

# SAC-5P-20,0-547/M12FS BK - Sensor/actuator cable



1425125

<https://www.phoenixcontact.com/us/products/1425125>

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, 5-position, PVC, yellow, free cable end, on Socket straight M12, coding: A, cable length: 20 m

## Commercial data

|                                      |                                |
|--------------------------------------|--------------------------------|
| Item number                          | 1425125                        |
| Packing unit                         | 1 pc                           |
| Minimum order quantity               | 1 pc                           |
| Note                                 | Made to order (non-returnable) |
| Sales key                            | BF13                           |
| Product key                          | AF11FC                         |
| GTIN                                 | 4055626402536                  |
| Weight per piece (including packing) | 1,543.1 g                      |
| Weight per piece (excluding packing) | 22.22 g                        |
| Customs tariff number                | 85444290                       |
| Country of origin                    | US                             |

1425125

<https://www.phoenixcontact.com/us/products/1425125>

## Technical data

### Product properties

|                      |                       |
|----------------------|-----------------------|
| Product type         | Sensor/actuator cable |
| Application          | Standard, U.S. cables |
| 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                |
| Outer sheath, material                 | PVC   |

### Electrical properties

|                       |                           |
|-----------------------|---------------------------|
| Insulation resistance | $\geq 10 \text{ M}\Omega$ |
| Nominal voltage $U_N$ | 48 V AC                   |
|                       | 60 V DC                   |
| Nominal current $I_N$ | 4 A                       |

### Signaling

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

### Connection data

#### Conductor connection

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

### Connector

#### Connection 1

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

#### Connection 2

|      |                     |
|------|---------------------|
| Type | Socket straight M12 |
|------|---------------------|

# SAC-5P-20,0-547/M12FS BK - Sensor/actuator cable



1425125

<https://www.phoenixcontact.com/us/products/1425125>

|                     |   |
|---------------------|---|
| Number of positions | 5 |
| Coding type         | A |

## Cable/line

|              |      |
|--------------|------|
| Cable length | 20 m |
|--------------|------|

PVC AWG 18 yellow 105°C [547]

|   |  |
|---|--|
| Dimensional drawing                         |  |
| UL AWM Style                                | 2517 (105 °C / 300 V)  |
| Number of positions                         | 5  |
| Shielded                                    | no   |
| Cable type                                  | PVC AWG 18 yellow 105°C [547]  |
| Conductor structure signal line             | 41x 0.16 mm  |
| AWG signal line                             | 18   |
| Wire diameter incl. insulation              | 1.7 mm ±0.03 mm  |
| External cable diameter                     | 6.60 mm ±0.2 mm  |
| Outer sheath, material                      | PVC  |
| External sheath, color                      | yellow   |
| Conductor material                          | Tin-plated Cu litz wires   |
| Material, filler                            | PP   |
| Material wire insulation                    | PVC  |
| Single wire, color                          | brown, white, blue, black, gray  |
| Overall twist                               | 5 wires around filler to the core  |
| Nominal voltage, cable                      | 300 V  |
| Minimum bending radius, fixed installation  | 8 x D  |
| Smallest bending radius, fixed installation | 53 mm  |
| Flame resistance                            | FT4  |
| Special properties                          | UL ITC/PLTC 105 °C<br>CSA AWM I/II A/B FT4 105 °C / 300 V                          |
| Ambient temperature (operation)             | -30 °C ... 105 °C (cable, fixed 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-5P-20,0-547/M12FS BK - Sensor/actuator cable



1425125

<https://www.phoenixcontact.com/us/products/1425125>

connector)

## Standards and regulations

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

1425125

<https://www.phoenixcontact.com/us/products/1425125>

## Drawings

Dimensional drawing



M12 x 1 socket, straight

Schematic diagram



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

1425125

<https://www.phoenixcontact.com/us/products/1425125>

Circuit diagram



Contact assignment of the M12 sockets

# SAC-5P-20,0-547/M12FS BK - Sensor/actuator cable



1425125

<https://www.phoenixcontact.com/us/products/1425125>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1425125>

|  <b>UL Listed</b><br>Approval ID: FILE E 221474 |                       |                       |                   |                             |
|--|-----------------------|-----------------------|-------------------|-----------------------------|
|  | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
| keine  |                       |                       |                   |                             |
|  | 125 V                 | 4 A                   | -                 | -                           |

|  <b>cUL Listed</b><br>Approval ID: FILE E 221474 |                       |                       |                   |                             |
|---|-----------------------|-----------------------|-------------------|-----------------------------|
|   | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
| keine   |                       |                       |                   |                             |
|   | 125 V                 | 4 A                   | -                 | -                           |

1425125

<https://www.phoenixcontact.com/us/products/1425125>

## Classifications

### ECLASS

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

### ETIM

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

### UNSPSC

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

# SAC-5P-20,0-547/M12FS BK - Sensor/actuator cable



1425125

<https://www.phoenixcontact.com/us/products/1425125>

## 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)