

Sensor/actuator cable - SAC-5P- 1,5-PUR/M12FR



1669851

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

Your advantages

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

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Commercial Data

Item number	1669851
Packing unit	1 pc
Minimum order quantity	1 pc
Sales Key	BF1CDA
Product Key	BF1CDA
Catalog Page	Page 201 (C-2-2019)
GTIN	4017918134754
Weight per Piece (including packing)	57.2 g
Weight per Piece (excluding packing)	57.2 g
Customs tariff number	85444290
Country of origin	PL

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Technical Data

Product properties

Product type	Sensor/actuator cable
Number of positions	5
Application	Standard
Coding	A - standard

Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Material specifications

Flammability rating according to UL 94	HB
Sealing material	NBR
Material of grip body	TPU, hardly inflammable, self-extinguishing
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Cable gland material	Zinc die-cast, nickel-plated

Electrical properties

Contact resistance	$\leq 5 \text{ m}\Omega$
Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage U_N	48 V AC
	60 V DC
Nominal current I_N	4 A
Protective circuit	unwired

Connection data

Conductor connection

Tightening torque	0.4 NmM12 connector
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Connector

Insertion/withdrawal cycles	≥ 100
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Header 1

Head design	free cable end
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Header 2

Head design	Socket
Head cable outlet	angled
Head thread type	M12
Coding	A

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LED signaling

Status display	No
Status display present	No

Cable / line

Cable length	1.5 m
Cable weight	35 kg/km

Cable structure

Cable abbreviation	Li9Y11Y-HF
Cable type	PUR halogen-free black
External cable diameter	5.00 mm
Outer sheath, material	PUR
External sheath, color	black-gray RAL 7021
Conductor material	Bare Cu litz wires
Conductor structure signal line	42x 0.10 mm
AWG signal line	22
Material, filler	PP
Material wire insulation	PP
Thickness, insulation	≥ 0.21 mm (Core insulation)
Wire diameter incl. insulation	1.27 mm ±0.05 mm
Single wire, color	brown, blue, white, black, green/yellow
Overall twist	5 cores, twisted

Electrical properties

Nominal voltage, cable	300 V
Test voltage, cable	3000 V
Conductor resistance	≤ 58 Ω/m
Cable insulation resistance	≥ 100 GΩ*km

Mechanical properties

Smallest bending radius, movable installation	50 mm
Number of bending cycles	4000000
Bending radius	50 mm
Traversing path	10 m
Traversing rate	3 m/s

Bending cycles

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Number of bending cycles	4000000
Bending radius	50 mm
Traversing path	10 m
Traversing rate	3 m/s

Ambient conditions

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Degree of protection	IP65
	IP67
	IP68
Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)

Standards and regulations

M12

Standards/specifications	IEC 61076-2-101
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Drawings

