

# SAC-3P-MS-FS SCO/.../... - Sensor/actuator cable



1523544

<https://www.phoenixcontact.com/us/products/1523544>

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, 3-position, Variable cable type, Plug straight M12 SPEEDCON, coding: A, on Socket straight M12 SPEEDCON, coding: A, cable length: Free input (0.2 ... 40.0 m)

## Your advantages

- Easy and safe: 100 % electrically tested plug-in components
- Save time, thanks to installation with SPEEDCON fast locking system
- Flexible solutions - configurable materials with variable cable types and cable lengths

## Commercial data

|                       |                                |
|-----------------------|--------------------------------|
| Item number           | 1523544                        |
| Packing unit          | 1 pc                           |
| Note                  | Made to order (non-returnable) |
| Sales key             | BF03                           |
| Product key           | AF1CBA                         |
| Customs tariff number | 85444290                       |
| Country of origin     | PL                             |

# SAC-3P-MS-FS SCO/.../... - Sensor/actuator cable



1523544

<https://www.phoenixcontact.com/us/products/1523544>

## Technical data

### Product properties

|                      |                       |
|----------------------|-----------------------|
| Product type         | Sensor/actuator cable |
| Application          | Standard              |
| Number of positions  | 3                     |
| 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  |
| Seal material                          | NBR   |
| Material of grip body                  | TPU, hardly inflammable, self-extinguishing |
| Contact material                       | CuSn  |
| Contact surface material               | Ni/Au                                       |
| Contact carrier material               | TPU GF                                      |
| Material for screw connection          | Zinc die-cast, nickel-plated                |

### Electrical properties

|  |                            |
|--|----------------------------|
| Rated voltage in acc. with IEC 61076-2-101 | 250 V                      |
| Insulation resistance                      | $\geq 100 \text{ M}\Omega$ |
| Nominal voltage $U_N$                      | 250 V AC                   |
|  | 250 V DC                   |
| Nominal current $I_N$                      | 4 A                        |
| Test voltage                               | 2500 V                     |

### Mechanical properties

#### Mechanical data

|                             |            |
|-----------------------------|------------|
| Insertion/withdrawal cycles | $\geq 100$ |
|-----------------------------|------------|

### Signaling

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

### Connection data

#### Conductor connection

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

# SAC-3P-MS-FS SCO/.../... - Sensor/actuator cable



1523544

<https://www.phoenixcontact.com/us/products/1523544>

## Connector

### Connection 1

|                     |                            |
|---------------------|----------------------------|
| Type                | Plug straight M12 SPEEDCON |
| Number of positions | 3                          |
| Locking type        | SPEEDCON                   |
| Coding type         | A                          |

### Connection 2

|                     |                              |
|---------------------|------------------------------|
| Type                | Socket straight M12 SPEEDCON |
| Number of positions | 3                            |
| Locking type        | SPEEDCON                     |
| Coding type         | A                            |

## Cable/line

|              |                             |
|--------------|-----------------------------|
| Cable length | Free input (0.2 ... 40.0 m) |
|--------------|-----------------------------|

### PUR halogen-free black [PUR]

|   |  |
|---|--|
| Cable weight                                  | 23 kg/km   |
| UL AWM Style                                  | 20549  |
| Number of positions                           | 3  |
| Shielded                                      | no   |
| Cable type                                    | PUR halogen-free black [PUR]<br>PUR halogen-free black PUR   |
| Conductor structure signal line               | 42x 0.10 mm  |
| AWG signal line                               | 22   |
| Conductor cross-section                       | 3x 0.34 mm <sup>2</sup> (Signal line)  |
| Wire diameter incl. insulation                | 1.27 mm ±0.02 mm (Signal line)   |
| External cable diameter                       | 3.85 mm ±0.15 mm   |
| Outer sheath, material                        | PUR  |
| External sheath, color                        | black-gray RAL 7021  |
| Conductor material                            | Bare Cu litz wires   |
| Material wire insulation                      | PP   |
| Single wire, color                            | brown, blue, black   |
| Thickness, insulation                         | ≥ 0.21 mm (Core insulation)<br>approx. 0.50 mm (Outer cable sheath)  |
| Overall twist                                 | 3 wires, twisted   |
| Max. conductor resistance                     | max. 58 Ω/km (at 20 °C)  |
| Insulation resistance                         | ≥ 100 GΩ*km (at 20 °C)   |
| Nominal voltage, cable                        | ≤ 300 V  |
| Test voltage                                  | ≥ 3000 V   |
| Smallest bending radius, fixed installation   | 19 mm  |
| Smallest bending radius, movable installation | 38 mm  |
| Dynamic load capacity (bending)               | Max. bending cycles: 10000000, Bending radius: 38 mm,<br>Bending radius: 10 x D, Traversing path: 10 m, Traversing rate: 3 |

