# Sensor/actuator cable - SAC-3P-Y/2X10,0-PUR SCO - 1524239

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Sensor/actuator cable, 3-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12 SPEEDCON, coding: A, on free cable end and free cable end, cable length: 10 m

## Key Commercial Data

| | |
|---|---|
| Packing unit | 1 pc |
| GTIN | 4 017918 969080 |
| GTIN | 4017918969080 |

## Technical data

### Dimensions

| | |
|---|---|
| Length of cable | 10 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 |
| | IP68 |

### General

| | |
|---|---|
| Rated current at 40°C | 4 A |
| Rated voltage | 250 V AC |
| | 250 V DC |
| Number of positions | 3 |
| Insulation resistance | 100 MΩ |
| Coding | A - standard |
| Standards/regulations | M12 connector IEC 61076-2-101 |
| Status display | No |
| Overvoltage category | II |

# Sensor/actuator cable - SAC-3P-Y/2X10,0-PUR SCO - 1524239

## Technical data

### General

| | |
|---|---|
| Degree of pollution | 3 |
| Torque | 0.4 Nm (M12 connector) |

### Material

| | |
|---|---|
| Flammability rating 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 |

### Standards and Regulations

| | |
|---|---|
| Standards/specifications | M12 connector IEC 61076-2-101 |
| Flammability rating according to UL 94 | HB |

### Cable

| | |
|---|---|
| Cable type | PUR halogen-free black |
| Cable type (abbreviation) | PUR |
| Cable abbreviation | Li9Y11Y |
| UL AWM style | 20549 |
| Conductor cross section | 3x 0.34 mm² (Signal line) |
| AWG signal line | 22 |
| Conductor structure signal line | 42x 0.10 mm |
| Core diameter including insulation | 1.27 mm ±0.02 mm (Signal line) |
| Thickness, insulation | ≥ 0.21 mm (Core insulation) |
| | approx. 0.5 mm (Outer cable sheath) |
| Wire colors | brown, blue, black |
| Overall twist | 3 wires, twisted |
| External sheath, color | black-gray RAL 7021 |
| External cable diameter D | 3.85 mm ±0.15 mm |
| Smallest bending radius, fixed installation | 19 mm |
| Smallest bending radius, movable installation | 38 mm |
| Number of bending cycles | 10000000 |
| Bending radius | 44 mm |
| Traversing path | 10 m |
| Traversing rate | 3 m/s |
| Acceleration | 10 m/s² |
| Cable weight | 23 kg/km |
| Outer sheath, material | PUR |
| Material conductor insulation | PP |
| Conductor material | Bare Cu litz wires |
| Insulation resistance | ≥ 100 GΩ*km (at 20 °C) |

# Sensor/actuator cable - SAC-3P-Y/2X10,0-PUR SCO - 1524239

## Technical data

### Cable

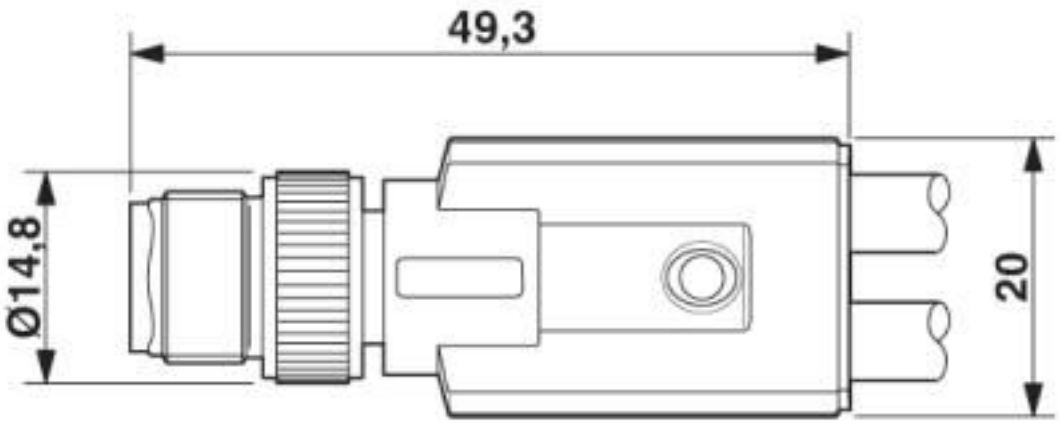
| | |
|---|---|
| Conductor resistance | max. 58 Ω/km (at 20 °C) |
| Nominal voltage, cable | ≤ 300 V |
| Test voltage, cable | ≥ 3000 V |
| Special properties | Flexible cable conduit capable |
| | Silicone-free |
| | Free of substances which would hinder coating with paint or varnish |
| Flame resistance | in accordance with UL 758/1581 FT2 |
| | DIN EN 60332-2-2 (20 s) |
| 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) |

