



**Automatización Eléctrica**  
Especialistas en Automatización

At the end of this document you will find links to products related to this catalog. You can go directly to our shop by clicking [HERE](#). [HERE](#)

## Bus system cable - SAC-4P-M12MS/10,0-990/M12FS - 1558454

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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Bus system cable, CC link (10 Mbps), 4-position, PVC, red, shielded, Plug straight M12, A-coded, on Socket straight M12, A-coded, Cable length: 10 m



### Key Commercial Data

|                        |                     |
|------------------------|---------------------|
| Packing unit           | 1 STK               |
| Minimum order quantity | 50 STK              |
| GTIN                   | <br>4 046356 293785 |

### Technical data

#### Dimensions

|                 |      |
|-----------------|------|
| Length of cable | 10 m |
|-----------------|------|

#### Ambient conditions

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

#### General

|                             |                        |
|-----------------------------|------------------------|
| Rated current at 40°C       | 4 A                    |
| Rated voltage               | 250 V                  |
| Number of positions         | 4                      |
| Insulation resistance       | ≥ 100 MΩ               |
| Coding                      | A - standard           |
| Signal type/category        | CC link, 10 Mbps       |
| Status display              | No                     |
| Overvoltage category        | II                     |
| Degree of pollution         | 3                      |
| Insertion/withdrawal cycles | ≥ 100                  |
| Torque                      | 0.4 Nm (M12 connector) |

#### Material

# Bus system cable - SAC-4P-M12MS/10,0-990/M12FS - 1558454

## Technical data

### Material

|  |   |
|--|---|
| Flammability rating according to UL 94 | HB  |
| Contact material                       | CuZn  |
| 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                |
| Sealing material                       | NBR   |

### Pin assignment

|  |                                     |
|--|-------------------------------------|
| Position = wire color (signal) = position (optional) | 1 (Plug) = SR (shield) = 1 (Socket) |
|  | 2 (Plug) = WH (DB) = 2 (Socket)     |
|  | 3 (Plug) = YE (DG) = 3 (Socket)     |
|  | 4 (Plug) = BU (DA) = 4 (Socket)     |

### Standards and Regulations

|  |    |
|--|----|
| Flammability rating according to UL 94 | HB |
|--|----|

### Cable

|   |  |
|---|--|
| Cable type                                  | CC-Link  |
| Cable type (abbreviation)                   | 990  |
| Conductor cross section                     | 0.5 mm <sup>2</sup>  |
| AWG signal line                             | 20   |
| Conductor structure signal line             | 7x 0.28 mm   |
| Thickness, insulation                       | 0.89 mm (Outer cable sheath)                               |
| Wire colors                                 | white, yellow, blue  |
| Shielding                                   | Plastic-coated aluminum foil, tinned copper braided shield |
| Optical shield covering                     | 78 %   |
| External sheath, color                      | red  |
| External cable diameter                     | 7.70 mm  |
| Smallest bending radius, fixed installation | 77 mm  |
| Cable weight                                | 78.8 kg/km   |
| Outer sheath, material                      | PVC  |
| Material conductor insulation               | foamed PE, with high density                               |
| Conductor material                          | Bare Cu litz wires   |
| Conductor resistance                        | 31.2 Ω/km  |
| Working capacitance                         | 61 pF  |
| Wave impedance                              | 110 Ω  |
| Nominal voltage, cable                      | 300 V  |
| Ambient temperature (operation)             | -30 °C ... 60 °C (cable, fixed installation)               |
|   | -5 °C ... 60 °C (cable, flexible installation)             |

# Bus system cable - SAC-4P-M12MS/10,0-990/M12FS - 1558454

## 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 |

### 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

---

Approvals

EAC

---

Ex Approvals

---

Approvals submitted

---

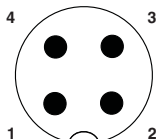
Approval details

|     |
|-----|
| EAC |
|-----|

## Drawings

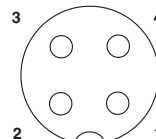
# Bus system cable - SAC-4P-M12MS/10,0-990/M12FS - 1558454

Schematic diagram



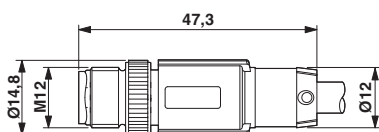
Pin assignment M12 plug, 4-pos., A-coded, view plug side

Schematic diagram



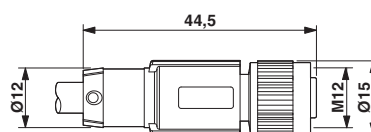
Pin assignment M12 socket, 4-pos., A-coded, view female side

Dimensional drawing



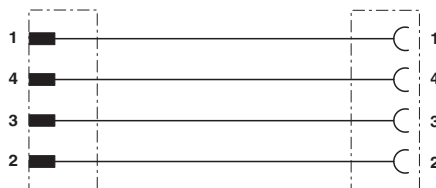
Plug, M12 x 1, straight, shielded

Dimensional drawing



M12 x 1 socket, straight, shielded

Circuit diagram



Contact assignment of the M12 plug and the M12 socket



Below is a list of articles with direct links to our shop Electric Automation Network where you can see:

- Quote per purchase volume in real time.
- Online documentation and datasheets of all products.
- Estimated delivery time enquiry in real time.
- Logistics systems for the shipment of materials almost anywhere in the world.
- Purchasing management, order record and tracking of shipments.

To access the product, [click on the green button.](#)

| Product  | Code    | Reference                   | Product link               |
|--|---------|-----------------------------|----------------------------|
| Bus system cable, CC link (10 Mbps), 4-position, PVC, red, shielded, Plug straight M12, A-coded, on Socket straight M12, A-coded, Cable length: 10 m | 1558454 | SAC-4P-M12MS/10,0-990/M12FS | <a href="#">Buy on EAN</a> |