# SAC-3P-MS-FS SCO/.../... - Sensor/actuator cable



1523544

<https://www.phoenixcontact.com/us/products/1523544>

|                                 |  |
|---------------------------------|--|
|                                 | m/s, Acceleration: 10 m/s <sup>2</sup>   |
| Dynamic load capacity (torsion) | Torsion: $\pm 180$ °/m, Torsion cycles: $\geq 5000000$ , Torsional frequency: 35 cycles/min.   |
| Halogen-free                    | in accordance with DIN VDE 0472 part 815   |
| Flame resistance                | in accordance with UL 758/1581 FT2<br>DIN EN 60332-2-2 (20 s)  |
| Resistance to oil               | in accordance with DIN EN 60811-2-1  |
| Other resistance                | Highly resistant to acids, alkaline solutions and solvents<br>hydrolysis and microbe resistant<br>partly UV-resistant (in accordance with DIN EN ISO 4892-2-A) |
| Special properties              | Flexible cable conduit capable<br>Silicone-free<br>Free of substances which would hinder coating with paint or varnish   |
| Ambient temperature (operation) | -40 °C ... 80 °C (cable, fixed installation)<br>-25 °C ... 80 °C (Cable, flexible installation)  |

## PUR/PVC orange [110]

|   |   |
|---|---|
| Cable weight                                  | 37 kg/km  |
| Number of positions                           | 3   |
| Shielded                                      | no  |
| Cable type                                    | PUR/PVC orange [110]<br>PUR/PVC orange 110  |
| Conductor structure signal line               | 42x 0.10 mm   |
| AWG signal line                               | 22  |
| Conductor cross-section                       | 0.34 mm <sup>2</sup>  |
| Wire diameter incl. insulation                | 1.52 mm $\pm 0.02$ mm   |
| External cable diameter                       | 5.2 mm<br>5.20 mm   |
| Outer sheath, material                        | PUR   |
| External sheath, color                        | orange RAL 2003   |
| Conductor material                            | Bare Cu litz wires  |
| Material wire insulation                      | PVC   |
| Single wire, color                            | brown, blue, black  |
| Thickness, insulation                         | $\geq 0.23$ mm (Core insulation)<br>$\geq 0.38$ mm (Outer cable sheath)<br>approx. 0.45 mm (Inner sheath) |
| Overall twist                                 | 3 wires, twisted  |
| Max. conductor resistance                     | max. 57.3 $\Omega$ /km  |
| Insulation resistance                         | $\geq 100$ M $\Omega$ *km   |
| Nominal voltage, cable                        | 300 V   |
| Test voltage                                  | 2500 V  |
| Smallest bending radius, fixed installation   | 52 mm   |
| Smallest bending radius, movable installation | 52 mm   |
| Dynamic load capacity (bending)               | Max. bending cycles: 2000000, Bending radius: 52 mm,  |

# SAC-3P-MS-FS SCO/.../... - Sensor/actuator cable



1523544

<https://www.phoenixcontact.com/us/products/1523544>

|                                 |  |
|---------------------------------|--|
|                                 | Traversing path: 5 m, Traversing rate: 3 m/s   |
| Ambient temperature (operation) | -25 °C ... 80 °C (cable, fixed installation)   |
|                                 | -5 °C ... 80 °C (Cable, flexible installation) |

