SAC-3P- 5,0-PUR/M 8FR-2L - Sensor/actuator cable

1671085

https://www.phoenixcontact.com/in/products/1671085

Sensor/actuator cable, 3-position, PUR halogen-free, black-gray RAL 7021, free cable end, on Socket angled M8, with 2 LEDs, cable length: 5 m

Your advantages

- Easy and safe: 100% electrically tested plug-in components
- Convenient: increased machine availability thanks to quick and easy diagnostics

Commercial Data

Item number	1671085
Packing unit	1 pc
Minimum order quantity	1 pc
Sales Key	BF1
Product Key	BF1BBA
Catalog Page	Page 188 (C-2-2019)
GTIN	4017918134938
Weight per Piece (including packing)	95.4 g
Weight per Piece (excluding packing)	92.5 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	3
Application	Standard
No. of cable outlets	1
Shielded	no
Coding	A

Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Material specifications

Color Handle area	transparent
Flammability rating according to UL 94	HB
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

Electrical properties

Contact resistance	≤ 5 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U_N	24 V DC
Nominal current I_N	4 A
Protective circuit	unwired

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 100

Signaling

Status display	2 LEDs
Status display present	Yes

Connection data

Conductor connection

Tightening torque	0.2 Nm (M8 connectors)

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Connector

Connection 1

Type	free cable end
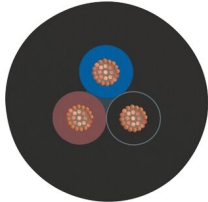
Connection 2

Type	Socket angled M8
Number of positions	3
Coding type	A

Cable/line

Cable length	5 m

PUR halogen-free black [PUR]

Dimensional drawing	
Cable weight	18 kg/km
UL AWM Style	20549 / 10493 (80°C/300 V)
Number of positions	3
Shielded	no
Cable type	PUR halogen-free black [PUR]
Conductor structure signal line	32x 0.10 mm
AWG signal line	24
Conductor cross section	3x 0.25 mm² (Signal line)
Wire diameter incl. insulation	1.17 mm ±0.02 mm
External cable diameter	3.6 mm ±0.15 mm
Outer sheath, material	PUR
External sheath, color	black-gray RAL 7021
Conductor material	Bare Cu litz wires
Material wire insulation	PP
Single wire, color	brown, blue, black
Thickness, insulation	≥ 0.21 mm (Core insulation)
Thickness, outer sheath	approx. 0.5 mm
Overall twist	3 wires, twisted
Length of twist, overall twist	40 mm
Max. conductor resistance	≤ 78 Ω/km (at 20 °C)
Insulation resistance	≥ 100 GΩ*km (at 20 °C)
Nominal voltage, cable	≤ 300 V

Test voltage	≥ 3000 V
Smallest bending radius, fixed installation	18 mm
Smallest bending radius, movable installation	36 mm
Max. bending cycles	10000000
Halogen-free	in accordance with DIN VDE 0472 part 815
Flame resistance	in accordance with UL 758/1581 FT2
	DIN EN 60332-2-2 (20 s)
Resistance to oil	in accordance with DIN EN 60811-2-1
Other resistance	hydrolysis and microbe resistant
	Highly resistant to acids, alkaline solutions and solvents
	Resistant to salt water
	partly UV-resistant in accordance with DIN EN ISO 4892-2-A
Special properties	Flexible cable conduit capable
	Silicone-free
	Free of substances which would hinder coating with paint or varnish
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-25 °C ... 80 °C (Cable, flexible installation)

Environmental and real-life conditions

Ambient conditions

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

Standards and regulations

Standards/specifications	IEC 61076-2-104

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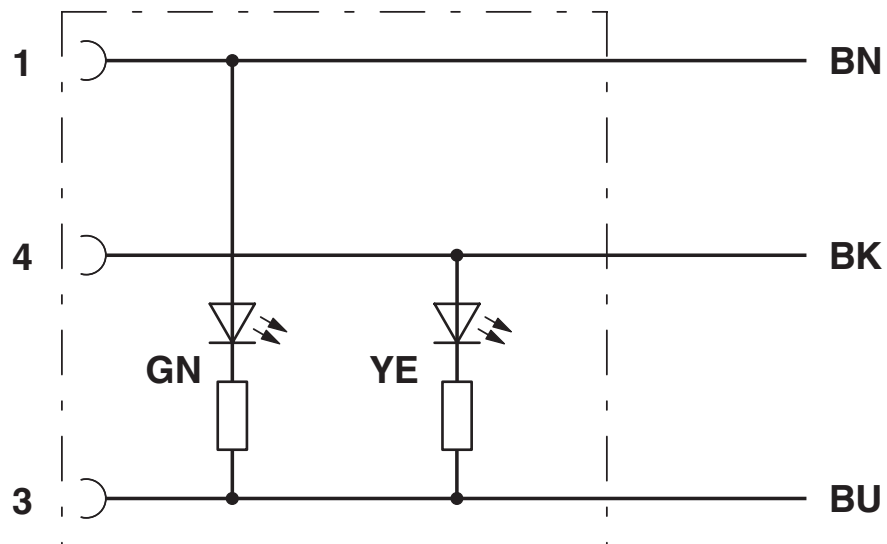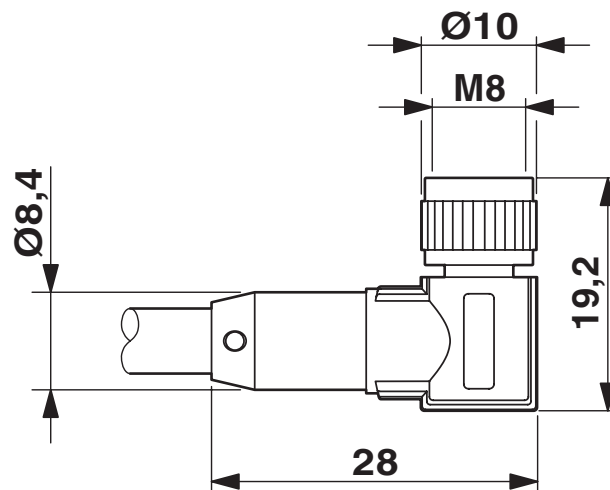https://www.phoenixcontact.com/in/products/1671085

