

# SAC-5P-10,0-PUR/M12FR - Sensor/actuator cable



1694541

<https://www.phoenixcontact.com/fi/tuotteet/1694541>

Huomioi, että tässä ilmoitetut tiedot ovat peräisin online-luettelosta. Täydelliset tiedot löydät käyttöohjeesta. Internet-latausten yleiset käyttöehdot ovat voimassa.

---



Sensor/actuator cable, 5-position, PUR halogen-free, black-gray RAL 7021, free cable end, on Socket angled M12, coding: A, cable length: 10 m

---

## Edut

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

1694541

<https://www.phoenixcontact.com/fi/tuotteet/1694541>

## Tekniset tiedot

### Product properties

|                      |                       |
|----------------------|-----------------------|
| Product type         | Sensor/actuator cable |
| Application          | Standard              |
| Number of positions  | 5                     |
| 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

|                       |                            |
|-----------------------|----------------------------|
| Insulation resistance | $\geq 100 \text{ M}\Omega$ |
| Nominal voltage $U_N$ | 48 V AC                    |
|                       | 60 V DC                    |
| Nominal current $I_N$ | 4 A                        |

### 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) |
|-------------------|------------------------|

### Connector

#### Connection 1

# SAC-5P-10,0-PUR/M12FR - Sensor/actuator cable



1694541

<https://www.phoenixcontact.com/fi/tuotteet/1694541>

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

## Connection 2

|                     |                   |
|---------------------|-------------------|
| Type                | Socket angled M12 |
| Number of positions | 5                 |
| Coding type         | A                 |

## Cable/line

|              |      |
|--------------|------|
| Cable length | 10 m |
|--------------|------|

## PUR halogen-free black [PUR]

|   |  |
|---|--|
| Mittapiirros                                  |   |
| Cable weight                                  | 33 kg/km   |
| UL AWM Style                                  | 20549  |
| Number of positions                           | 5  |
| Shielded                                      | no   |
| Cable type                                    | PUR halogen-free black [PUR]   |
| Conductor structure signal line               | 42x 0.10 mm  |
| AWG signal line                               | 22   |
| Conductor cross-section                       | 5x 0.34 mm <sup>2</sup> (Signal line)  |
| Wire diameter incl. insulation                | 1.27 mm 0.05 mm (Signal line)  |
| External cable diameter                       | 4.55 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, white, blue, black, green-yellow  |
| Thickness, insulation                         | approx. 0.50 mm  |
| Max. conductor resistance                     | max. 58 Ω/km (at 20 °C)  |
| Insulation resistance                         | ≥ 16 GΩ*km (at 20 °C)  |
| Nominal voltage, cable                        | 300 V  |
| Test voltage                                  | 3000 V   |
| Smallest bending radius, fixed installation   | 23 mm  |
| Smallest bending radius, movable installation | 46 mm  |
| Dynamic load capacity (bending)               | Max. bending cycles: 10000000, Bending radius: 46 mm, Bending radius: 10 x D, Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10 m/s <sup>2</sup> |
| Dynamic load capacity (torsion)               | Torsion: ±180 °/m, Torsion cycles: ≥2000000, Torsional frequency: 35 cycles/min.   |

# SAC-5P-10,0-PUR/M12FR - Sensor/actuator cable



1694541

<https://www.phoenixcontact.com/fi/tuotteet/1694541>

|                                 |   |
|---------------------------------|---|
| 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>Resistant to salt water<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<br>flexible  |
| 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<br>IP67<br>IP68                           |
| Ambient temperature (operation) (male connector/female connector) | -25 °C ... 90 °C (Plug / socket)               |
| Ambient temperature (operation) (Cable, fixed installation)       | -40 °C ... 80 °C (cable, fixed installation)   |
| Ambient temperature (operation) (Cable, flexible installation)    | -5 °C ... 80 °C (Cable, flexible installation) |