## PUR/PVC yellow [140]

|   |   |
|---|---|
| Cable weight                                  | 37 kg/km  |
| Number of positions                           | 3   |
| Shielded                                      | no  |
| Cable type                                    | PUR/PVC yellow [140]  |
|   | PUR/PVC yellow 140  |
| Conductor structure signal line               | 42x 0.10 mm   |
| AWG signal line                               | 22  |
| Conductor cross-section                       | 0.34 mm <sup>2</sup>  |
| Wire diameter incl. insulation                | 1.52 mm ±0.02 mm  |
| External cable diameter                       | 5.20 mm ±0.2 mm   |
| Outer sheath, material                        | PUR   |
| External sheath, color                        | yellow  |
| Conductor material                            | Bare Cu litz wires  |
| Material wire insulation                      | PVC   |
| Single wire, color                            | brown, blue, black  |
| Thickness, insulation                         | ≥ 0.23 mm (Core insulation)   |
|   | ≥ 0.38 mm (Outer cable sheath)  |
|   | approx. 0.45 mm (Inner sheath)  |
| Overall twist                                 | 3 wires, twisted  |
| Max. conductor resistance                     | max. 57.3 Ω/km (at 20 °C)   |
| Insulation resistance                         | ≥ 100 MΩ*km (at 20 °C)  |
| Nominal voltage, cable                        | 300 V   |
| Test voltage                                  | 2500 V  |
| Smallest bending radius, fixed installation   | 52 mm   |
| Smallest bending radius, movable installation | 52 mm   |
| Dynamic load capacity (bending)               | Max. bending cycles: 2000000, Bending radius: 52 mm, Traversing path: 5 m, Traversing rate: 3 m/s |
| Ambient temperature (operation)               | -25 °C ... 80 °C (cable, fixed installation)  |
|   | -5 °C ... 80 °C (Cable, flexible installation)  |

## PUR irradiated halogen-free orange [150]

|                                 |  |
|---------------------------------|--|
| Number of positions             | 3  |
| Shielded                        | no                                       |
| Cable type                      | PUR irradiated halogen-free orange [150] |
|                                 | PUR irradiated halogen-free orange 150   |
| Conductor structure signal line | 42x 0.10 mm                              |
| AWG signal line                 | 22                                       |
| Conductor cross-section         | 3x 0.34 mm <sup>2</sup> (Signal line)    |
| Wire diameter incl. insulation  | 1.05 mm ±0.05 mm (Signal line)           |
| External cable diameter         | 4.40 mm ±0.2 mm                          |

# SAC-3P-MS-FS SCO/.../... - Sensor/actuator cable



1523544

<https://www.phoenixcontact.com/us/products/1523544>

|   |   |
|---|---|
| Outer sheath, material                        | PUR   |
| External sheath, color                        | orange RAL 2003   |
| Conductor material                            | Bare Cu litz wires  |
| Material wire insulation                      | PE  |
| Single wire, color                            | brown, blue, black  |
| Overall twist                                 | 3 wires, twisted  |
| Max. conductor resistance                     | max. 57 Ω/km  |
| Nominal voltage, cable                        | 250 V (AC)  |
| Test voltage                                  | 2000 V (50 Hz, 5 minutes)   |
| Smallest bending radius, fixed installation   | 13.5 mm   |
| Smallest bending radius, movable installation | 53 mm   |
| Dynamic load capacity (bending)               | Max. bending cycles: 5000000, Bending radius: 44 mm, Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10 m/s <sup>2</sup> |
| Flame resistance                              | according to DIN VDE 0472 Part 804  |
| Other resistance                              | UV resistant  |
| Special properties                            | Silicone-free   |
|   | Irradiated  |
| Ambient temperature (operation)               | -50 °C ... 105 °C (cable, fixed installation)   |
|   | -40 °C ... 105 °C (Cable, flexible installation)  |

## PUR halogen-free gray [280]

|                                 |                                      |
|---------------------------------|--------------------------------------|
| Cable weight                    | 26 kg/km                             |
| UL AWM Style                    | 20549                                |
| Number of positions             | 3                                    |
| Shielded                        | no                                   |
| Cable type                      | PUR halogen-free gray [280]          |
|                                 | PUR halogen-free gray 280            |
| Conductor structure signal line | 42x 0.10 mm                          |
| AWG signal line                 | 22                                   |
| Conductor cross-section         | 0.34 mm <sup>2</sup>                 |
| Wire diameter incl. insulation  | 1.27 mm ±0.02 mm                     |
| External cable diameter         | 4.40 mm ±0.15 mm                     |
| Outer sheath, material          | PUR                                  |
| External sheath, color          | gray RAL 7001                        |
| Conductor material              | Bare Cu litz wires                   |
| Material wire insulation        | TPE                                  |
| Single wire, color              | brown, blue, black                   |
| Thickness, insulation           | 0.21 mm (Core insulation)            |
|                                 | approx. 0.80 mm (Outer cable sheath) |
| Overall twist                   | 3 wires, twisted                     |
| Max. conductor resistance       | max. 58 Ω/km (at 20 °C)              |
| Insulation resistance           | ≥ 10 GΩ*km (at 20 °C)                |
| Nominal voltage, cable          | ≤ 300 V                              |
| Test voltage                    | ≥ 3000 V                             |

