

# SAC-5P-10,0-BF145/M12FS SH NC - Sensor/actuator cable



1405343

<https://www.phoenixcontact.com/us/products/1405343>

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Sensor/actuator cable, 5-pos., free cable end to straight M12 socket, A-coded, cable length: 10 m

## Commercial data

|                                      |                                |
|--------------------------------------|--------------------------------|
| Item number                          | 1405343                        |
| Packing unit                         | 1 pc                           |
| Minimum order quantity               | 50 pc                          |
| Note                                 | Made to order (non-returnable) |
| Product key                          | AF1CDA                         |
| GTIN                                 | 4046356740647                  |
| Weight per piece (including packing) | 818 g                          |
| Weight per piece (excluding packing) | 808.8 g                        |
| Country of origin                    | PL                             |

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## Technical data

### Product properties

|                      |                       |
|----------------------|-----------------------|
| Product type         | Sensor/actuator cable |
| Number of positions  | 5                     |
| No. of cable outlets | 1                     |
| Coding               | A                     |

### Insulation characteristics

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

### Electrical properties

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

### Mechanical properties

#### Mechanical data

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

### Signaling

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

### Connector

#### Connection 1

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

#### Connection 2

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

### Cable/line

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

#### POC irradiated halogen-free black [BF 145]

|                         |                                            |
|-------------------------|--------------------------------------------|
| Cable weight            | 86 kg/km                                   |
| Number of positions     | 5                                          |
| Shielded                | yes                                        |
| Cable type              | POC irradiated halogen-free black [BF 145] |
| AWG signal line         | 20                                         |
| Conductor cross section | 5x 0.5 mm <sup>2</sup>                     |

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|                                               |                                                                                                                          |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| Wire diameter incl. insulation                | 1.9 mm                                                                                                                   |
| External cable diameter                       | 7.30 mm                                                                                                                  |
| Outer sheath, material                        | POC                                                                                                                      |
| External sheath, color                        | black RAL 9005                                                                                                           |
| Conductor material                            | Tin-plated Cu litz wires                                                                                                 |
| Material wire insulation                      | POC                                                                                                                      |
| Single wire, color                            | black 1, black 2, black 3, black 4, black 5                                                                              |
| Overall twist                                 | 5 wires around filler to the core                                                                                        |
| Nominal voltage, cable                        | 300 V                                                                                                                    |
| Test voltage Core/Core                        | 3500 V                                                                                                                   |
| Test voltage Core/Shield                      | 2500.00 V                                                                                                                |
| Minimum bending radius, fixed installation    | 4 x D                                                                                                                    |
| Minimum bending radius, flexible installation | 12 x D                                                                                                                   |
| Smallest bending radius, fixed installation   | 30 mm                                                                                                                    |
| Smallest bending radius, movable installation | 88 mm                                                                                                                    |
| Dynamic load capacity (bending)               | Max. bending cycles: 2000000, Bending radius: 10 x D, Traversing path: 5 m, Traversing rate: 4 m/s, Acceleration: 5 m/s² |
| Halogen-free                                  | according to IEC 60754-1<br>in accordance with DIN EN 50267-2-1                                                          |
| Flame resistance                              | IEC 60332-1<br>According to DIN EN 50265-2-1                                                                             |
| Concentration of fumes                        | in accordance with IEC 61034<br>EN 50268-2                                                                               |
| Other resistance                              | Good resistance to aggressive media                                                                                      |
| Special properties                            | Irradiated                                                                                                               |
| Ambient temperature (operation)               | -55 °C ... 145 °C (cable, fixed installation)<br>-35 °C ... 120 °C (Cable, flexible installation)                        |

## Environmental and real-life conditions

### Ambient conditions

|                                 |                                                                                                                                    |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| Degree of protection            | IP65<br>IP67                                                                                                                       |
| Ambient temperature (operation) | -25 °C ... 90 °C (Plug / socket)<br>-25 °C ... 80 °C (cable, fixed installation)<br>-5 °C ... 80 °C (Cable, flexible installation) |

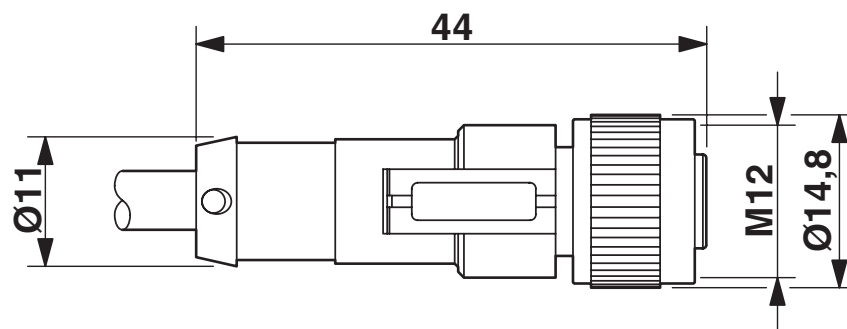
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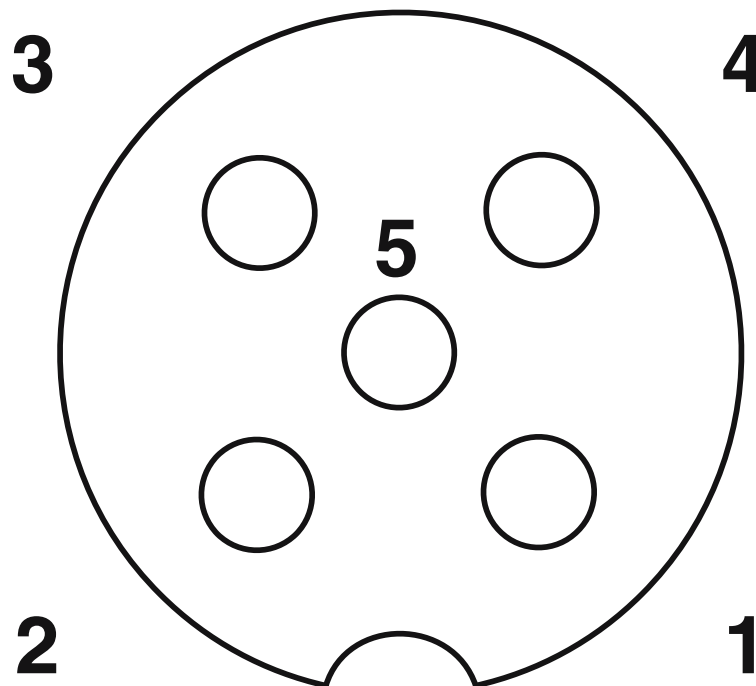
## Drawings

Dimensional drawing



M12 x 1 socket, straight

Schematic diagram



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

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Circuit diagram



Contact assignment of the M12 socket

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## Classifications

### ECLASS

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

### ETIM

|          |          |
|----------|----------|
| ETIM 9.0 | EC001855 |
|----------|----------|

### UNSPSC

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

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

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