Circuit diagram



Contact assignment of the M12 sockets

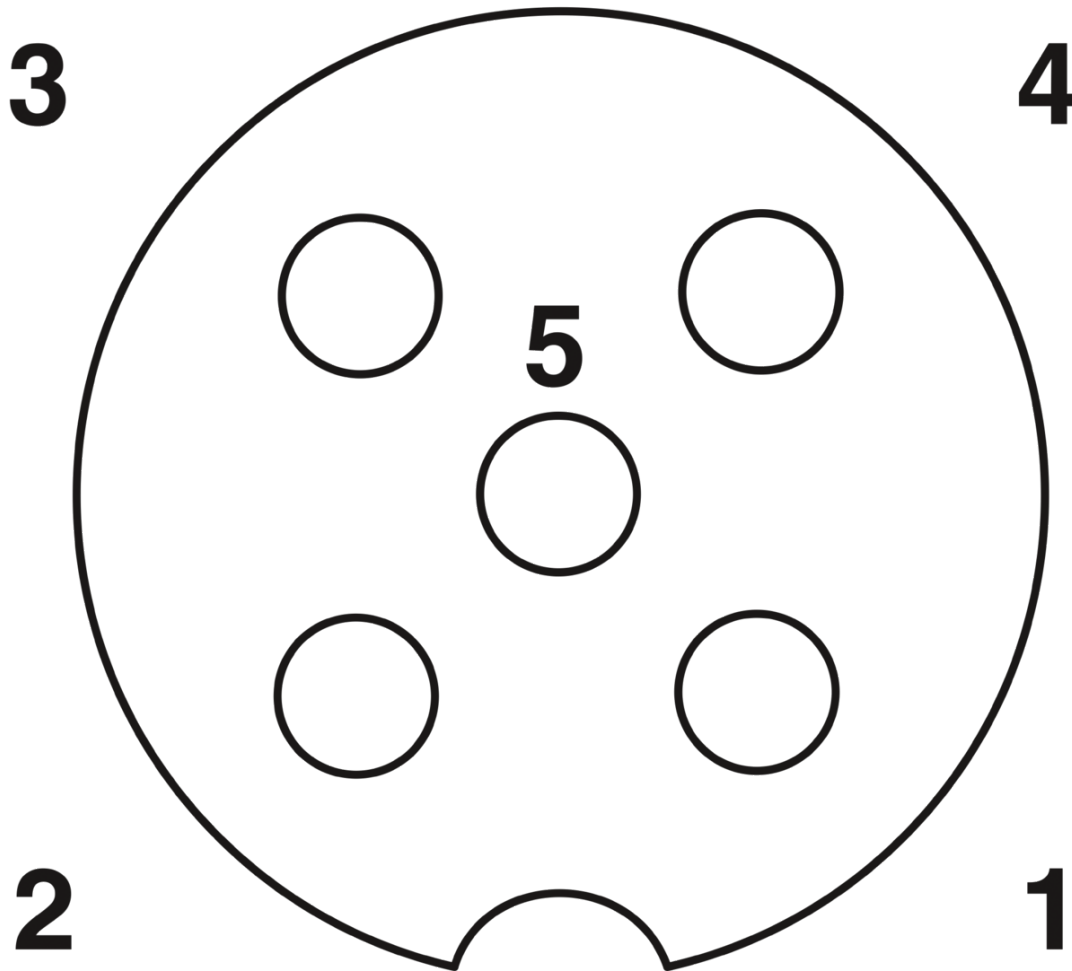
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Schematic diagram



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

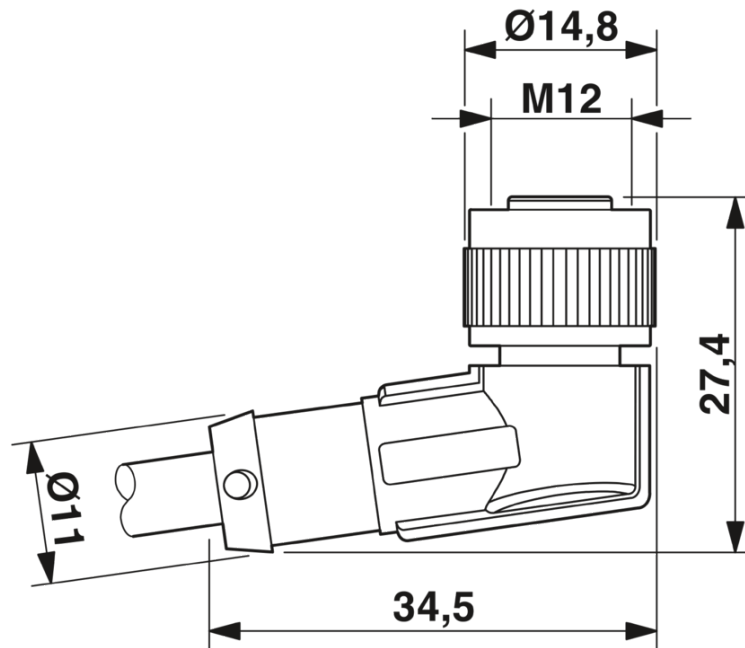
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Dimensional drawing



M12 x 1 socket, angled


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Approvals

UL Listed 	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
	125 V	4 A	-	-

cUL Listed 	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
	125 V	4 A	-	-

EAC 

cULus Listed

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Classifications

ECLASS

ECLASS-9.0	27060311
ECLASS-10.0.1	27060311
ECLASS-11.0	27060311

ETIM

ETIM 8.0	EC001855
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UNSPSC

UNSPSC 21.0	31251501
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Environmental Product Compliance

China RoHS

Environmentally friendly use period: unlimited = EFUP-e

No hazardous substances above threshold values

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