

# SAC-3P-MS/ 1,5-600/M 8FR-2L FB - Sensor/actuator cable



1406500

<https://www.phoenixcontact.com/us/products/1406500>

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, PP-EPDM halogen-free, gray RAL 7035, Plug straight M8, coding: A, with 2 LEDs, on Socket angled M8, coding: A, with 2 LEDs, cable length: 1.5 m, Hygienic design, with plastic knurl

## Your advantages

- Easy and safe: 100 % electrically tested plug-in components
- Contamination can be detected quickly – thanks to the light color
- Convenient: increased machine availability thanks to quick and easy diagnostics

## Commercial data

|                                      |               |
|--------------------------------------|---------------|
| Item number                          | 1406500       |
| Packing unit                         | 1 pc          |
| Minimum order quantity               | 1 pc          |
| Sales key                            | BF01          |
| Product key                          | AF1BBA        |
| GTIN                                 | 4046356780728 |
| Weight per piece (including packing) | 42.4 g        |
| Weight per piece (excluding packing) | 42 g          |
| Customs tariff number                | 85444290      |
| Country of origin                    | PL            |

# SAC-3P-MS/ 1,5-600/M 8FR-2L FB - Sensor/actuator cable



1406500

<https://www.phoenixcontact.com/us/products/1406500>

## Technical data

### Product properties

|                      |                          |
|----------------------|--------------------------|
| Product type         | Sensor/actuator cable    |
| Application          | Food processing industry |
| Number of positions  | 3                        |
| No. of cable outlets | 1                        |
| Shielded             | no                       |
| Coding               | A                        |

### Insulation characteristics

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

### Material specifications

|                               |               |
|-------------------------------|---------------|
| Seal material                 | FKM           |
| Material of grip body         | PP            |
| Contact material              | CuSn          |
| Contact surface material      | Ni/Au         |
| Contact carrier material      | PP            |
| Material for screw connection | Polypropylene |

### Electrical properties

|                       |                            |
|-----------------------|----------------------------|
| Insulation resistance | $\geq 100 \text{ M}\Omega$ |
| Nominal voltage $U_N$ | 24 V DC                    |
| Nominal current $I_N$ | 4 A                        |

### Mechanical properties

#### Mechanical data

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

### Signaling

|                        |        |
|------------------------|--------|
| Status display         | 2 LEDs |
| Status display present | yes    |

### Connection data

#### Conductor connection

|                   |                        |
|-------------------|------------------------|
| Tightening torque | 0.2 Nm (M8 connectors) |
|-------------------|------------------------|

### Connector

#### Connection 1

|                     |                  |
|---------------------|------------------|
| Type                | Plug straight M8 |
| Number of positions | 3                |

# SAC-3P-MS/ 1,5-600/M 8FR-2L FB - Sensor/actuator cable



1406500

<https://www.phoenixcontact.com/us/products/1406500>

|             |   |
|-------------|---|
| Coding type | A |
|-------------|---|

## Connection 2

|                     |                  |
|---------------------|------------------|
| Type                | Socket angled M8 |
| Number of positions | 3                |
| Coding type         | A                |

## Cable/line

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

## Halogen-free PP gray [600]

|   |   |
|---|---|
| Dimensional drawing                           |  |
| Cable weight                                  | 19 kg/km  |
| Number of positions                           | 3   |
| Shielded                                      | no  |
| Cable type                                    | Halogen-free PP gray [600]  |
| Conductor structure signal line               | 32x 0.10 mm   |
| AWG signal line                               | 24  |
| Conductor cross-section                       | 3x 0.25 mm <sup>2</sup> (Signal line)   |
| Wire diameter incl. insulation                | 1.17 mm ±0.02 mm (Signal line)  |
| External cable diameter                       | 4.20 mm ±0.15 mm  |
| Outer sheath, material                        | PP-EPDM   |
| External sheath, color                        | gray RAL 7035   |
| Conductor material                            | Bare Cu litz wires  |
| Material wire insulation                      | PP  |
| Single wire, color                            | brown, blue, black  |
| Thickness, insulation                         | ≥ 0.21 mm (Core insulation)   |
| Thickness, outer sheath                       | approx. 0.80 mm   |
| Overall twist                                 | 3 wires, twisted  |
| Length of twist, overall twist                | 40 mm   |
| Max. conductor resistance                     | 78 Ω/km (at 20 °C)  |
| Insulation resistance                         | ≥ 1 GΩ*km (at 20 °C)  |
| Nominal voltage, cable                        | ≤ 300 V AC  |
| Test voltage                                  | ≥ 3000 V AC (Spark test)  |
| Minimum bending radius, fixed installation    | 5 x D   |
| Minimum bending radius, flexible installation | 10 x D  |
| Smallest bending radius, fixed installation   | 21 mm   |
| Smallest bending radius, movable installation | 42 mm   |