# SAC-3P-MS-FS SCO/.../... - Sensor/actuator cable



1523544

<https://www.phoenixcontact.com/us/products/1523544>

|                                 |  |
|---------------------------------|--|
| Dynamic load capacity (bending) | Max. bending cycles: 10000000  |
| Dynamic load capacity (torsion) | Torsion: $\pm 180$ °/m, Torsion cycles: $\geq 5000000$ , Torsional frequency: 35 cycles/min. |
| Halogen-free                    | in accordance with DIN VDE 0472 part 815   |
| Ambient temperature (operation) | -25 °C ... 80 °C (cable, fixed installation)   |

## PVC black [PVC]

|   |   |
|---|---|
| Cable weight                                  | 40 kg/km  |
| UL AWM Style                                  | 2464 / 1729 (80°C/300 V)  |
| Number of positions                           | 3   |
| Shielded                                      | no  |
| Cable type                                    | PVC black [PVC]<br>PVC black PVC  |
| Conductor structure signal line               | 19x 0.15 mm   |
| AWG signal line                               | 22  |
| Conductor cross-section                       | 3x 0.34 mm <sup>2</sup> (Signal line)   |
| Wire diameter incl. insulation                | 1.26 mm $\pm$ 0.05 mm   |
| External cable diameter                       | 4.30 mm $\pm$ 0.2 mm  |
| Outer sheath, material                        | PVC   |
| External sheath, color                        | black RAL 9005  |
| Conductor material                            | Bare Cu litz wires  |
| Material wire insulation                      | PVC   |
| Single wire, color                            | brown, blue, black  |
| Thickness, insulation                         | $\geq 0.23$ mm (Core insulation)  |
| Thickness, outer sheath                       | $\geq 0.76$ mm  |
| Overall twist                                 | 3 wires, twisted  |
| Max. conductor resistance                     | max. 57 $\Omega$ /km (at 20 °C)   |
| Insulation resistance                         | $\geq 100$ M $\Omega$ *km (at 20 °C)  |
| Nominal voltage, cable                        | $\leq 300$ V  |
| Test voltage                                  | $\geq 2500$ V   |
| Minimum bending radius, fixed installation    | 5 x D   |
| Minimum bending radius, flexible installation | 10 x D  |
| Smallest bending radius, fixed installation   | 22 mm   |
| Smallest bending radius, movable installation | 43 mm   |
| Flame resistance                              | As per UL-Style 2464  |
| Ambient temperature (operation)               | -25 °C ... 80 °C (cable, fixed installation)<br>-10 °C ... 80 °C (Cable, flexible installation) |

## PVC gray [500]

|                     |                                |
|---------------------|--------------------------------|
| Cable weight        | 40 kg/km                       |
| UL AWM Style        | 2464 / 1729 (80°C/300 V)       |
| Number of positions | 3                              |
| Shielded            | no                             |
| Cable type          | PVC gray [500]<br>PVC gray 500 |

# SAC-3P-MS-FS SCO/.../... - Sensor/actuator cable



1523544

<https://www.phoenixcontact.com/us/products/1523544>

|   |   |
|---|---|
| Conductor structure signal line               | 19x 0.15 mm   |
| AWG signal line                               | 22  |
| Conductor cross-section                       | 3x 0.34 mm <sup>2</sup> (Signal line)   |
| Wire diameter incl. insulation                | 1.26 mm ±0.05 mm  |
| External cable diameter                       | 4.30 mm ±0.2 mm   |
| Outer sheath, material                        | PVC   |
| External sheath, color                        | gray RAL 7001   |
| Conductor material                            | Bare Cu litz wires  |
| Material wire insulation                      | PVC   |
| Single wire, color                            | brown, blue, black  |
| Thickness, insulation                         | ≥ 0.23 mm (Core insulation)   |
| Thickness, outer sheath                       | ≥ 0.76 mm   |
| Overall twist                                 | 3 wires, twisted  |
| Max. conductor resistance                     | max. 57 Ω/km (at 20 °C)   |
| Insulation resistance                         | ≥ 100 MΩ*km (at 20 °C)  |
| Nominal voltage, cable                        | ≤ 300 V   |
| Test voltage                                  | ≥ 2500 V  |
| Minimum bending radius, fixed installation    | 5 x D   |
| Minimum bending radius, flexible installation | 10 x D  |
| Smallest bending radius, fixed installation   | 22 mm   |
| Smallest bending radius, movable installation | 43 mm   |
| Flame resistance                              | As per UL-Style 2464  |
| Ambient temperature (operation)               | -40 °C ... 80 °C (cable, fixed installation)<br>-25 °C ... 80 °C (Cable, flexible installation) |