### Environmental Product Compliance

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

## Drawings

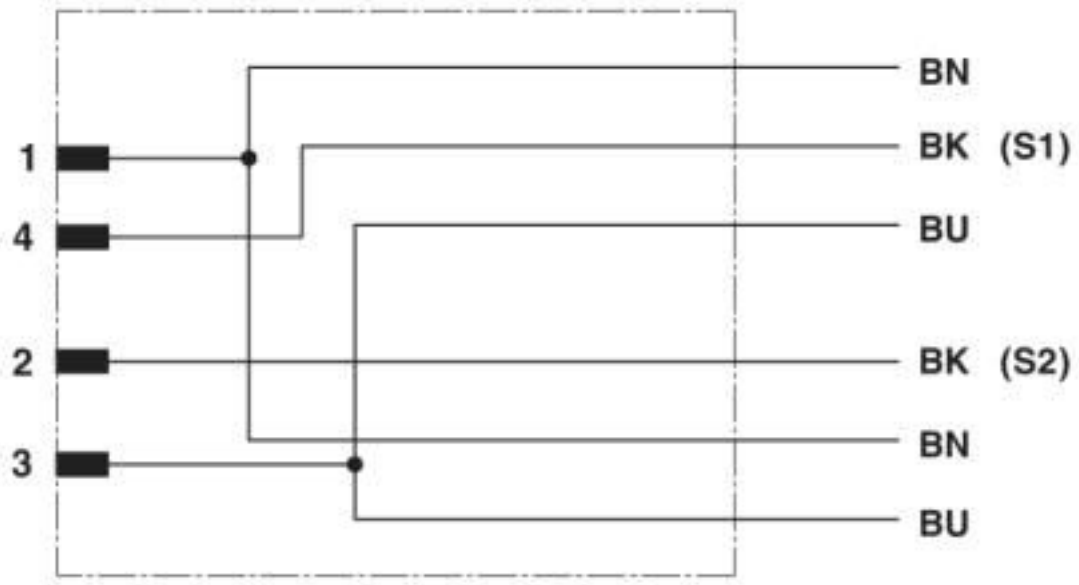
Dimensional drawing




Plug M12 x 1, Y distributor

# Sensor/actuator cable - SAC-3P-Y/2X10,0-PUR SCO - 1524239

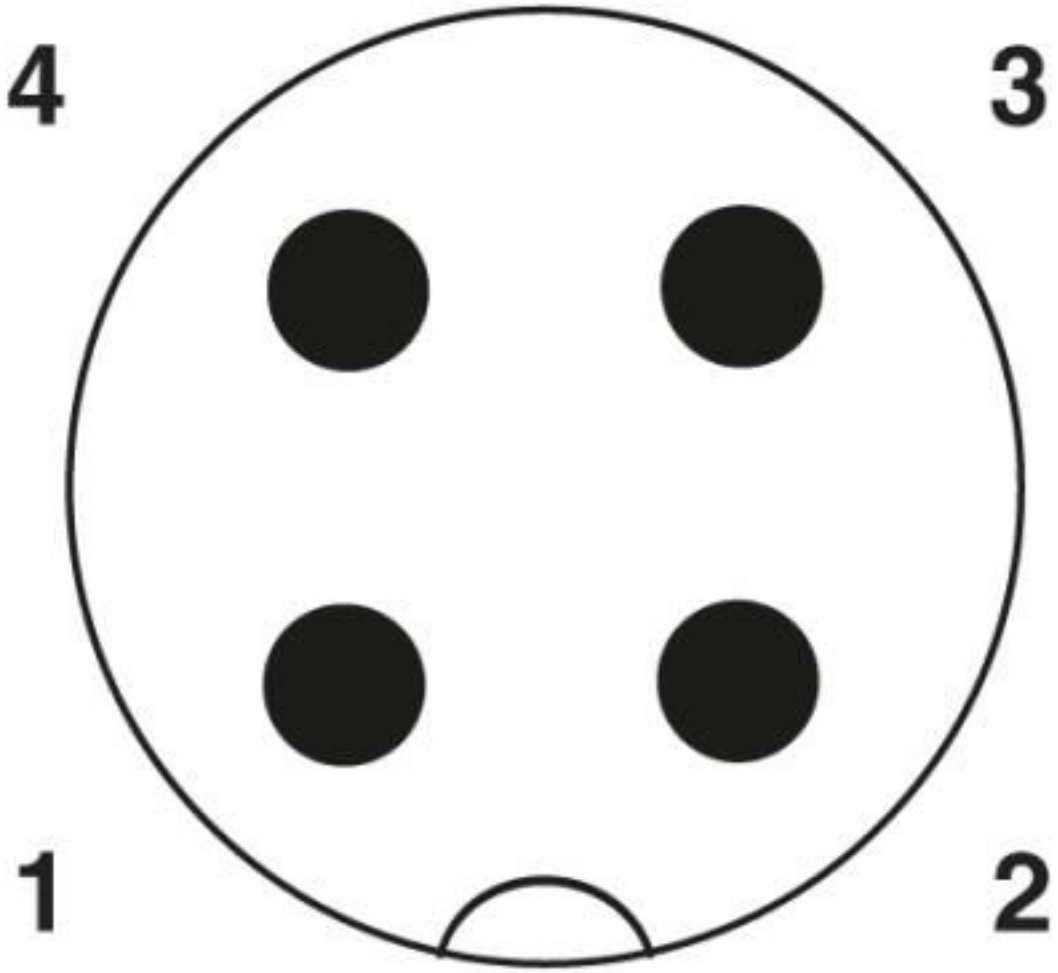
Circuit diagram




Contact assignment of the M12 Y connector

# Sensor/actuator cable - SAC-3P-Y/2X10,0-PUR SCO - 1524239

Schematic diagram




Pin assignment M12 Y plug, 4-pos., A-coded, view plug side

## Classifications

### eCl@ss

| | |
|---|---|
| eCl@ss 10.0.1 | 27060311 |
| eCl@ss 4.0 | 27060300 |
| eCl@ss 4.1 | 27060300 |
| eCl@ss 5.0 | 27061800 |
| eCl@ss 5.1 | 27061800 |
| eCl@ss 6.0 | 27279200 |
| eCl@ss 7.0 | 27279218 |
| eCl@ss 8.0 | 27279218 |
| eCl@ss 9.0 | 27060311 |

# Sensor/actuator cable - SAC-3P-Y/2X10,0-PUR SCO - 1524239

## Classifications

### ETIM

| | |
|---|---|
| ETIM 2.0 | EC000830 |
| ETIM 3.0 | EC001855 |
| ETIM 4.0 | EC001855 |
| ETIM 5.0 | EC001855 |
| ETIM 6.0 | EC001855 |
| ETIM 7.0 | EC001855 |

### UNSPSC

| | |
|---|---|
| UNSPSC 6.01 | 31251501 |
| UNSPSC 7.0901 | 31251501 |
| UNSPSC 11 | 31251501 |
| UNSPSC 12.01 | 31251501 |
| UNSPSC 13.2 | 31251501 |
| UNSPSC 19.0 | 31251501 |
| UNSPSC 20.0 | 31251501 |
| UNSPSC 21.0 | 31251501 |

## Approvals

### Approvals

Approvals

UL Listed / cUL Listed / EAC-RoHS / EAC / cULus Listed

Ex Approvals

### Approval details

| | | | |
|---|---|---|---|
| UL Listed | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 221474 |

| | |
|---|---|
| Nominal voltage UN | 300 V |
| Nominal current IN | 4 A |

| | | | |
|---|---|---|---|
| cUL Listed | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 221474 |

| | |
|---|---|
| Nominal voltage UN | 300 V |

# Sensor/actuator cable - SAC-3P-Y/2X10,0-PUR SCO - 1524239

## Approvals

| | |
|---|---|
| Nominal current IN | 4 A |

| | | |
|---|---|---|
| EAC-RoHS | EAC | RU D-DE.HB35.B.00387 |
| EAC | EAC | EAC-Zulassung |
| cULus Listed | c UL us LISTED | |

## Accessories

### Accessories

### Conductor marking

Insert label - PABA WH/23 - 1013779



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

Insert label - PABA YE/23 - 1013782



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