## Standards and regulations

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

# SAC-5P-10,0-PUR/M12FR - Sensor/actuator cable

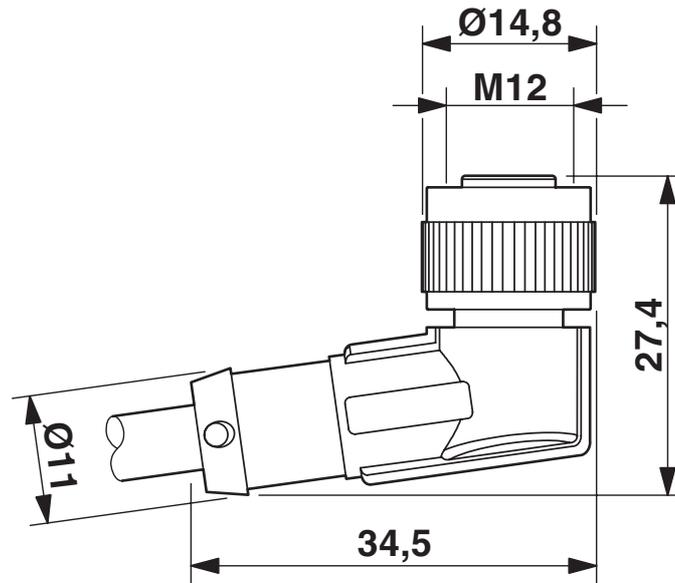
1694541

<https://www.phoenixcontact.com/fi/tuotteet/1694541>



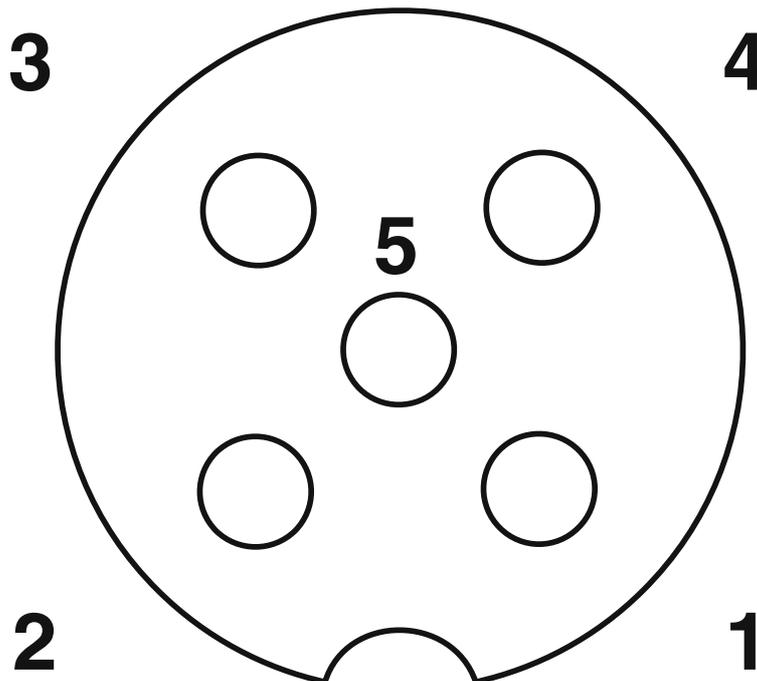
## Piirustukset

Dimensional drawing



M12 x 1 socket, angled

Schematic diagram



Pin assignment M12 socket, 5-pos., A-coded, socket side view

# SAC-5P-10,0-PUR/M12FR - Sensor/actuator cable



1694541

<https://www.phoenixcontact.com/fi/tuotteet/1694541>

Circuit diagram



Contact assignment of the M12 socket

# SAC-5P-10,0-PUR/M12FR - Sensor/actuator cable



1694541

<https://www.phoenixcontact.com/fi/tuotteet/1694541>

## Hyväksynät

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/fi/tuotteet/1694541>

|  <b>UL Listed</b><br>Hyväksyntätunnus: FILE E 221474 |                       |                     |                 |                           |
|---|-----------------------|---------------------|-----------------|---------------------------|
|   | Nimellisjännite $U_N$ | Nimellisvirta $I_N$ | Poikkipinta AWG | Poikkipinta $\text{mm}^2$ |
| keine   |                       |                     |                 |                           |
|   | 125 V                 | 4 A                 | -               | -                         |

|  <b>cUL Listed</b><br>Hyväksyntätunnus: FILE E 221474 |                       |                     |                 |                           |
|--|-----------------------|---------------------|-----------------|---------------------------|
|  | Nimellisjännite $U_N$ | Nimellisvirta $I_N$ | Poikkipinta AWG | Poikkipinta $\text{mm}^2$ |
| keine  |                       |                     |                 |                           |
|  | 125 V                 | 4 A                 | -               | -                         |

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

# SAC-5P-10,0-PUR/M12FR - Sensor/actuator cable



1694541

<https://www.phoenixcontact.com/fi/tuotteet/1694541>

## Luokitukset

### ECLASS

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

### ETIM

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

### UNSPSC

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

# SAC-5P-10,0-PUR/M12FR - Sensor/actuator cable



1694541

<https://www.phoenixcontact.com/fi/tuotteet/1694541>

## Environmental product compliance

### EU RoHS

|                                      |                              |
|--------------------------------------|------------------------------|
| Täyttää RoHS-direktiivin vaatimukset | Kyllä, Ei poikkeussäännöksiä |
|--------------------------------------|------------------------------|

### China RoHS

|  |   |
|--|---|
| Environment friendly use period (EFUP) | EFUP-E                                      |
|  | Ei raja-arvot ylittäviä vaarallisia aineita |

### EU REACH SVHC

|   |                                    |
|---|------------------------------------|
| Huomautus REACH-kandidaattiaineesta (CAS-nro) | Aineen pitoisuus ei ole yli 0,1 %. |
|---|------------------------------------|

### EF3.1 Ilmastonmuutos

|         |               |
|---------|---------------|
| CO2e kg | 6,304 kg CO2e |
|---------|---------------|

Phoenix Contact 2026 © – Kaikki oikeudet pidätetään.  
<https://www.phoenixcontact.com>

PHOENIX CONTACT OY  
Niittytie 11  
FI-01300 Vantaa  
+358 (0)9 350 9020  
[myynti@phoenixcontact.com](mailto:myynti@phoenixcontact.com)