## PVC yellow [540]

|                                 |   |
|---------------------------------|---|
| Cable weight                    | 40 kg/km  |
| Number of positions             | 3   |
| Shielded                        | no  |
| Cable type                      | PVC yellow [540]<br>PVC yellow 540                            |
| Conductor structure signal line | 42x 0.10 mm   |
| AWG signal line                 | 22  |
| Conductor cross-section         | 0.34 mm <sup>2</sup>  |
| Wire diameter incl. insulation  | 1.45 mm ±0.05 mm  |
| External cable diameter         | 5.20 mm ±0.2 mm   |
| Outer sheath, material          | PVC   |
| External sheath, color          | yellow  |
| Conductor material              | Bare Cu litz wires  |
| Material wire insulation        | PVC   |
| Single wire, color              | brown, blue, black  |
| Thickness, insulation           | ≥ 0.23 mm (Core insulation)<br>≥ 0.76 mm (Outer cable sheath) |
| Overall twist                   | 3 wires, twisted  |

# SAC-3P-MS-FS SCO/.../... - Sensor/actuator cable



1523544

<https://www.phoenixcontact.com/us/products/1523544>

|                                 |  |
|---------------------------------|--|
| Max. conductor resistance       | max. 58 Ω/km (at 20 °C)                        |
| Insulation resistance           | ≥ 1 GΩ*km (at 20 °C)                           |
| Nominal voltage, cable          | ≤ 300 V  |
| Test voltage                    | ≥ 3000 V                                       |
| Flame resistance                | As per UL-Style 2464                           |
| Ambient temperature (operation) | -25 °C ... 80 °C (cable, fixed installation)   |
|                                 | -5 °C ... 80 °C (Cable, flexible installation) |

## PVC yellow 105 °C [542]

|                                 |   |
|---------------------------------|---|
| Cable weight                    | 38 kg/km  |
| Number of positions             | 3   |
| Shielded                        | no  |
| Cable type                      | PVC yellow 105 °C [542]                         |
|                                 | PVC yellow 105 °C 542                           |
| Conductor structure signal line | 42x 0.10 mm                                     |
| AWG signal line                 | 22  |
| Conductor cross-section         | 0.34 mm <sup>2</sup>                            |
| Wire diameter incl. insulation  | 1.55 mm ±0.05 mm                                |
| External cable diameter         | 5.20 mm ±0.2 mm                                 |
| Outer sheath, material          | PVC   |
| External sheath, color          | yellow  |
| Conductor material              | Bare Cu litz wires                              |
| Material wire insulation        | PVC   |
| Single wire, color              | brown, blue, black                              |
| Thickness, insulation           | ≥ 0.38 mm (Core insulation)                     |
|                                 | ≥ 0.76 mm (Outer cable sheath)                  |
| Overall twist                   | 3 wires, twisted                                |
| Max. conductor resistance       | max. 58 Ω/km (at 20 °C)                         |
| Insulation resistance           | ≥ 100 MΩ*km (at 20 °C)                          |
| Nominal voltage, cable          | 300 V   |
| Test voltage                    | 4000 V  |
| Flame resistance                | according to DIN 50265-2-1                      |
| Ambient temperature (operation) | -25 °C ... 105 °C (cable, fixed installation)   |
|                                 | -5 °C ... 105 °C (Cable, flexible installation) |

## Gray, highly flexible PUR [800]

|                                 |  |
|---------------------------------|--|
| Note                            | Due to the extremely robust outer sheath, this cable should only be stripped in 5 cm increments. |
| Cable weight                    | 28.3 kg/km   |
| UL AWM Style                    | 20549  |
| Number of positions             | 3  |
| Shielded                        | no   |
| Cable type                      | Gray, highly flexible PUR [800]  |
|                                 | Gray, highly flexible PUR 800  |
| Conductor structure signal line | 42x 0.10 mm  |