### Corrugated pipe

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



Polyamide protective hose, inflammability class V0, UV resistant

# Sensor/actuator cable - SAC-3P-Y/2X10,0-PUR SCO - 1524239

## Accessories

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



Polyamide protective hose, inflammability class HB, UV resistant

### Cutting tools

Diagonal cutter - CUTFOX-S VDE - 1212207



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

### 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

Sealing cap - PROT-M12 FS-PA-CHAIN - 1430873

M12 sealing cap made of plastic with fixing band, for sensor cables, for free M12 plugs



### Safety locking

Locking clip - SAC-M12-EXCLIP-M - 1558988



Locking clip for the pin side of sensor/actuator cables with M12 connector and M12 connectors for assembly, for knurl diameter: 15 mm or for Allen key with a wrench size of 14 mm, prevents the disconnection of plug-in connections without tools

# Sensor/actuator cable - SAC-3P-Y/2X10,0-PUR SCO - 1524239

## Accessories

### Screwdriver tools

Adapter insert - TSD-M SAC-BIT ADAPTER - 1212600



Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits

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Tool - SAC BIT M12-D15 - 1208432



Nut for assembling sensor/actuator cables with M12 connector and M12 connectors for assembly, with a knurl diameter of 15 mm, for 4 mm hexagonal drive

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### Stripping tool

Stripping tool - WIREFOX SAC-1 - 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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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 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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### Torque tool

# Sensor/actuator cable - SAC-3P-Y/2X10,0-PUR SCO - 1524239

## Accessories

Torque screwdriver - TSD 04 SAC - 1208429



Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors

Torque screwdriver - TSD-M 1,2NM - 1212224



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm

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



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

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