

# SAC-12P-MS/ 1,5-PVC SCO - Sensor/actuator cable



1554775

<https://www.phoenixcontact.com/us/products/1554775>

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 documentation. Our general terms of use for downloads are valid.



Sensor/actuator cable, 12-position, PVC, black RAL 9005, Plug straight M12 SPEEDCON, coding: A, on free cable end, cable length: 1.5 m

## Your advantages

- Easy and safe: 100 % electrically tested plug-in components
- Save time, thanks to installation with SPEEDCON fast locking system
- Save space – with high-pos. connectors

## Commercial data

|                                      |               |
|--------------------------------------|---------------|
| Item number                          | 1554775       |
| Packing unit                         | 1 pc          |
| Minimum order quantity               | 1 pc          |
| Sales key                            | BF03          |
| Product key                          | AF1CGA        |
| GTIN                                 | 4046356176194 |
| Weight per piece (including packing) | 91.9 g        |
| Weight per piece (excluding packing) | 91.9 g        |
| Customs tariff number                | 85444290      |
| Country of origin                    | DE            |

# SAC-12P-MS/ 1,5-PVC SCO - Sensor/actuator cable



1554775

<https://www.phoenixcontact.com/us/products/1554775>

## Technical data

### Product properties

|                      |                       |
|----------------------|-----------------------|
| Product type         | Sensor/actuator cable |
| Application          | Standard              |
| Number of positions  | 12                    |
| No. of cable outlets | 1                     |
| Shielded             | no                    |
| Coding               | A                     |

### Insulation characteristics

|                      |    |
|----------------------|----|
| Overvoltage category | II |
| Degree of pollution  | 3  |

### Material specifications

|  |   |
|--|---|
| Flammability rating according to UL 94 | HB  |
| Material of grip body                  | TPU, hardly inflammable, self-extinguishing |
| Contact material                       | CuZn  |
| Contact surface material               | Ni/Au                                       |
| Contact carrier material               | TPU GF                                      |
| Material for screw connection          | Zinc die-cast, nickel-plated                |

### Electrical properties

|                       |                            |
|-----------------------|----------------------------|
| Insulation resistance | $\geq 100 \text{ M}\Omega$ |
| Nominal voltage $U_N$ | 30 V AC                    |
|                       | 30 V DC                    |
| Nominal current $I_N$ | 1.5 A                      |

### Signaling

|                        |    |
|------------------------|----|
| Status display         | no |
| Status display present | no |

### Connection data

#### Conductor connection

|                   |                        |
|-------------------|------------------------|
| Tightening torque | 0.4 Nm (M12 connector) |
|-------------------|------------------------|

### Connector

#### Connection 1

|                     |                            |
|---------------------|----------------------------|
| Type                | Plug straight M12 SPEEDCON |
| Number of positions | 12                         |
| Locking type        | SPEEDCON                   |
| Coding type         | A                          |

#### Connection 2

# SAC-12P-MS/ 1,5-PVC SCO - Sensor/actuator cable



1554775

<https://www.phoenixcontact.com/us/products/1554775>

|      |                |
|------|----------------|
| Type | free cable end |
|------|----------------|

## Cable/line

|              |       |
|--------------|-------|
| Cable length | 1.5 m |
|--------------|-------|

## PVC black [PVC]

|   |  |
|---|--|
| Dimensional drawing                           |              |
| Number of positions                           | 12   |
| Shielded                                      | no   |
| Cable type                                    | PVC black [PVC]  |
| Conductor structure signal line               | 18x 0.10 mm  |
| AWG signal line                               | 26   |
| Conductor cross-section                       | 12x 0.14 mm <sup>2</sup> (Signal line)   |
| Wire diameter incl. insulation                | 1 mm ±0.05 mm (Signal line)  |
| External cable diameter                       | 5.80 mm  |
| Outer sheath, material                        | PVC  |
| External sheath, color                        | black RAL 9005   |
| Conductor material                            | Bare Cu litz wires   |
| Material wire insulation                      | PVC  |
| Single wire, color                            | white, brown, green, yellow, gray, pink, blue, red, black, violet, gray/pink, red/blue         |
| Overall twist                                 | 12 wires twisted in layers   |
| Max. conductor resistance                     | ≤ 142 Ω/km (at 20 °C)  |
| Insulation resistance                         | > 10 MΩ*km   |
| Nominal voltage, cable                        | 250 V  |
| Test voltage Core/Core                        | 1500 V AC  |
| Smallest bending radius, fixed installation   | 29 mm  |
| Smallest bending radius, movable installation | 87 mm  |
| Flame resistance                              | DIN EN 50265-2-1   |
| Ambient temperature (operation)               | -25 °C ... 80 °C (cable, fixed installation)<br>-5 °C ... 80 °C (Cable, flexible installation) |