# SAC-3P-MS-FS SCO/.../... - Sensor/actuator cable



1523544

<https://www.phoenixcontact.com/us/products/1523544>

|   |   |
|---|---|
| AWG signal line                               | 22  |
| Conductor cross-section                       | 3x 0.34 mm <sup>2</sup> (Signal line)   |
| Wire diameter incl. insulation                | 1.3 mm ±0.05 mm (Signal line)   |
| External cable diameter                       | 4.50 mm ±0.2 mm   |
| Outer sheath, material                        | PUR   |
| External sheath, color                        | gray RAL 7001   |
| Conductor material                            | Bare Cu litz wires  |
| Material wire insulation                      | PP  |
| Single wire, color                            | brown, blue, black  |
| Overall twist                                 | 3 wires, twisted  |
| Max. conductor resistance                     | approx. 53 Ω/km   |
| Insulation resistance                         | ≥ 20 MΩ*km  |
| Nominal voltage, cable                        | 300 V   |
| Test voltage                                  | 2000 V  |
| Minimum bending radius, fixed installation    | 4 x D   |
| Minimum bending radius, flexible installation | 7.5 x D   |
| Smallest bending radius, fixed installation   | 18 mm   |
| Smallest bending radius, movable installation | 34 mm   |
| Dynamic load capacity (bending)               | Max. bending cycles: 10000000, Bending radius: 7,5 x D, Traversing path: 5 m, Traversing rate: 3.3 m/s, Acceleration: 5 m/s <sup>2</sup><br>Max. bending cycles: 15000000, Bending radius: 50 mm, Traversing path: 0.9 m, Traversing rate: 5 m/s, Acceleration: 30 m/s <sup>2</sup> |
| Dynamic load capacity (torsion)               | Torsion: ±360 °/m, Torsion cycles: 1000000, Torsional frequency: 35 cycles/min.   |
| Halogen-free                                  | in accordance with DIN VDE 0472 part 815  |
| Flame resistance                              | in accordance with UL 758/1581 FT2  |
| Resistance to oil                             | in accordance with DIN EN 60811-2-1   |
| Other resistance                              | Highly resistant to acids, alkaline solutions and solvents<br>Silicone-free   |
| Special properties                            | Cable jacket is welding spark-resistant, recyclable, matt, low-adhesion, abrasion-resistant, flame-retardant, and self-extinguishing<br>Free from silicone and cadmium<br>Free of substances which would hinder coating with paint or varnish                                       |
| Ambient temperature (operation)               | -40 °C ... 80 °C (cable, fixed installation)<br>-25 °C ... 80 °C (Cable, flexible installation)   |

## Environmental and real-life conditions

### Ambient conditions

|   |                                  |
|---|----------------------------------|
| Degree of protection                                    | IP65                             |
|   | IP67                             |
|   | IP68                             |
| Ambient temperature (operation) (male connector/female) | -25 °C ... 90 °C (Plug / socket) |

# SAC-3P-MS-FS SCO/.../... - Sensor/actuator cable



1523544

<https://www.phoenixcontact.com/us/products/1523544>

connector)

