

## Sensor/actuator cable - SAC-4PY-MRC3-1,0-240/2XF - 1420397


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Sensor/actuator cable, 4-position halogen-free, yellow, Plug angled M12 SPEEDCON, A-coded, on Socket straight M12 SPEEDCON, A-coded and Socket straight M12 SPEEDCON, A-coded, cable length: 1 m

As illustrated but with yellow cable and angled M12 plug

### Key Commercial Data

|                        |  |
|------------------------|--|
| Packing unit           | 1 pc   |
| Minimum order quantity | 100 pc   |
| GTIN                   | <br>4 055626 218052 |
| GTIN                   | 4055626218052  |

### Technical data

#### Dimensions

|                 |     |
|-----------------|-----|
| Length of cable | 1 m |
|-----------------|-----|

#### General

|                       |                               |
|-----------------------|-------------------------------|
| Rated current at 40°C | 4 A                           |
| Rated voltage         | 60 V                          |
| Number of positions   | 4                             |
| Insulation resistance | ≥ 100 MΩ                      |
| Coding                | A - standard                  |
| Standards/regulations | M12 connector IEC 61076-2-101 |
| Status display        | No                            |
| Overvoltage category  | II                            |
| Degree of pollution   | 3                             |

#### 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                |

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## Technical data

### Material

|                  |     |
|------------------|-----|
| Sealing material | NBR |
|------------------|-----|

### Standards and Regulations

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

### Cable

|   |   |
|---|---|
| Cable type                                    | PUR halogen-free yellow   |
| Cable type (abbreviation)                     | 240   |
| Cable abbreviation                            | Li9Y11Y   |
| Conductor cross section                       | 4x 0.34 mm <sup>2</sup>   |
| AWG signal line                               | 22  |
| Conductor structure signal line               | 42x 0.10 mm   |
| Core diameter including insulation            | 1.27 mm ±0.02 mm  |
| Thickness, insulation                         | ≥ 0.21 mm (Core insulation)   |
|   | approx. 0.8 mm (Outer cable sheath)                                 |
| Wire colors                                   | brown, white, blue, black   |
| Overall twist                                 | 4 wires, twisted  |
| Length of twist, overall twist                | 49.5 mm   |
| External sheath, color                        | yellow  |
| 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>   |
| Cable weight                                  | 30 kg/km  |
| Outer sheath, material                        | PUR   |
| Material conductor insulation                 | PP  |
| Conductor material                            | Bare Cu litz wires  |
| Insulation resistance                         | ≥ 1 GΩ*km (at 20 °C)  |
| 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 DIN UL-Style 20549                               |
|   | in accordance with FT1 as per UL 758                                |

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## Technical data

### Cable

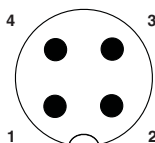
|                                 |  |
|---------------------------------|--|
| Halogen-free                    | in accordance with DIN VDE 0472 part 815                   |
|                                 | in accordance with DIN EN 50267-2-1                        |
| Resistance to oil               | in accordance with DIN EN 60811-2-1                        |
| Other resistance                | Highly resistant to acids, alkaline solutions and solvents |
|                                 | hydrolysis and microbe resistant                           |
| Ambient temperature (operation) | -40 °C ... 80 °C (cable, fixed installation)               |
|                                 | -25 °C ... 80 °C (cable, flexible installation)            |

### Environmental Product Compliance

|            |   |
|------------|---|
| REACH SVHC | Lead 7439-92-1  |
| China RoHS | Environmentally Friendly Use Period = 50  |
|            | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

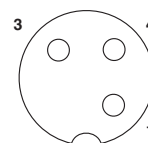
## Drawings

Schematic diagram



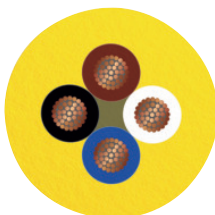
Pin assignment M12 plug, 4-pos., A-coded, view plug side

Schematic diagram



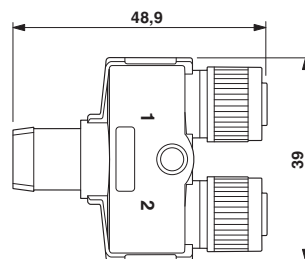
Pin assignment M12 socket, 3-pos., A-coded, view female side

Cable cross section



PUR halogen-free yellow [240]

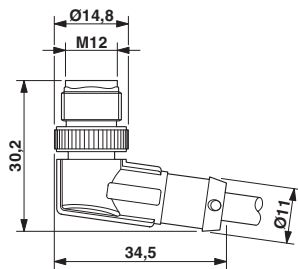
Dimensional drawing



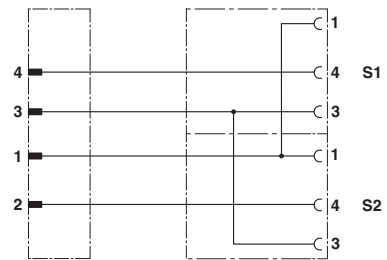
Y distributor, 2 x socket M12 x 1

## Sensor/actuator cable - SAC-4PY-MRC3-1,0-240/2XF - 1420397

Dimensional drawing



Circuit diagram



Contact assignment of the M12 Y distributor

M12 x 1 male plug, angled

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