

SAC-5P-3,0-500/M12FR FB - Sensor/actuator cable



1421003

<https://www.phoenixcontact.com/us/products/1421003>

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Sensor/actuator cable, 5-position, PVC, gray RAL 7001, free cable end, on Socket angled M12, coding: A, cable length: 3 m, with high-grade steel knurl

Your advantages

- Easy and safe: 100 % electrically tested plug-in components
- Contamination can be detected quickly – thanks to the light color

Commercial data

Item number	1421003
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF03
Product key	AF1CDA
GTIN	4055626250335
Weight per piece (including packing)	144.15 g
Weight per piece (excluding packing)	135.11 g
Customs tariff number	85444290
Country of origin	PL

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Technical data

Product properties

Product type	Sensor/actuator cable
Application	Food processing industry
Number of positions	5
No. of cable outlets	1
Shielded	no
Coding	A

Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Material specifications

Material of grip body	PP
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PP
Material for screw connection	Stainless steel

Electrical properties

Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage U_N	48 V AC 60 V DC
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

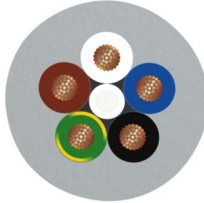
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Cable/line

Cable length	3 m
PVC gray [500]	
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 gray [500]
Conductor structure signal line	19x 0.15 mm
AWG signal line	22
Conductor cross-section	5x 0.34 mm ² (Signal line)
Wire diameter incl. insulation	1.26 mm ±0.05 mm
External cable diameter	5.00 mm ±0.15 mm
Outer sheath, material	PVC
External sheath, color	gray RAL 7001
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. 57 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	25 mm
Smallest bending radius, movable installation	50 mm
Flame resistance	As per UL-Style 2464
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation) -25 °C ... 80 °C (Cable, flexible installation)

Environmental and real-life conditions

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Ambient conditions

Degree of protection	IP65
	IP67
	IP68
	IP69K
Ambient temperature (operation) (male connector/female connector)	-25 °C ... 90 °C (Plug / socket)

Standards and regulations

M12

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

Drawings

Dimensional drawing



M12 x 1 male plug, angled

Schematic diagram



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

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Circuit diagram



Contact assignment of the M12 socket

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Classifications

ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

ETIM

ETIM 9.0	EC001855
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UNSPSC

UNSPSC 21.0	26121600
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene ("Dechlorane Plus™")(CAS: n/a)
SCIP	8d9ad6e9-1601-49c3-8951-a9ed18a3bae1

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