type	A

Cable/line

Cable length	1.5 m
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PUR black [570]

Dimensional drawing



Cable weight58.5 kg/kmNumber of positions5ShieldedyesCable typePUR black [570]Conductor structure signal line44x 0.10 mmAWG signal line22Wire diameter incl. insulation0.76 mmExternal cable diameter5.30 mm ±0.2 mmOuter sheath, materialPURExternal sheath, colorblackConductor materialTin-plated Cu litz wiresMaterial, fillerCottonSingle wire, colorbrown, white, blue, black, grayOverall twist5 wires, twistedMax. conductor resistancemax. 66.6 Ω/km (20 °C)Nominal voltage, cable300 VMinimum bending radius, flexible installation8 x DSmallest bending radius, movable installation43 mm		
Shielded yes Cable type PUR black [570] Conductor structure signal line 44x 0.10 mm AWG signal line 22 Wire diameter incl. insulation 0.76 mm External cable diameter 5.30 mm ±0.2 mm Outer sheath, material PUR External sheath, color black Conductor material Tin-plated Cu litz wires Material, filler Cotton Single wire, color brown, white, blue, black, gray Overall twist 5 wires, twisted Max. conductor resistance max. 66.6 Ω/km (20 °C) Nominal voltage, cable 300 V Minimum bending radius, flexible installation 8 x D	Cable weight	58.5 kg/km
Cable type Conductor structure signal line AWG signal line 22 Wire diameter incl. insulation External cable diameter Outer sheath, material External sheath, color External sheath, color Conductor material Material, filler Cotton Single wire, color Diametrial Max. conductor resistance Max. conductor resistance Max. conductor resistance Max. de.6.6 Ω/km (20 °C) Nominal voltage, cable Minimum bending radius, flexible installation PUR PUR 5.30 mm ±0.2 mm D.76 mm Cotton Cotton Cotton Single wire, color Max. 66.6 Ω/km (20 °C) 300 V Minimum bending radius, flexible installation 8 x D	Number of positions	5
Conductor structure signal line 44x 0.10 mm AWG signal line 22 Wire diameter incl. insulation 0.76 mm External cable diameter 5.30 mm ±0.2 mm Outer sheath, material PUR External sheath, color black Conductor material Tin-plated Cu litz wires Material, filler Cotton Single wire, color brown, white, blue, black, gray Overall twist 5 wires, twisted Max. conductor resistance max. 66.6 Ω/km (20 °C) Nominal voltage, cable 300 V Minimum bending radius, flexible installation 8 x D	Shielded	yes
AWG signal line 22 Wire diameter incl. insulation External cable diameter 5.30 mm ±0.2 mm Outer sheath, material PUR External sheath, color black Conductor material Tin-plated Cu litz wires Material, filler Cotton Single wire, color brown, white, blue, black, gray Overall twist 5 wires, twisted Max. conductor resistance max. 66.6 Ω/km (20 °C) Nominal voltage, cable Minimum bending radius, flexible installation 8 x D	Cable type	PUR black [570]
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External cable diameter 5.30 mm ±0.2 mm Outer sheath, material PUR External sheath, color black Conductor material Tin-plated Cu litz wires Material, filler Cotton Single wire, color brown, white, blue, black, gray Overall twist 5 wires, twisted Max. conductor resistance max. 66.6 Ω/km (20 °C) Nominal voltage, cable Minimum bending radius, flexible installation 8 x D	AWG signal line	22
Outer sheath, material PUR External sheath, color black Conductor material Tin-plated Cu litz wires Material, filler Cotton Single wire, color brown, white, blue, black, gray Overall twist 5 wires, twisted Max. conductor resistance max. 66.6 Ω/km (20 °C) Nominal voltage, cable 300 V Minimum bending radius, flexible installation 8 x D	Wire diameter incl. insulation	0.76 mm
External sheath, colorblackConductor materialTin-plated Cu litz wiresMaterial, fillerCottonSingle wire, colorbrown, white, blue, black, grayOverall twist5 wires, twistedMax. conductor resistancemax. 66.6 Ω/km (20 °C)Nominal voltage, cable300 VMinimum bending radius, flexible installation8 x D	External cable diameter	5.30 mm ±0.2 mm
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Nominal voltage, cable 300 V Minimum bending radius, flexible installation 8 x D	Overall twist	5 wires, twisted
Minimum bending radius, flexible installation 8 x D	Max. conductor resistance	max. 66.6 Ω/km (20 °C)
	Nominal voltage, cable	300 V
Smallest bending radius, movable installation 43 mm	Minimum bending radius, flexible installation	8 x D
	Smallest bending radius, movable installation	43 mm