## Environmental and real-life conditions

### Ambient conditions

|                      |      |
|----------------------|------|
| Degree of protection | IP65 |
|                      | IP67 |
|                      | IP68 |

# SAC-12P-MS/ 1,5-PVC SCO - Sensor/actuator cable



1554775

<https://www.phoenixcontact.com/us/products/1554775>

|   |  |
|---|--|
| Ambient temperature (operation) (male connector/female connector) | -25 °C ... 85 °C (Plug / socket)               |
| Ambient temperature (operation) (Cable, fixed installation)       | -25 °C ... 80 °C (cable, fixed installation)   |
| Ambient temperature (operation) (Cable, flexible installation)    | -5 °C ... 80 °C (Cable, flexible installation) |

## Standards and regulations

M12

|                          |                 |
|--------------------------|-----------------|
| Standard designation     | M12 connector   |
| Standards/specifications | IEC 61076-2-101 |

# SAC-12P-MS/ 1,5-PVC SCO - Sensor/actuator cable

1554775

<https://www.phoenixcontact.com/us/products/1554775>

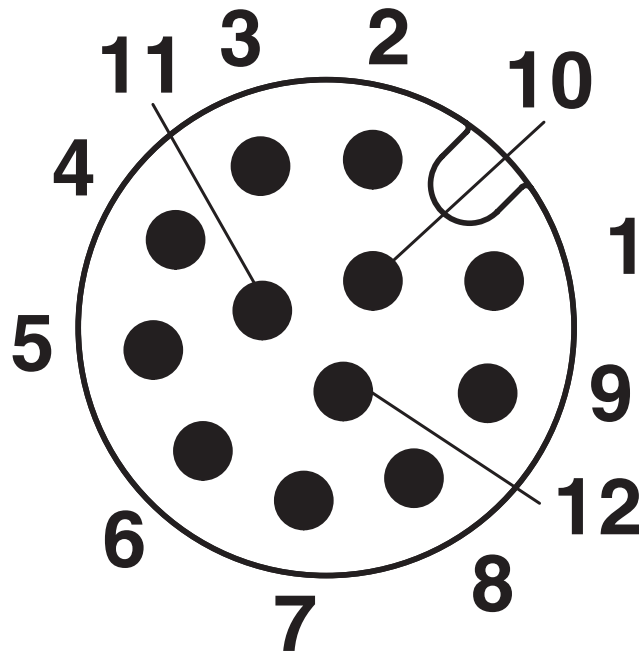
## Drawings

Dimensional drawing



M12 SPEEDCON plug, straight

Schematic diagram



Pin assignment M12 male connector, 12-pos., male side view

# SAC-12P-MS/ 1,5-PVC SCO - Sensor/actuator cable



1554775

<https://www.phoenixcontact.com/us/products/1554775>

Circuit diagram



Contact assignment of the M12 plug

# SAC-12P-MS/ 1,5-PVC SCO - Sensor/actuator cable



1554775

<https://www.phoenixcontact.com/us/products/1554775>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1554775>

|  <b>UL Listed</b><br>Approval ID: E221474 |                       |                       |                   |                             |
|--|-----------------------|-----------------------|-------------------|-----------------------------|
|  | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
| keine  |                       |                       |                   |                             |
|  | 30 V                  | 1 A                   | -                 | -                           |

|  <b>EAC-RoHS</b><br>Approval ID: RU D-DE.HB35.B.00387 |  |
|--|--|
|--|--|

# SAC-12P-MS/ 1,5-PVC SCO - Sensor/actuator cable



1554775

<https://www.phoenixcontact.com/us/products/1554775>

## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-13.0 | 27060311 |
| ECLASS-15.0 | 27060311 |

### ETIM

|           |          |
|-----------|----------|
| ETIM 10.0 | EC001855 |
|-----------|----------|

### UNSPSC

|             |          |
|-------------|----------|
| UNSPSC 21.0 | 26121600 |
|-------------|----------|

# SAC-12P-MS/ 1,5-PVC SCO - Sensor/actuator cable



1554775

<https://www.phoenixcontact.com/us/products/1554775>

## Environmental product compliance

### EU RoHS

|   |                    |
|---|--------------------|
| Fulfills EU RoHS substance requirements | Yes, No exemptions |
|---|--------------------|

### China RoHS

|  |  |
|--|--|
| Environment friendly use period (EFUP) | EFUP-E                                   |
|  | No hazardous substances above the limits |

### EU REACH SVHC

|                                     |                            |
|-------------------------------------|----------------------------|
| REACH candidate substance (CAS No.) | No substance above 0.1 wt% |
|-------------------------------------|----------------------------|

### EF3.1 Climate Change

|         |               |
|---------|---------------|
| CO2e kg | 1.982 kg CO2e |
|---------|---------------|

Phoenix Contact 2026 © - all rights reserved  
<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)