

## Sensor/Actuator cable - SAC-4P-MR/1,5-542/ FRSH SCO BK - 1406182

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Sensor/Actuator cable, 4-position, PVC, yellow RAL 1021, shielded, Plug angled M12 SPEEDCON, A-coded, on Socket angled M12 SPEEDCON, A-coded, Cable length: 1.5 m



### Key Commercial Data

|                                      |               |
|--------------------------------------|---------------|
| Packing unit                         | 1 pc          |
| Weight per Piece (excluding packing) | 1.0 g         |
| Custom tariff number                 | 85444290      |
| Country of origin                    | United States |

### Technical data

#### Dimensions

|                 |       |
|-----------------|-------|
| Length of cable | 1.5 m |
|-----------------|-------|

#### Ambient conditions

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

#### General

|                       |                               |
|-----------------------|-------------------------------|
| Rated current at 40°C | 4 A                           |
| Rated voltage         | 250 V                         |
| Number of positions   | 4                             |
| Insulation resistance | ≥ 100 MΩ                      |
| Coding                | A - standard                  |
| Standards/regulations | M12 connector IEC 61076-2-101 |
| Status display        | No                            |

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## Technical data

### General

|                              |                        |
|------------------------------|------------------------|
| Protective circuit/component | Unwired                |
| Overvoltage category         | II                     |
| Degree of pollution          | 3                      |
| Insertion/withdrawal cycles  | ≥ 100                  |
| Torque                       | 0.4 Nm (M12 connector) |

### Material

|                                        |                                             |
|----------------------------------------|---------------------------------------------|
| Flammability rating according to UL 94 | HB                                          |
| Contact material                       | CuSn                                        |
| Contact surface material               | Ni/Au                                       |
| Contact carrier material               | TPU GF                                      |
| Material of grip body                  | TPU, hardly inflammable, self-extinguishing |
| Material, knurls                       | Zinc die-cast, nickel-plated                |

### Standards and Regulations

|                                        |                 |
|----------------------------------------|-----------------|
| Standard designation                   | M12 connector   |
| Standards/regulations                  | IEC 61076-2-101 |
| Flammability rating according to UL 94 | HB              |

### Cable

|                                               |                              |
|-----------------------------------------------|------------------------------|
| Cable type                                    | PVC yellow 105 °C            |
| Cable type (abbreviation)                     | 542                          |
| UL AWM style                                  | 2517 (105°C/300 V)           |
| AWG signal line                               | 22                           |
| Core diameter including insulation            | 1.27 mm ±0.03 mm             |
| Wire colors                                   | brown, blue, black, white    |
| Overall twist                                 | 4 wires, twisted             |
| Shielding                                     | Tinned copper braided shield |
| Optical shield covering                       | 85 %                         |
| External sheath, color                        | yellow                       |
| External cable diameter D                     | 5.5 mm ±0.2 mm               |
| Minimum bending radius, flexible installation | 12 x D                       |
| Cable weight                                  | 48 kg/km                     |
| Outer sheath, material                        | PVC                          |
| Material conductor insulation                 | PVC                          |
| Conductor material                            | Tin-plated Cu litz wires     |
| Nominal voltage, cable                        | 300 V                        |
| Special properties                            | UL standards PLTC and ITC    |
| Other resistance                              | UV resistant                 |

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### Technical data

#### Cable

|                                 |                                               |
|---------------------------------|-----------------------------------------------|
| Ambient temperature (operation) | -30 °C ... 105 °C (cable, fixed installation) |
|---------------------------------|-----------------------------------------------|

### Classifications

#### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.0 | 27060306 |
| eCl@ss 4.1 | 27060306 |
| eCl@ss 5.0 | 27061801 |
| eCl@ss 5.1 | 27061801 |
| eCl@ss 6.0 | 27061801 |
| eCl@ss 7.0 | 27061801 |
| eCl@ss 8.0 | 27279218 |
| eCl@ss 9.0 | 27060311 |

#### ETIM

|          |          |
|----------|----------|
| ETIM 3.0 | EC001855 |
| ETIM 4.0 | EC001855 |
| ETIM 5.0 | EC001855 |

#### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 31251501 |
| UNSPSC 7.0901 | 31251501 |
| UNSPSC 11     | 31251501 |
| UNSPSC 12.01  | 31251501 |
| UNSPSC 13.2   | 31251501 |

### Approvals

#### Approvals

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UL Listed / cUL Listed / cULus Listed

#### Ex Approvals

#### Approvals submitted

# Sensor/Actuator cable - SAC-4P-MR/1,5-542/ FRSH SCO BK - 1406182

## Approvals

### Approval details

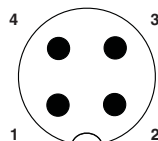
|                                                                                             |       |
|---------------------------------------------------------------------------------------------|-------|
| UL Listed  |       |
| Nominal current I <sub>N</sub>                                                              | 4 A   |
| Nominal voltage U <sub>N</sub>                                                              | 300 V |

|                                                                                              |       |
|----------------------------------------------------------------------------------------------|-------|
| cUL Listed  |       |
| Nominal current I <sub>N</sub>                                                               | 4 A   |
| Nominal voltage U <sub>N</sub>                                                               | 300 V |

|                                                                                                  |  |
|--------------------------------------------------------------------------------------------------|--|
| cULus Listed  |  |
|--------------------------------------------------------------------------------------------------|--|

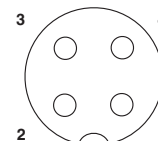
## Drawings

Schematic diagram



Pin assignment M12 plug, 4-pos., A-coded, view plug side

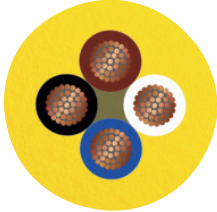
Schematic diagram



Pin assignment M12 socket, 4-pos., A-coded, view female side

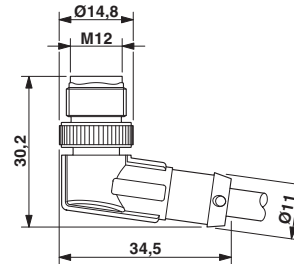
## Sensor/Actuator cable - SAC-4P-MR/1,5-542/ FRSH SCO BK - 1406182

Cable cross section



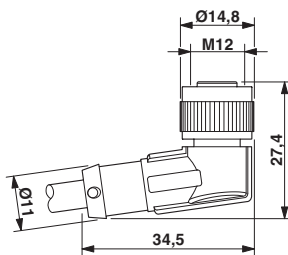
PVC yellow 105 °C [542]

Dimensional drawing



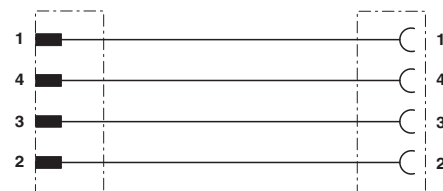
M12 x 1 male plug, angled

Dimensional drawing



M12 x 1 socket, angled

Circuit diagram



Contact assignment of M8 plugs / M12 sockets