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Standards/specifications

Ambient temperature (operation)	-15 °C 105 °C (cable, fixed installation)
Environmental and real-life conditions	
Ambient conditions	
Degree of protection	IP65
	IP67
Ambient temperature (operation) (male connector/female connector)	-25 °C 90 °C (Plug / socket)
Ambient temperature (operation) (Cable, fixed installation)	-15 °C 105 °C (cable, fixed installation)
Standards and regulations	
Standard designation	M12 connector

IEC 61076-2-101

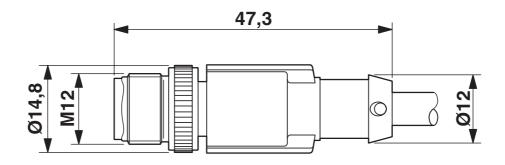


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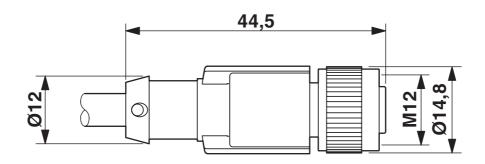
Drawings

Dimensional drawing

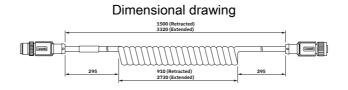


Plug, M12 x 1, straight, shielded

Dimensional drawing



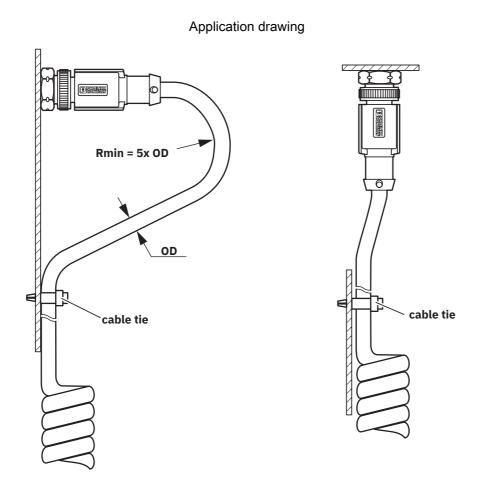
M12 x 1 socket, straight, shielded





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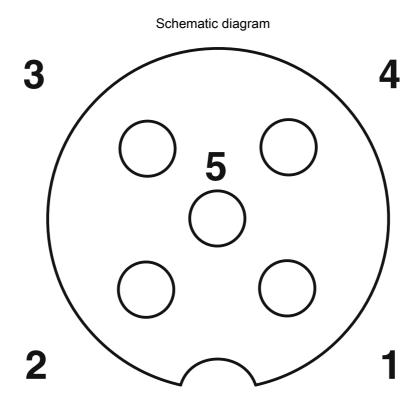
Schematic diagram

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



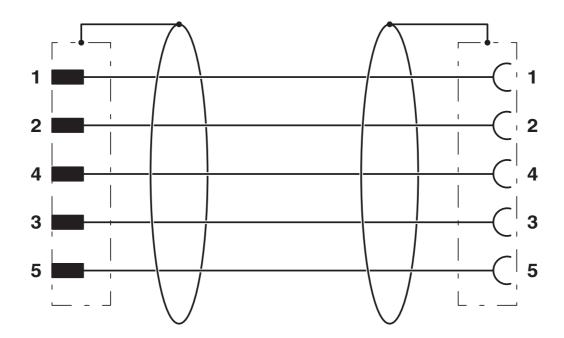
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Pin assignment M12 socket, 5-pos., A-coded, view female side

Circuit diagram



Contact assignment of M8 plugs / M12 sockets



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Classifications

ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311



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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
China RoHS	
Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits
EU REACH SVHC	
REACH candidate substance (CAS No.)	No substance above 0.1 wt%

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