

SAC-5P-M12MS/3,0-600 HD - Sensor/actuator cable

1404041

<https://www.phoenixcontact.com/us/products/1404041>



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Sensor/actuator cable, 5-position, PP-EPDM halogen-free, gray RAL 7035, Plug straight M12, coding: A, on free cable end, cable length: 3 m, Hygienic design, with high-grade steel knurl

Your advantages

- Easy and safe: 100 % electrically tested plug-in components
- Stainless steel type 1.4404 used to provide corrosion protection for all exposed metal parts
- Contamination can be detected quickly – thanks to the light color

Commercial data

Item number	1404041
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF03
Product key	AF1CDA
GTIN	4046356677806
Weight per piece (including packing)	113.72 g
Weight per piece (excluding packing)	103 g
Customs tariff number	85444290
Country of origin	PL

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

Signaling

Status display	no
Status display present	no

Connection data

Conductor connection	
Tightening torque	0.4 Nm (M12 connector)

Connector

Connection 1	
Type	Plug straight M12
Number of positions	5

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Coding type

A

Connection 2

Type

free cable end

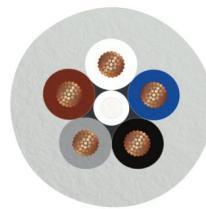
Cable/line

Cable length

3 m

Halogen-free PP gray [600]

Dimensional drawing



Cable weight

34 kg/km

Number of positions

5

Shielded

no

Cable type

Halogen-free PP gray [600]

Conductor structure signal line

42x 0.10 mm

AWG signal line

22

Conductor cross section

5x 0.34 mm² (Signal line)

Wire diameter incl. insulation

1.27 mm ±0.02 mm (Signal line)

External cable diameter

5.00 mm ±0.15 mm

Outer sheath, material

PP-EPDM

External sheath, color

gray RAL 7035

Conductor material

Bare Cu litz wires

Material wire insulation

PP

Single wire, color

brown, white, blue, black, gray

Thickness, insulation

≥ 0.21 mm (Core insulation)

Thickness, outer sheath

approx. 0.70 mm

Overall twist

5 cores, twisted

Length of twist, overall twist

55 mm

Max. conductor resistance

58 Ω/km (at 20 °C)

Nominal voltage, cable

≤ 300 V AC

Test voltage

≥ 3000 V AC

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

Dynamic load capacity (bending)

Max. bending cycles: 4000000, Bending radius: 10 x D, Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10 m/s²

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Dynamic load capacity (torsion)	Torsion: ± 270 °/m, Torsion cycles: ≥ 4000000 , Torsional frequency: max.25 Torsion cycles/min
Halogen-free	in accordance with DIN VDE 0472 part 815
Other resistance	Resistant to cold bending and cold impacts (according to DIN EN 60811-1-4 (-40 °C))
Special properties	FDA compliant according to FDA 21 CFR 177.2600 highly flexible Flexible cable conduit capable
Ambient temperature (operation)	-40 °C ... 105 °C (cable, fixed installation) -25 °C ... 105 °C (Cable, flexible installation)

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65 IP67 IP68 IP69K
Ambient temperature (operation) (male connector/female connector)	-40 °C ... 105 °C (Plug / socket)

Standards and regulations

M12

Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101
Standard designation	Material conformance
Standards/specifications	FDA 21 CFR 177.2600

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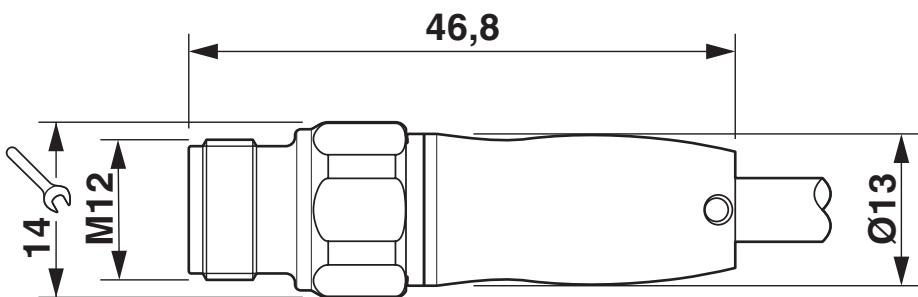
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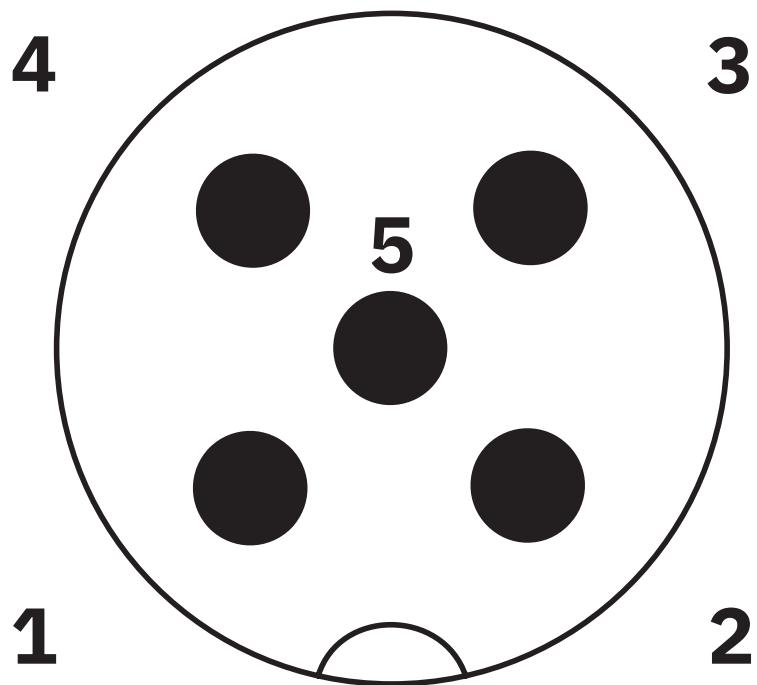
Drawings

Dimensional drawing



Plug, M12 x 1, straight, shielded

Schematic diagram



Pin assignment M12 male connector, 5-pos., A-coded, male side

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Circuit diagram



Contact assignment of the M12 plug

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Approvals

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EAC-RoHS

Approval ID: RU D-DE.HB35.B.00387

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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.)	No substance above 0.1 wt%
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EF3.0 Climate Change

CO2e kg	1.378 kg CO2e
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