

Sensor/actuator cable - SAC-4P-3,0-600/M12FR-3L FB



1404020

<https://www.phoenixcontact.com/pc/products/1404020>

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Sensor/actuator cable, 4-position, PP-EPDM, gray RAL 7035, free cable end, on Socket angled M12, coding: A, with 3 LEDs, cable length: 3 m, Hygienic design, with plastic knurl

Your advantages

- Easy and safe: 100% electrically tested plug-in components
- Contamination can be detected quickly – thanks to the light color
- Convenient: increased machine availability thanks to quick and easy diagnostics

Commercial Data

Item number	1404020
Packing unit	1 pc
Minimum order quantity	1 pc
Product Key	BF1CCA
Catalog Page	Page 144 (C-4-2013)
GTIN	4046356677653
Weight per Piece (including packing)	93.9 g
Weight per Piece (excluding packing)	89 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	4
Application	Food processing industry
No. of cable outlets	1
Shielded	no
Coding	A - standard

Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Material specifications

Sealing material	FKM
Material of grip body	PP
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PP
Material for screw connection	Polypropylene

Electrical properties

Contact resistance	$\leq 5 \text{ m}\Omega$
Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage U_N	24 V DC
Nominal current I_N	4 A
Protective circuit	unwired

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 100
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LED signaling

Status display	3 LEDs
Status display present	yes

Connection data

Conductor connection

Tightening torque	0.4 Nm (M12 connector)
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Connector

Connection 1

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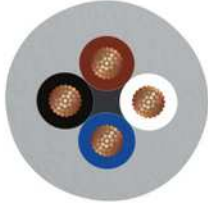
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Head design	free cable end
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Connection 2

Head design	Socket
Head cable outlet	angled
Head thread type	M12
Coding	A
Status indicator head	3 LEDs

Cable / line

Cable length	3 m
Dimensional drawing	
Cable weight	30 kg/km
Number of positions	4
Shielded	no
Conductor structure signal line	42x 0.10 mm
AWG signal line	22
Conductor cross section	4x 0.34 mm ² (Signal line)
Wire diameter incl. insulation	1.27 mm ±0.02 mm (Signal line)
External cable diameter	4.7 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
Thickness, insulation	≥ 0.21 mm
Thickness, outer sheath	approx. 0.8 mm
Overall twist	4 wires, twisted
Length of twist, overall twist	48 mm
Max. conductor resistance	approx. 58 MΩ/km
Insulation resistance	≥ 1 GΩ*km
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
Max. bending cycles	4000000
Torsional frequency	Torsion cycles/min

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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	partly suitable for use with drag chain
Ambient temperature (operation)	-40 °C ... 105 °C (cable, fixed installation) -25 °C ... 105 °C (Cable, flexible installation)

Ambient conditions

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

Standards and regulations

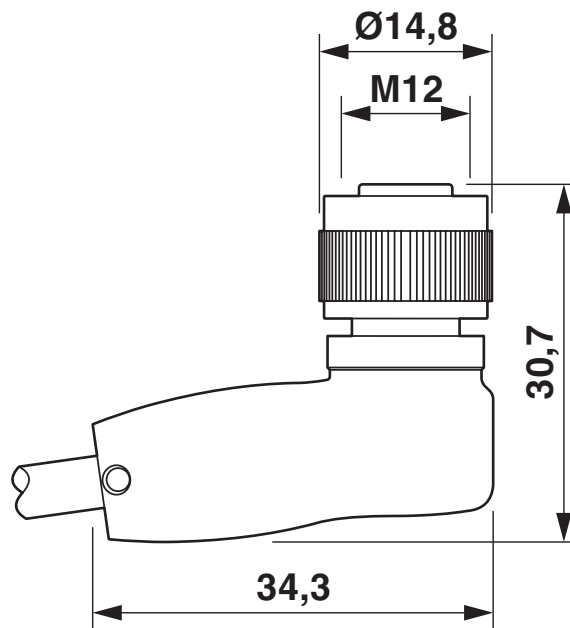
Standards/specifications	IEC 61076-2-101
Standards/specifications	FDA 21 CFR 177.2600

