

## Sensor/Actuator cable - SAC-3P-M12MS/3,0-PVC/M 8FR - 1415533

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Sensor/Actuator cable, 3-position, PVC, Black RAL 9005, Plug straight M12, A-coded, on Socket angled M8, Cable length: 3 m

### Product Features

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓



### Key commercial data

|                      |          |
|----------------------|----------|
| Packing unit         | 1 pc     |
| Custom tariff number | 85444290 |
| Country of origin    | Germany  |

### Technical data

#### Dimensions

|                 |     |
|-----------------|-----|
| Length of cable | 3 m |
|-----------------|-----|

#### 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         | 60 V         |
| Number of positions   | 3            |
| Contact resistance    | ≤ 5 mΩ       |
| Insulation resistance | ≥ 100 MΩ     |
| Coding                | A - standard |

## Sensor/Actuator cable - SAC-3P-M12MS/3,0-PVC/M 8FR - 1415533

### Technical data

#### General

|                              |                               |
|------------------------------|-------------------------------|
| Standards/regulations        | M12 connector IEC 61076-2-101 |
|                              | M8 connector IEC 61076-2-104  |
| Status display               | No                            |
| Protective circuit/component | Unwired                       |
| Surge voltage category       | II                            |
| Pollution degree             | 3                             |
| Insertion/withdrawal cycles  | ≥ 100                         |

#### 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                                    | PVC black                             |
| Cable type (abbreviation)                     | PVC                                   |
| Cable abbreviation                            | LiYY                                  |
| UL AWM style                                  | 2464 / 1729 (80°C/300 V)              |
| Conductor cross section                       | 3x 0.34 mm <sup>2</sup> (signal line) |
| AWG signal line                               | 22                                    |
| Conductor structure signal line               | 19x 0.15 mm                           |
| Core diameter including insulation            | 1.26 mm ±0.05 mm                      |
| Thickness, insulation                         | ≥ 0.23 mm (Core insulation)           |
| Wire colors                                   | brown, blue, black                    |
| Overall twist                                 | 3 wires, twisted                      |
| External sheath, color                        | Black RAL 9005                        |
| Outer sheath thickness                        | ≥ 0.76 mm                             |
| External cable diameter D                     | 4.3 mm ±0.2 mm                        |
| Minimum bending radius, fixed installation    | 5 x D                                 |
| Minimum bending radius, flexible installation | 10 x D                                |
| Cable weight                                  | 40 kg/km                              |
| Outer sheath, material                        | PVC                                   |
| Material conductor insulation                 | PVC                                   |
| Conductor material                            | Bare Cu litz wires                    |

# Sensor/Actuator cable - SAC-3P-M12MS/3,0-PVC/M 8FR - 1415533

## Technical data

### Cable

|                        |                         |
|------------------------|-------------------------|
| Insulation resistance  | ≥ 100 MΩ*km (at 20 °C)  |
| Conductor resistance   | max. 57 Ω/km (at 20 °C) |
| Nominal voltage, cable | ≤ 300 V                 |
| Test voltage, cable    | ≥ 2500 V                |
| Flame resistance       | As per UL-Style 2464    |

## Classifications

### eCl@ss

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

### ETIM

|          |          |
|----------|----------|
| ETIM 5.0 | EC001855 |
|----------|----------|

## Approvals

### Approvals


#### Approvals

UL Listed / cUL Listed / cULus Listed

#### Ex Approvals

#### Approvals submitted

### Approval details

|   |       |
|---|-------|
| UL Listed  |       |
| Nominal current I <sub>N</sub>  | 4 A   |
| Nominal voltage U <sub>N</sub>  | 125 V |

# Sensor/Actuator cable - SAC-3P-M12MS/3,0-PVC/M 8FR - 1415533

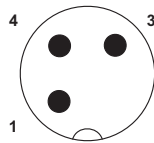
## Approvals

|                                |       |
|--------------------------------|-------|
| cUL Listed                     |       |
| Nominal current I <sub>N</sub> | 4 A   |
| Nominal voltage U <sub>N</sub> | 125 V |

|              |  |
|--------------|--|
| cULus Listed |  |
|--------------|--|

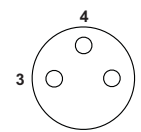
## Drawings

Schematic diagram



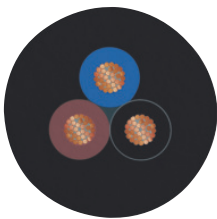
Pin assignment M12 plug, 3-pos., A-coded, view male side

Schematic diagram



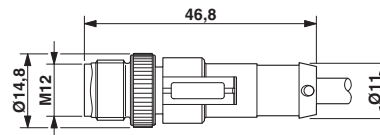
Pin assignment M8 socket, 3-pos., view female side

Cable cross section



PVC black [PVC]

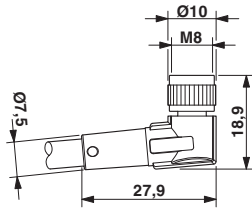
Dimensional drawing



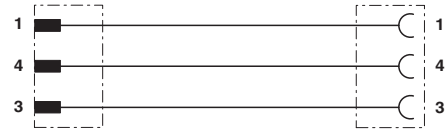
M12 x 1 plug, straight

# Sensor/Actuator cable - SAC-3P-M12MS/3,0-PVC/M 8FR - 1415533

Dimensional drawing



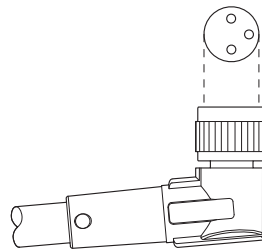
Circuit diagram



Contact assignment of M12 plugs / M8 sockets

Socket M8 x 1, angled

Schematic diagram



Layout of connector pin assignments