# SAC-3P-MS/ 1,5-600/M 8FR-2L FB - Sensor/actuator cable



1406500

<https://www.phoenixcontact.com/us/products/1406500>

|                                 |  |
|---------------------------------|--|
| Dynamic load capacity (bending) | Max. bending cycles: 4000000, 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: ±270 °/m, Torsion cycles: ≥4000000, Torsional frequency: max.25 Torsion cycles/min  |
| Halogen-free                    | in accordance with DIN VDE 0472 part 815   |
|                                 | in accordance with DIN EN 50267-2-1  |
| Other resistance                | Resistant to cold bending and cold impacts (according to DIN EN 60811-1-4 (-40 °C))  |
| Special properties              | FDA compliant according to FDA 21 CFR 177.2600   |
|                                 | highly flexible  |
|                                 | Flexible cable conduit capable   |
| Ambient temperature (operation) | -40 °C ... 105 °C (cable, fixed installation)  |
|                                 | -25 °C ... 105 °C (Cable, flexible installation)   |

## Environmental and real-life conditions

### Ambient conditions

|   |                                   |
|---|-----------------------------------|
| Degree of protection  | IP65                              |
|   | IP67                              |
|   | IP68                              |
|   | IP69K                             |
| Ambient temperature (operation) (male connector/female connector) | -40 °C ... 105 °C (Plug / socket) |

## Standards and regulations

### M8

|                          |                      |
|--------------------------|----------------------|
| Standard designation     | M8 connector         |
| Standards/specifications | IEC 61076-2-104      |
| Standard designation     | Material conformance |
| Standards/specifications | FDA 21 CFR 177.2600  |

