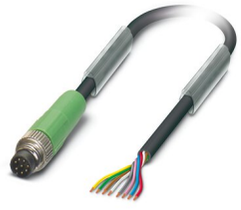
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Sensor/actuator cable - SAC-8P-M 8MS/ 5,0-PUR

1404181

https://www.phoenixcontact.com/gb/products/1404181

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Sensor/actuator cable, 8-position, PUR halogen-free, black-gray RAL 7021, Plug straight M8, on free cable end, cable length: 5 m

Your advantages

- Easy and safe: 100% electrically tested plug-in components
- Save space – with high-pos. connectors

Commercial Data

Item number	1404181
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to Order (non-returnable)
Sales Key	BF1BGA
Product Key	BF1BGA
Catalog Page	Page 207 (C-2-2019)
GTIN	4046356680943
Weight per Piece (including packing)	163.7 g
Weight per Piece (excluding packing)	159.4 g
Customs tariff number	85444290
Country of origin	PL

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Sensor/actuator cable - SAC-8P-M 8MS/ 5,0-PUR

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Technical Data

Product properties

Product type	Sensor/actuator cable
Number of positions	8
Application	Standard
No. of cable outlets	1
Shielded	no
Coding	A - standard

Insulation characteristics

Degree of pollution	3

Material specifications

Flammability rating according to UL 94	HB
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	≤ 5 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U_N	30 V AC
	30 V DC
Nominal current I_N	1.5 A
Protective circuit	unwired

Connection data

Conductor connection

Tightening torque	0.2 NmM8 connectors

Connector

Insertion/withdrawal cycles	≥ 100

Header 1

Head design	Plug
Head cable outlet	straight
Head thread type	M8

Head 2

Head design	free cable end

LED signaling

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Status display	No
Status display present	No

Cable / line

Cable length	5 m
UL AWM Style	20549
Number of positions	8
Shielded	no
Cable type	PUR halogen-free black [PUR]
Conductor structure signal line	18x 0.10 mm
AWG signal line	26
Conductor cross section	8x 0.14 mm² (Signal line)
Wire diameter incl. insulation	1 mm ±0.02 mm (Signal line)
External cable diameter	5.1 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	white, brown, green, yellow, gray, pink, blue, red
Thickness, insulation	≥ 0.21 mm (Signal line)
	≥ 0.38 mm (Outer cable sheath)
Overall twist	8 wires around filler to the core
Length of twist, overall twist	58 mm
Max. conductor resistance	139 Ω/km (at 20 °C)
Insulation resistance	1 GΩ*km (at 20 °C)
Nominal voltage, cable	≤ 300 V AC
Test voltage	≥ 3000 V AC (Spark test)
Smallest bending radius, fixed installation	25.5 mm
Smallest bending radius, movable installation	51 mm
Max. bending cycles	4000000
Halogen-free	in accordance with DIN VDE 0472 part 815
	in accordance with DIN EN 50267-2-1
Flame resistance	according to UL 758/1581 (horizontal)
	in accordance with UL 758/1581 FT2
Resistance to oil	According to DIN EN 60811-2-1, 168 h at 100°C
Other resistance	hydrolysis and microbe resistant
	Resistant to salt water
	Low adhesion
	abrasion-resistant
	partly UV-resistant in accordance with DIN EN ISO 4892-2-A
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-25 °C ... 80 °C (Cable, flexible installation)

Cable structure

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Sensor/actuator cable - SAC-8P-M 8MS/ 5,0-PUR

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Cable type	PUR halogen-free black
Outer sheath, material	PUR
External sheath, color	black-gray RAL 7021

Ambient conditions

Degree of protection	IP65
	IP67
	IP68
Ambient temperature (operation)	-25 °C ... 85 °C (Plug / socket)

