

# Sensor/Actuator cable - SAC-3P- 1,5-PUR/M 8FS SH - 1521711

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Sensor/Actuator cable, 3-position, PUR halogen-free, Black-gray RAL 7021, shielded, Free cable end, on Socket straight M8, Cable length: 1.5 m

## Why buy this product

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ Our standard: robust halogen-free PUR cable
- ✓ Reliable signal transmission – 360° shielding in environments with electromagnetic interference



## Key commercial data

Packing unit	1 pc
GTIN	 4 017918 968717
Weight per Piece (excluding packing)	59.3 g
Custom tariff number	85444290
Country of origin	Poland

## Technical data

### Dimensions

Length of cable	1.5 m
Stripping length of the free conductor end	50 mm

### Ambient conditions

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

### General

Rated current at 40°C	4 A
Rated voltage	60 V
Number of positions	3
Contact resistance	≤ 5 mΩ
Insulation resistance	≥ 100 MΩ

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## Technical data

### General

Coding	A - standard
Standards/regulations	M8 connector IEC 61076-2-104
Status display	No
Protective circuit/component	Unwired
Surge voltage category	II
Pollution degree	3
Insertion/withdrawal cycles	≥ 100
Torque	0.2 Nm (M8 connectors)

### Material

Inflammability class according to UL 94	HB
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Material of grip body	TPU, hardly inflammable, self-extinguishing
Material, knurls	Zinc die-cast, nickel-plated
Sealing material	NBR

### Cable

Cable type	PUR halogen-free black shielded
Cable type (abbreviation)	PUR
Cable abbreviation	Li9Y-V1-C-V1-11Y
UL AWM style	20549
Conductor cross section	3x 0.25 mm <sup>2</sup> (signal line)
AWG signal line	24
Conductor structure signal line	32x 0.10 mm
Core diameter including insulation	1.17 mm ±0.02 mm (signal line)
Thickness, insulation	≥ 0.21 mm (Core insulation)
	≥ 0.76 mm (Outer cable sheath)
Wire colors	brown, blue, black
Overall twist	3 wires, twisted
Shielding	Braided copper wires
Optical shield covering	85 %
External sheath, color	Black-gray RAL 7021
External cable diameter D	5 mm ±0.2 mm
Smallest bending radius, fixed installation	25 mm
Smallest bending radius, movable installation	50 mm
Number of bending cycles	4000000
Bending radius	50 mm
Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s <sup>2</sup>

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## Technical data

### Cable

Cable weight	33 kg/km
Outer sheath, material	PUR
Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Insulation resistance	≥ 100 GΩ*km
Conductor resistance	max. 79000000 Ω/km
Nominal voltage, cable	300 V
Test voltage, cable	3000 V
Special properties	Flexible cable conduit capable
	Silicone-free
	Free of substances which would hinder coating with paint or varnish
Flame resistance	in accordance with DIN UL-Style 20549
Halogen-free	in accordance with DIN VDE 0472 part 815
Resistance to oil	in accordance with DIN EN 60811-2-1
Other resistance	Highly resistant to acids, alkaline solutions and solvents
	hydrolysis and microbe 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)

## Classifications

### eCl@ss

eCl@ss 4.0	27060306
eCl@ss 4.1	27060306
eCl@ss 5.0	27061801
eCl@ss 5.1	27061801
eCl@ss 6.0	27061801
eCl@ss 7.0	27061801
eCl@ss 8.0	27061801

### ETIM

ETIM 2.0	EC000830
ETIM 3.0	EC001855
ETIM 4.0	EC001855
ETIM 5.0	EC001855

### UNSPSC

UNSPSC 6.01	31251501
UNSPSC 7.0901	31251501
UNSPSC 11	31251501

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## Classifications

### UNSPSC

UNSPSC 12.01	31251501
UNSPSC 13.2	31251501

## Approvals

### Approvals

#### Approvals

UL Listed / cUL Listed / GOST / cULus Listed

#### Ex Approvals

#### Approvals submitted

### Approval details

UL Listed	
Nominal current IN	4 A
Nominal voltage UN	125 V

cUL Listed	
Nominal current IN	4 A
Nominal voltage UN	125 V

GOST	
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cULus Listed	
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## Sensor/Actuator cable - SAC-3P- 1,5-PUR/M 8FS SH - 1521711

### Accessories

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#### Conductor marking

Insert label - PABA WH/15 - 1013151



Insert label, Strip, white, Unlabeled, Can be labeled with: Plotter, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm

Insert label - PABA YE/15 - 1013698



Insert label, Strip, yellow, Unlabeled, Can be labeled with: Plotter, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm

Insert label - PABA RD/15 - 1013944



Insert label, Strip, red, Unlabeled, Can be labeled with: Plotter, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm

#### Cutting tools

Cable-cutting tool - CUTFOX-S VDE - 1212207



Diagonal cutter for copper and aluminum conductors, VDE-tested

#### Marker carrier cable

Conductor marker carrier - PATG 2/15 - 1013038



Conductor marker carrier, transparent, Unlabeled, Mounting type: Slide on, Cable diameter: 2-4 mm, Lettering field: 4 x 15 mm

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### Accessories

Conductor marker carrier - PATG 3/15 - 1013041



Conductor marker carrier, transparent, Unlabeled, Mounting type: Slide on, Cable diameter: 4-7 mm, Lettering field: 4 x 15 mm

Conductor marker carrier - PATG 4/15 - 1013054



Conductor marker carrier, transparent, Unlabeled, Mounting type: Slide on, Cable diameter: 6-10 mm, Lettering field: 4 x 15 mm

### Marker pen

Marker pen - B-STIFT - 1051993



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

### Protective cap

Screw plug - PROT-M 8 MS-PA-CHAIN - 1430860

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



### Screwdriver tools

Tool - SAC BIT M8-D10 - 1208461



Nut for assembling sensor/actuator cables with M8 connector and for M8 connectors with QUICKON fast connection technology, for 4 mm hexagonal drive

### Stripping tool

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## Accessories

Stripping tool - WIREFOX SAC-1 - 1212757



Abisolierzange, für halogenfreie Sensor-/Aktor-Leitungen (SAC-Leitungen), mit PUR und PVC Isolierung, von Ø 3,2 bis 4,4 mm, Abisolierlänge beliebig

Stripping tool - WIREFOX SAC - 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 - WIREFOX 10 - 1212150



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

Torque tool

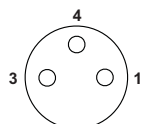
Torque screwdriver - TSD 02 SAC - 1208487



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

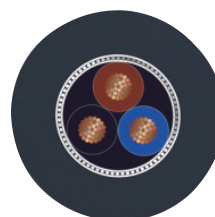
## Drawings

Schematic diagram



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

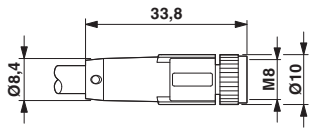
Cable cross section



PUR halogen-free black shielded [PUR]

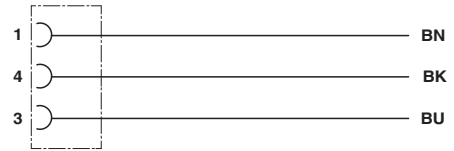
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Dimensioned drawing



Socket M8 x 1, straight

Circuit diagram



Contact assignment of M8 socket

Diagram