# SAC-3P-MS/ 1,5-600/M 8FR-2L FB - Sensor/actuator cable

1406500

<https://www.phoenixcontact.com/us/products/1406500>

## Drawings

Dimensional drawing



M8 x 1 male plug, straight version

Dimensional drawing



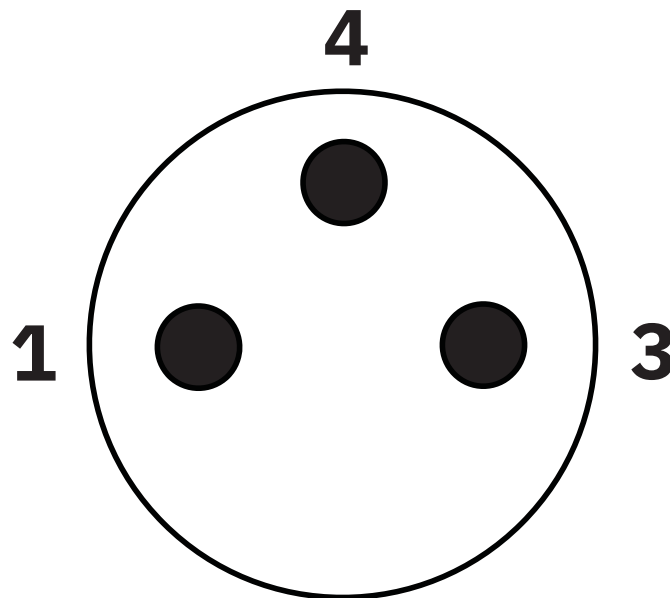
Socket M8 x 1, angled

# SAC-3P-MS/ 1,5-600/M 8FR-2L FB - Sensor/actuator cable

1406500

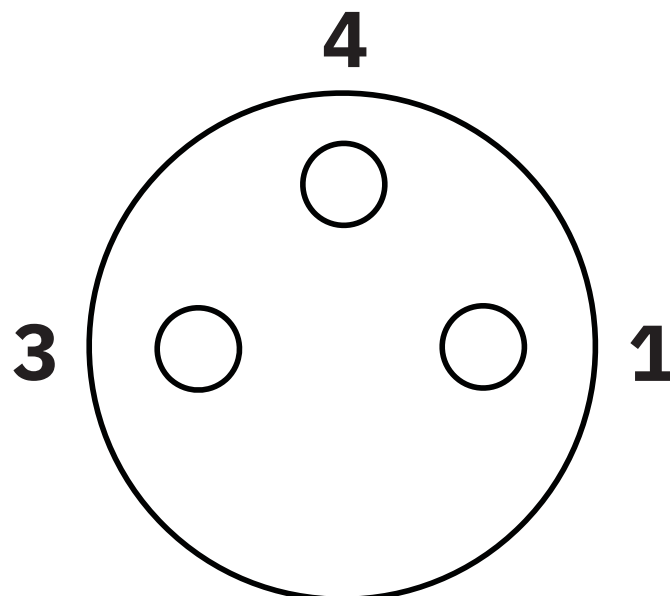
<https://www.phoenixcontact.com/us/products/1406500>

Schematic diagram



Pin assignment M8 plug, 3-pos., view male side

Schematic diagram



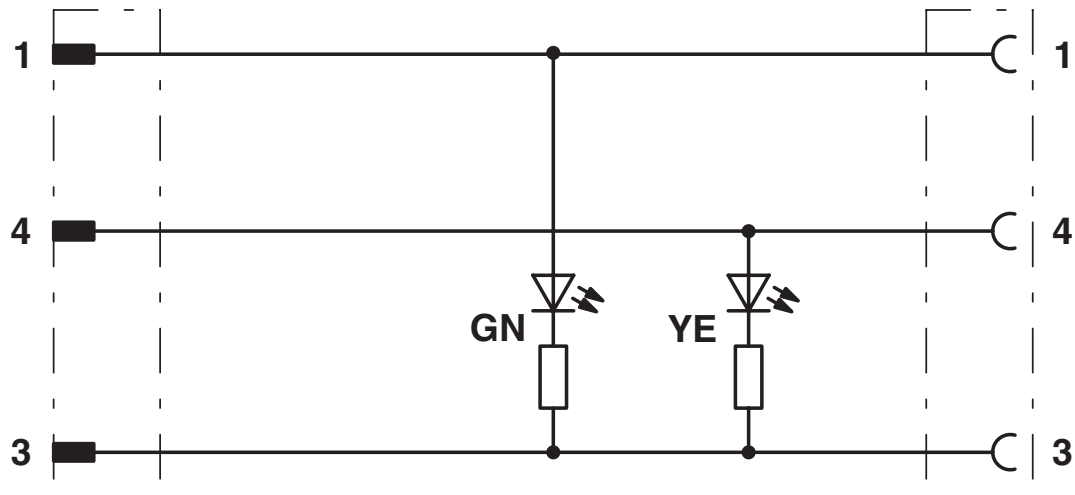
Pin assignment M8 socket, 3-pos., view female side

# SAC-3P-MS/ 1,5-600/M 8FR-2L FB - Sensor/actuator cable

1406500

<https://www.phoenixcontact.com/us/products/1406500>

Circuit diagram



Contact assignment of M8 plugs/sockets

# SAC-3P-MS/ 1,5-600/M 8FR-2L FB - Sensor/actuator cable



1406500

<https://www.phoenixcontact.com/us/products/1406500>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1406500>



**EAC-RoHS**

Approval ID: RU D-DE.HB35.B.00387

# SAC-3P-MS/ 1,5-600/M 8FR-2L FB - Sensor/actuator cable



1406500

<https://www.phoenixcontact.com/us/products/1406500>

## Classifications

### ECLASS

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

### ETIM

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

### UNSPSC

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

# SAC-3P-MS/ 1,5-600/M 8FR-2L FB - Sensor/actuator cable



1406500

<https://www.phoenixcontact.com/us/products/1406500>

## 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 | 0.626 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)