## Standards and regulations

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

# SAC-3P-MS-FS SCO/.../... - Sensor/actuator cable

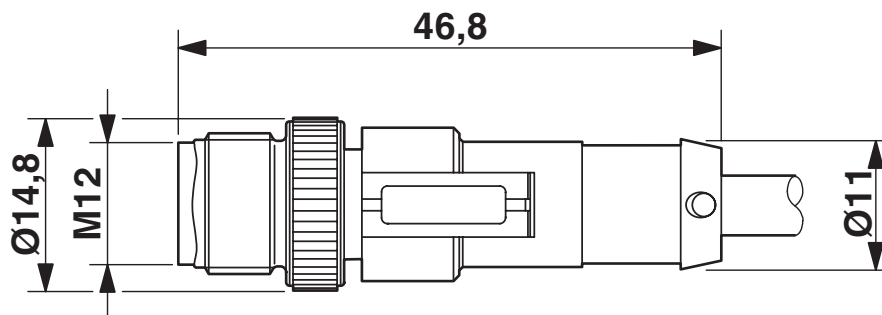


1523544

<https://www.phoenixcontact.com/us/products/1523544>

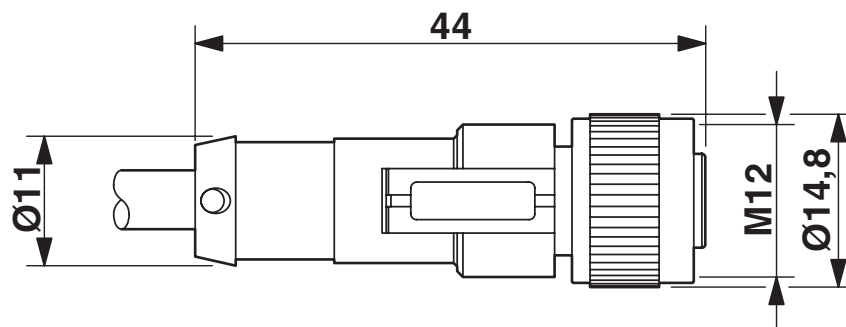
## Drawings

Dimensional drawing



Plug, M12 x 1, straight, shielded

Dimensional drawing



M12 x 1 socket, straight

1523544

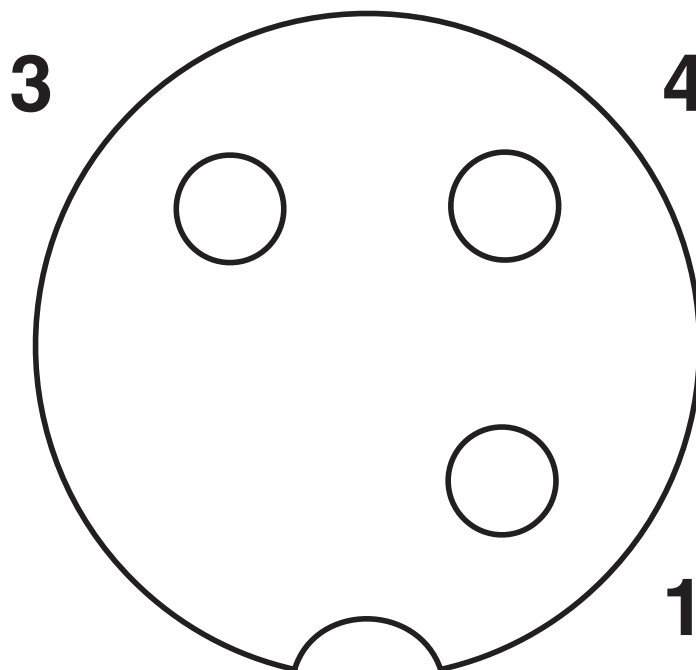
<https://www.phoenixcontact.com/us/products/1523544>

Schematic diagram



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

Schematic diagram



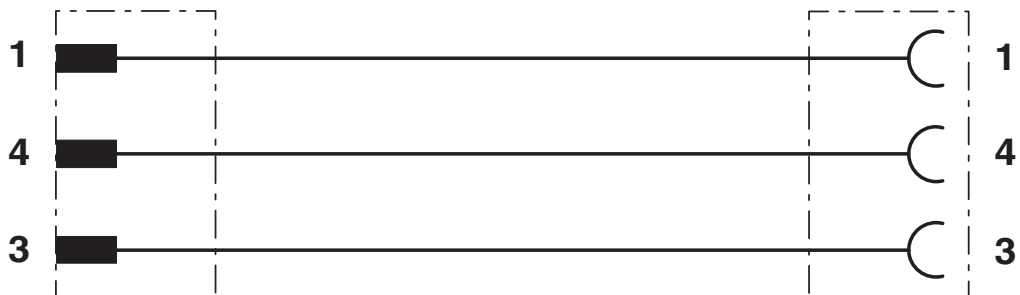
Pin assignment M12 socket, 3-pos., A-coded, view female side

# SAC-3P-MS-FS SCO/.../... - Sensor/actuator cable

1523544

<https://www.phoenixcontact.com/us/products/1523544>

Circuit diagram



Contact assignment of the M12 plug and the M12 socket

# SAC-3P-MS-FS SCO/.../... - Sensor/actuator cable



1523544

<https://www.phoenixcontact.com/us/products/1523544>

## Classifications

### ECLASS

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

# SAC-3P-MS-FS SCO/.../... - Sensor/actuator cable



1523544

<https://www.phoenixcontact.com/us/products/1523544>

## 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% |
|-------------------------------------|----------------------------|

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)