

SAC-8P-M12MS/15,0-542/M12FSSH - Sensor/actuator cable



1417925  
<https://www.phoenixcontact.com/pc/products/1417925>

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, 8-position, PVC, yellow, shielded, Plug straight M12, coding: A, on Socket straight M12, coding: A, cable length: 15 m

Commercial data

|                                      |                                |
|--------------------------------------|--------------------------------|
| Item number                          | 1417925                        |
| Packing unit                         | 1 pc                           |
| Minimum order quantity               | 1 pc                           |
| Note                                 | Made to order (non-returnable) |
| Product key                          | BF1IDD                         |
| GTIN                                 | 4055626211398                  |
| Weight per piece (including packing) | 925.3 g                        |
| Weight per piece (excluding packing) | 910 g                          |
| Customs tariff number                | 85444290                       |
| Country of origin                    | US                             |

# SAC-8P-M12MS/15,0-542/M12FSSH - Sensor/actuator cable



1417925

<https://www.phoenixcontact.com/pc/products/1417925>

## Technical data

### Product properties

|                      |                       |
|----------------------|-----------------------|
| Product type         | Sensor/actuator cable |
| Application          | Standard, U.S. cables |
| Number of positions  | 8                     |
| No. of cable outlets | 1                     |
| Shielded             | yes                   |
| 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                       | CuZn                                        |
| 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 | $\geq 100 \text{ M}\Omega$ |
| Nominal voltage $U_N$ | 30 V AC                    |
|                       | 30 V DC                    |
| Nominal current $I_N$ | 2 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

# SAC-8P-M12MS/15,0-542/M12FSSH - Sensor/actuator cable



1417925

<https://www.phoenixcontact.com/pc/products/1417925>

## Connection 1

|                     |                   |
|---------------------|-------------------|
| Type                | Plug straight M12 |
| Number of positions | 8                 |
| Coding type         | A                 |

## Connection 2

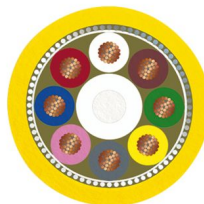
|                     |                     |
|---------------------|---------------------|
| Type                | Socket straight M12 |
| Number of positions | 8                   |
| Coding type         | A                   |

## Cable/line

|              |      |
|--------------|------|
| Cable length | 15 m |
|--------------|------|

## PVC yellow 105 °C [542]

### Dimensional drawing



|                                               |                                                    |
|-----------------------------------------------|----------------------------------------------------|
| Cable weight                                  | 58 kg/km                                           |
| UL AWM Style                                  | 2517 (105 °C / 300 V)                              |
| Number of positions                           | 8                                                  |
| Shielded                                      | yes                                                |
| Cable type                                    | PVC yellow 105 °C [542]                            |
| Conductor structure signal line               | 32x 1.10 mm                                        |
| AWG signal line                               | 24                                                 |
| Wire diameter incl. insulation                | 1.12 mm ±0.03 mm                                   |
| External cable diameter                       | 6.30 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                            | white, brown, green, yellow, gray, pink, blue, red |
| Overall twist                                 | 8 wires around filler to the core                  |
| Optical shield covering                       | 85 %                                               |
| Max. conductor resistance                     | max. 79.7 Ω/km (20 °C)                             |
| Insulation resistance                         | ≥ (550 M Ohms/m @ 500V)                            |
| Nominal voltage, cable                        | 300 V                                              |
| Minimum bending radius, flexible installation | 12 x D                                             |
| Smallest bending radius, movable installation | 76 mm                                              |

# SAC-8P-M12MS/15,0-542/M12FSSH - Sensor/actuator cable



1417925

<https://www.phoenixcontact.com/pc/products/1417925>

|                                 |                                                 |
|---------------------------------|-------------------------------------------------|
| Flame resistance                | FT1, VW-1                                       |
| Other resistance                | UV resistant                                    |
| Ambient temperature (operation) | -30 °C ... 105 °C (cable, fixed installation)   |
|                                 | -5 °C ... 105 °C (Cable, flexible installation) |

## Environmental and real-life conditions

### Ambient conditions

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

## Standards and regulations

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

Phoenix Contact 2024 © - all rights reserved  
<https://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG  
Flachsmarktstraße 8  
D-32825 Blomberg  
+49 (0) 5235-3 00  
[info@phoenixcontact.com](mailto:info@phoenixcontact.com)