

1415725

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Sensor/actuator cable, 8-position, PVC, black RAL 9005, free cable end, on Socket straight M12, coding: A, cable length: 3 m

Your advantages

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

Commercial data

|                                      |                     |
|--------------------------------------|---------------------|
| Item number                          | 1415725             |
| Packing unit                         | 1 pc                |
| Minimum order quantity               | 1 pc                |
| Sales key                            | BF03                |
| Product key                          | BF1CFA              |
| Catalog page                         | Page 209 (C-2-2019) |
| GTIN                                 | 4055626052472       |
| Weight per piece (including packing) | 168.5 g             |
| Weight per piece (excluding packing) | 163.7 g             |
| Customs tariff number                | 85444290            |
| Country of origin                    | PL                  |

# SAC-8P- 3,0-PVC/M12FS - Sensor/actuator cable



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## Technical data

### Product properties

|                      |                       |
|----------------------|-----------------------|
| Product type         | Sensor/actuator cable |
| Application          | Standard              |
| Number of positions  | 8                     |
| 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                       | CuZn                                        |
| 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 $U_N$ | 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 |

### Connector

#### Connection 1

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

#### Connection 2

|                     |                     |
|---------------------|---------------------|
| Type                | Socket straight M12 |
| Number of positions | 8                   |

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

## Cable/line

|              |     |
|--------------|-----|
| Cable length | 3 m |
|--------------|-----|

## PVC black [PVC]

|                                               |                                                                                                 |
|-----------------------------------------------|-------------------------------------------------------------------------------------------------|
| Dimensional drawing                           |               |
| Cable weight                                  | 54 kg/km                                                                                        |
| UL AWM Style                                  | 2464 / 1729 (80°C/300 V)                                                                        |
| Number of positions                           | 8                                                                                               |
| Shielded                                      | no                                                                                              |
| Cable type                                    | PVC black [PVC]                                                                                 |
| Conductor structure signal line               | 14x 0.15 mm                                                                                     |
| AWG signal line                               | 24                                                                                              |
| Conductor cross section                       | 8x 0.25 mm <sup>2</sup> (Signal line)                                                           |
| Wire diameter incl. insulation                | 1.17 mm ±0.05 mm                                                                                |
| External cable diameter                       | 5.90 mm ±0.2 mm                                                                                 |
| Outer sheath, material                        | PVC                                                                                             |
| External sheath, color                        | black RAL 9005                                                                                  |
| Conductor material                            | Bare Cu litz wires                                                                              |
| Material wire insulation                      | PVC                                                                                             |
| Single wire, color                            | white, brown, green, yellow, gray, pink, blue, red                                              |
| Thickness, insulation                         | ≥ 0.23 mm                                                                                       |
| Thickness, outer sheath                       | ≥ 0.76 mm                                                                                       |
| Overall twist                                 | 8 wires around filler to the core                                                               |
| Max. conductor resistance                     | 79 Ω/km (at 20 °C)                                                                              |
| Insulation resistance                         | ≥ 200 MΩ*km (at 20 °C)                                                                          |
| Nominal voltage, cable                        | ≤ 300 V AC                                                                                      |
| Test voltage                                  | ≥ 3000 V AC                                                                                     |
| Minimum bending radius, fixed installation    | 5 x D                                                                                           |
| Minimum bending radius, flexible installation | 10 x D                                                                                          |
| Smallest bending radius, fixed installation   | 30 mm                                                                                           |
| Smallest bending radius, movable installation | 59 mm                                                                                           |
| Flame resistance                              | as per VW-1 in accordance with UL 758                                                           |
| Resistance to oil                             | in accordance with DIN EN 60811-2-1                                                             |
| Ambient temperature (operation)               | -25 °C ... 80 °C (cable, fixed installation)<br>-10 °C ... 80 °C (Cable, flexible installation) |

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## Environmental and real-life conditions

### Ambient conditions

|                                 |                                  |
|---------------------------------|----------------------------------|
| Degree of protection            | IP65                             |
|                                 | IP67                             |
|                                 | IP68                             |
| Ambient temperature (operation) | -25 °C ... 90 °C (Plug / socket) |

## Standards and regulations

### M12

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

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