Standards and regulations

M8

Standards/specifications	IEC 61076-2-104

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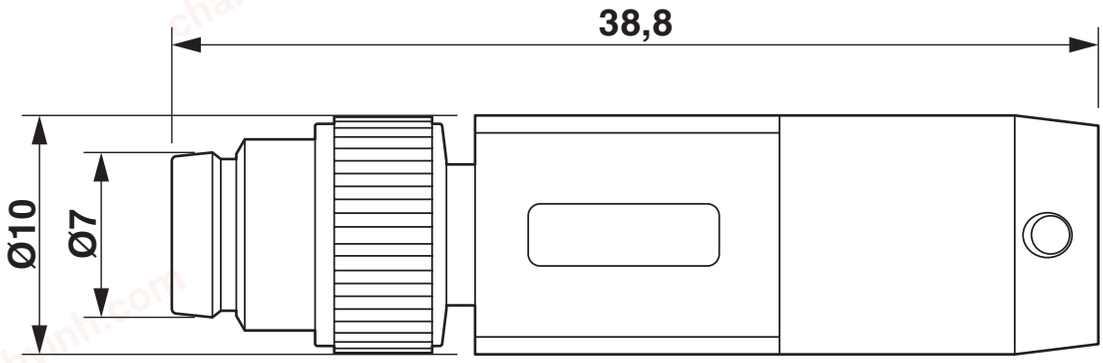
Sensor/actuator cable - SAC-8P-M 8MS/ 5,0-PUR

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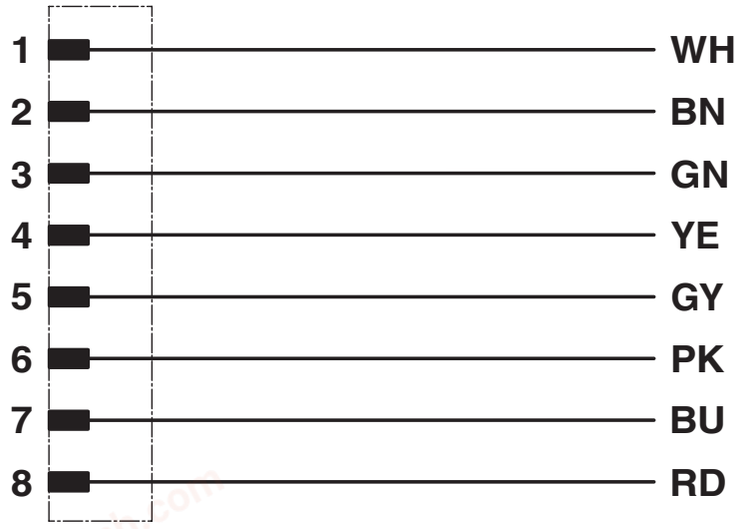
Drawings

Dimensional drawing



M8 x 1 male plug, straight version

Circuit diagram



Contact assignment of the M8 plug

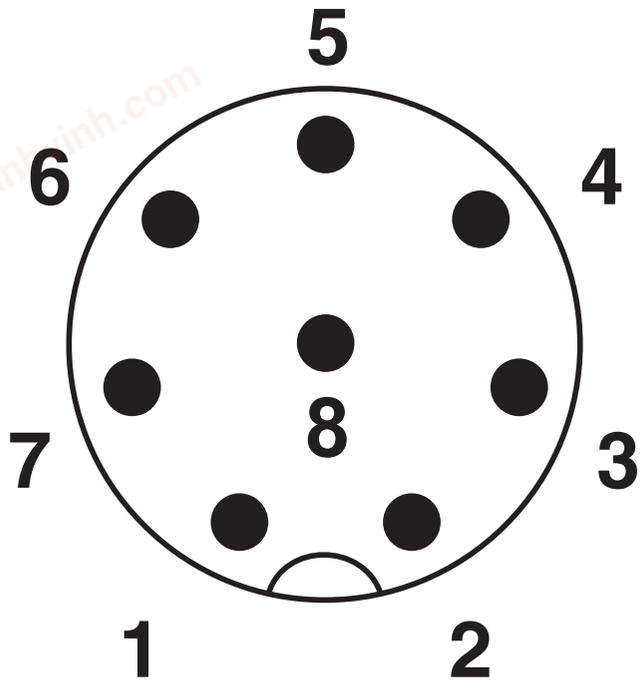
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Schematic diagram