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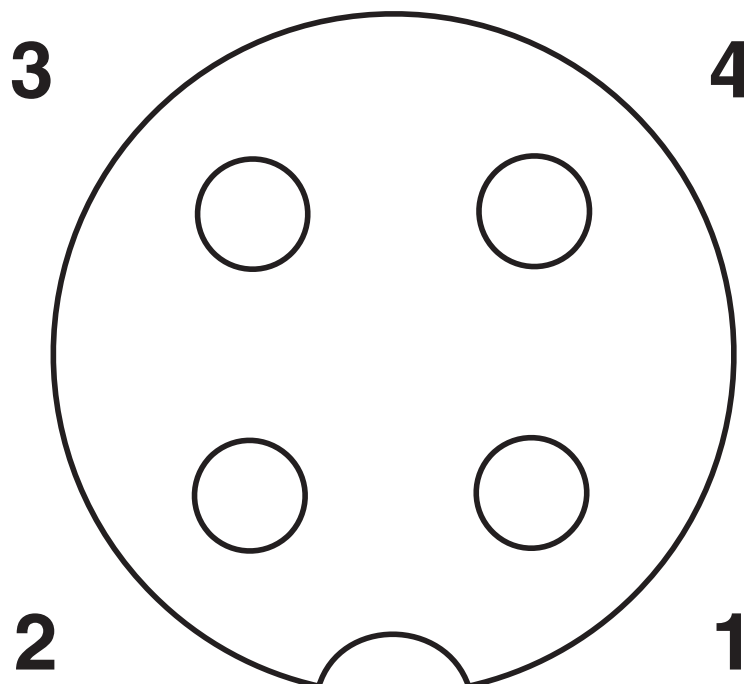
Drawings

Dimensional drawing



Socket M12 x 1, angled, with LED

Schematic diagram



Pin assignment M12 socket, 4-pos., A-coded, view female side

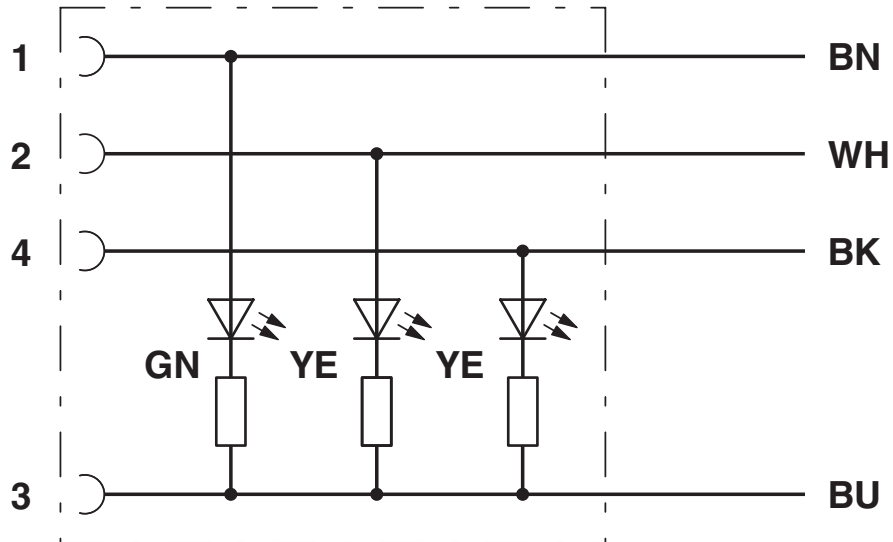
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Circuit diagram



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Approvals



EAC

Approval ID: RU C-DE.BL08.B.00286



EAC

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

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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	26121600
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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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Accessories

Diagonal cutter

Diagonal cutter - CUTFOX-S VDE - 1212207

<https://www.phoenixcontact.com/pc/products/1212207>



Diagonal cutter for hard (piano wire) and soft wires, VDE 1000 V AC/1500 V DC tested

Stripping tool

Stripping tool - WIREFOX SAC - 1212623

<https://www.phoenixcontact.com/pc/products/1212623>



Stripping pliers, for halogen-free sensor/actuator cables (SAC cables), with PUR and PVC insulation, from Ø of 4.4 to 7 mm, any stripping length

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Stripping tool

Stripping tool - WIREFOX 10 - 1212150

<https://www.phoenixcontact.com/pc/products/1212150>



Stripping tool, for cables and conductors from 0.02 - 10 mm², self-adjusting, stripping length of up to 18 mm, cutting capacity of up to 10 mm² stranded/1.5 mm² solid, replaceable stripping blade

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