Drawings

Circuit diagram

Dimensional drawing

Socket M8 x 1, angled, with LED

Schematic diagram

4

3

1
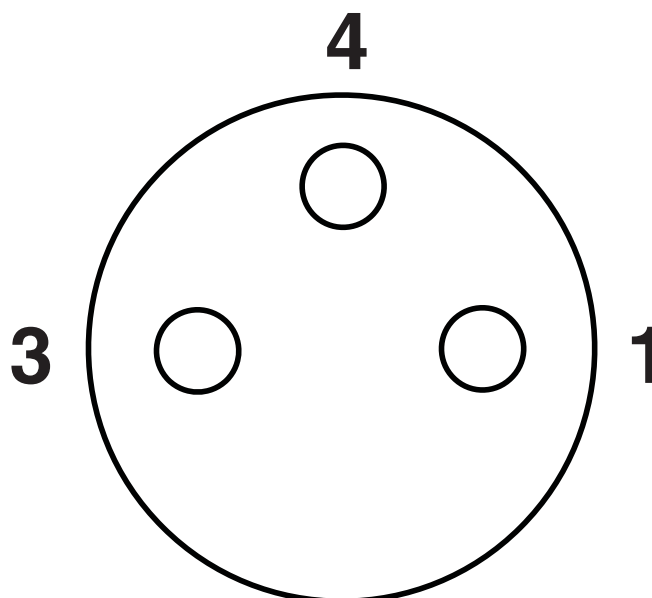
Pin assignment M8 socket, 3-pos., view female side

Approvals

UL Listed
Approval ID: FILE E 221474

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
	24 V	4 A	-	-

cUL Listed
Approval ID: FILE E 221474

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
	24 V	4 A	-	-

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

Classifications

ECLASS

ECLASS-11.0	27060311
ECLASS-12.0	27060311
ECLASS-13.0	27060311

ETIM

ETIM 8.0	EC001855

UNSPSC

UNSPSC 21.0	26121600

Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

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Accessories

PABA WH/23 - Insert label

Insert label, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, mounting type: slide-on, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 20
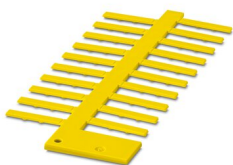
PABA YE/23 - Insert label

Insert label, Strip, yellow, unlabeled, can be labeled with: CMS-P1-PLOTTER, mounting type: slide-on, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 20

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B-STIFT - Marker pen

1051993

https://www.phoenixcontact.com/in/products/1051993

Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

CUTFOX-S VDE - Diagonal cutter

1212207

https://www.phoenixcontact.com/in/products/1212207

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

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WIREFOX SAC-1 - Stripping tool

1212757

https://www.phoenixcontact.com/in/products/1212757

Stripping pliers, for halogen-free sensor/actuator cables (SAC cables), with PUR and PVC insulation, from Ø of 3.2 to 4.4 mm, any stripping length

WIREFOX SAC - Stripping tool

1212623

https://www.phoenixcontact.com/in/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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WIREFOX 10 - Stripping tool

1212150

https://www.phoenixcontact.com/in/products/1212150

Stripping tool, for cables and conductors from 0.02 - 10 mm^2, self-adjusting, stripping length of up to 18 mm, cutting capacity of up to 10 mm^2 stranded/1.5 mm^2 solid, replaceable stripping blade

WP-CTA POM 13,0 BK - Protective hose adapter

1422884

https://www.phoenixcontact.com/in/products/1422884

Protective hose adapter, for corrugated hoses with a nominal size of 13 (10 x 13), corrugated in parallel

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WP-PA HF 13,0 BK - Protective hose

3240681

https://www.phoenixcontact.com/in/products/3240681

Protective hose, material: PA 6, UV-resistant: yes, flexible, degree of protection: IP68, color: black, flammability rating in acc. with UL 94: V0, inner diameter: 10 mm, Total length: 50 m

WP-PA HF-HB 13,0 BK - Protective hose

3240839

https://www.phoenixcontact.com/in/products/3240839

Protective hose, material: PA 6, UV-resistant: yes, flexible, degree of protection: IP68, color: black, flammability rating in acc. with UL 94: HB, inner diameter: 10 mm, Total length: 50 m

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PROT-M 8 MS-PA-CHAIN - Screw plug

1430860

https://www.phoenixcontact.com/in/products/1430860

M8 sealing cap made of plastic with fixing band for sensor cables, for M8 sockets

TSD 02 SAC - Torque screwdriver

1208487

https://www.phoenixcontact.com/in/products/1208487

Torque screwdriver, with preset torque of 0.2 Nm and 4 mm hexagonal drive for M8 connectors

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https://www.phoenixcontact.com/in/products/1671085

SAC BIT M8-D10 - Tool

1208461

https://www.phoenixcontact.com/in/products/1208461

Nut for assembling M8 connectors with longitudinal knurl and a knurl diameter of 10 mm, for 4 mm hexagonal drive

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