M8 plug pin assignment, 8-pos., view of pin side

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Sensor/actuator cable - SAC-8P-M 8MS/ 5,0-PUR

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Approvals

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

UL Listed
Approval ID: FILE E 221474

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
	30 V	1.5 A	-	-

cUL Listed
Approval ID: FILE E 221474

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
	30 V	1.5 A	-	-

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

cULus Listed

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Sensor/actuator cable - SAC-8P-M 8MS/ 5,0-PUR

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Classifications

ECLASS

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

ETIM

ETIM 8.0	EC001855

UNSPSC

UNSPSC 21.0	26121600

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Environmental Product Compliance

REACh SVHC	Lead 7439-92-1

China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer’s declaration available under “Downloads”

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Sensor/actuator cable - SAC-8P-M 8MS/ 5,0-PUR

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Accessories

Sealing cap

Sealing cap - PROT-M 8 FS-PA-CHAIN - 1430857

https://www.phoenixcontact.com/gb/products/1430857

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



Torque screwdriver

Torque screwdriver - TSD 02 SAC - 1208487

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

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



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Sensor/actuator cable - SAC-8P-M 8MS/ 5,0-PUR

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https://www.phoenixcontact.com/gb/products/1404181

Tool

Tool - SAC BIT M8-D10 - 1208461

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



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

Insert label

Insert label - PABA WH/23 - 1013779

https://www.phoenixcontact.com/gb/products/1013779



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

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Sensor/actuator cable - SAC-8P-M 8MS/ 5,0-PUR

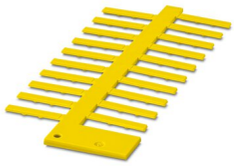
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https://www.phoenixcontact.com/gb/products/1404181

Insert label

Insert label - PABA YE/23 - 1013782

https://www.phoenixcontact.com/gb/products/1013782



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

Marker pen

Marker pen - B-STIFT - 1051993

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



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

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Sensor/actuator cable - SAC-8P-M 8MS/ 5,0-PUR

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https://www.phoenixcontact.com/gb/products/1404181

Diagonal cutter

Diagonal cutter - CUTFOX-S VDE - 1212207

https://www.phoenixcontact.com/gb/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-1 - 1212757

https://www.phoenixcontact.com/gb/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

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Sensor/actuator cable - SAC-8P-M 8MS/ 5,0-PUR

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https://www.phoenixcontact.com/gb/products/1404181

Stripping tool

Stripping tool - WIREFOX SAC - 1212623

https://www.phoenixcontact.com/gb/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

Stripping tool

Stripping tool - WIREFOX 10 - 1212150

https://www.phoenixcontact.com/gb/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

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Sensor/actuator cable - SAC-8P-M 8MS/ 5,0-PUR

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Protective hose adapter

Protective hose adapter - WP-CTA POM 13,0 BK - 1422884

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



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

Protective hose

Protective hose - WP-PA HF 13,0 BK - 3240681

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



Protective hose, material: PA 6, filament: without, UV-resistant: yes, flexible, degree of protection: IP68, color: black, inflammability class in acc. with UL 94: V0, inner diameter: 10 mm, Total length: 50 m

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Sensor/actuator cable - SAC-8P-M 8MS/ 5,0-PUR

1404181

https://www.phoenixcontact.com/gb/products/1404181

Protective hose

Protective hose - WP-PA HF-HB 13,0 BK - 3240839

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



Protective hose, material: PA 6, filament: without, UV-resistant: yes, flexible, degree of protection: IP68, color: black, inflammability class in acc. with UL 94: HB, inner diameter: 10 mm, Total length: 50 m

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