

## Sensor/Actuator cable - SAC-5P- 3,0-115/M 8FSB - 1404471

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Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Free cable end, on Socket straight M8, B-coded, Cable length: 3 m

### Product Features

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ Our standard: robust halogen-free PUR cable



### Key commercial data

|                      |                                                                                                         |
|----------------------|---------------------------------------------------------------------------------------------------------|
| Packing unit         | 1 PCE                                                                                                   |
| GTIN                 | <br>4 046356 697095 |
| Custom tariff number | 85444290                                                                                                |
| Country of origin    | GERMANY                                                                                                 |

### Technical data

#### General data

|                                 |                                  |
|---------------------------------|----------------------------------|
| Rated current at 40°C           | 3 A                              |
| Rated voltage                   | 30 V                             |
| Number of positions             | 5                                |
| Volume resistance               | ≤ 5 mΩ                           |
| Insulation resistance           | ≥ 100 MΩ                         |
| Length of cable                 | 3 m                              |
| Ambient temperature (operation) | -25 °C ... 90 °C (Plug / socket) |

#### General characteristics

|                       |                                      |
|-----------------------|--------------------------------------|
| Standards/regulations | M8 plug-in connector IEC 61076-2-104 |
| Coding                | B - inverse                          |

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### Technical data

#### General characteristics

|                             |                                             |
|-----------------------------|---------------------------------------------|
| Surge voltage category      | II                                          |
| Pollution degree            | 3                                           |
| Degree of protection        | IP65                                        |
| Degree of protection        | IP67                                        |
| Degree of protection        | IP68                                        |
| Insertion/withdrawal cycles | ≥ 100                                       |
| Torque                      | 0.2 Nm (M8 plug-in connectors)              |
| 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                                         |
| Status display              | No                                          |

#### Conductor data

|                                               |                                     |
|-----------------------------------------------|-------------------------------------|
| Cable type                                    | PUR halogen-free black              |
| Cable type (abbreviation)                     | 115                                 |
| Cable abbreviation                            | Li9Y11Y                             |
| UL AWM style                                  | 20549                               |
| Conductor cross section                       | 0.25 mm <sup>2</sup>                |
| AWG signal line                               | 24                                  |
| Conductor structure signal line               | 32x 0.10 mm                         |
| Core diameter including insulation            | 1.17 mm ±0.02 mm                    |
| Thickness, insulation                         | approx. 0.21 mm (Core insulation)   |
| Thickness, insulation                         | approx. 0.7 mm (Outer cable sheath) |
| Wire colors                                   | Brown, white, blue, black, gray     |
| Overall twist                                 | 5 cores, twisted                    |
| Length of twist, overall twist                | 75 mm                               |
| External sheath, color                        | Black-gray RAL 7021                 |
| External cable diameter D                     | 4.7 mm ±0.15 mm                     |
| Smallest bending radius, fixed installation   | 23.5 mm                             |
| Smallest bending radius, movable installation | 47 mm                               |
| Number of bending cycles                      | 4000000                             |
| Bending radius                                | 47 mm                               |
| Traversing path                               | 10 m                                |
| Traversing rate                               | 3 m/s                               |
| Acceleration                                  | 10 m/s <sup>2</sup>                 |

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### Technical data

#### Conductor data

|                                 |                                                 |
|---------------------------------|-------------------------------------------------|
| Cable weight                    | 30 kg/km                                        |
| Outer sheath, material          | PUR                                             |
| Material, filler                | PP                                              |
| Material conductor insulation   | PP                                              |
| Conductor material              | Bare Cu litz wires                              |
| Insulation resistance           | $\geq 1 \text{ G}\Omega\cdot\text{km}$          |
| Conductor resistance            | $\leq 75 \text{ }\Omega/\text{km}$              |
| Nominal voltage, conductor      | $\leq 300 \text{ V (AC)}$                       |
| Test voltage, conductor         | $\geq 3000 \text{ V (AC)}$                      |
| Flame resistance                | according to UL 758/1581 (horizontal)           |
| Flame resistance                | In accordance with UL 758/1581 FT2              |
| Halogen-free                    | in accordance with DIN VDE 0472 part 815        |
| Halogen-free                    | in accordance with DIN EN 50267-2-1             |
| Resistance to oil               | According to DIN EN 60811-2-1, 168 h at 100°C   |
| Other resistance                | hydrolysis and microbe resistant                |
| Other resistance                | Resistant to salt water                         |
| Other resistance                | Low adhesion                                    |
| Other resistance                | abrasion-resistant                              |
| Ambient temperature (operation) | -40 °C ... 80 °C (cable, fixed installation)    |
| Ambient temperature (operation) | -25 °C ... 80 °C (cable, flexible installation) |

### Classifications

#### ETIM

|          |          |
|----------|----------|
| ETIM 3.0 | EC001855 |
| ETIM 4.0 | EC001855 |
| ETIM 5.0 | EC001855 |

#### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 11     | 31251501 |
| UNSPSC 12.01  | 31251501 |
| UNSPSC 13.2   | 31251501 |
| UNSPSC 6.01   | 31251501 |
| UNSPSC 7.0901 | 31251501 |

#### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.0 | 27060306 |
| eCl@ss 4.1 | 27060306 |

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### Classifications

#### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 5.0 | 27061801 |
| eCl@ss 5.1 | 27061801 |
| eCl@ss 6.0 | 27061801 |
| eCl@ss 7.0 | 27061801 |

### Accessories

#### Accessories

#### 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

Conductor marker carrier - PATG 2/23 - 1013850



Conductor marker carrier, transparent, Unlabeled, Mounting type: Slide on, Cable diameter: 2-4 mm, Lettering field: 4 x 23 mm

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### Accessories

Conductor marker carrier - PATG 3/23 - 1013863



Conductor marker carrier, transparent, Unlabeled, Mounting type: Slide on, Cable diameter: 4-7 mm, Lettering field: 4 x 23 mm

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Conductor marker carrier - PATG 4/23 - 0808011



Conductor marker carrier, transparent, Unlabeled, Mounting type: Slide on, Cable diameter: 6-10 mm, Lettering field: 4 x 23 mm

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Marker pen - B-STIFT - 1051993



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

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### Protection and sealing elements

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

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



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### Tools

Cable-cutting tool - CUTFOX-S VDE - 1212207



Diagonal cutter for copper and aluminum conductors, VDE-tested

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### Accessories

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#### 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

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#### 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

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#### Torque screwdriver - TSD 02 SAC - 1208487



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

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#### Tool - SAC BIT M8-D10 - 1208461



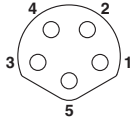
Nut for assembling sensor/actuator cables with M8 connector and for M8 connectors with QUICKON fast connection technology, for 4 mm hexagonal drive

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### Drawings

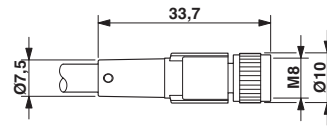
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Schematic diagram



Pin assignment, socket side, M8, 5-pos., B-coded

Dimensioned drawing



Socket M8 x 1, straight

Circuit diagram



Contact assignment of M8 socket