

# SAC-8P-M12MS/10,0-940/M12MS

Order No.: 1543207



<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=1543207>

Bus system cable, 8-position, PUR, halogen-free, water blue RAL 5021, shielded, Plug, straight M12, A-coded, on Plug, straight M12, A-coded, Cable length: 10 m

## Ethernet

### Commercial data

|                          |                    |
|--------------------------|--------------------|
| GTIN (EAN)               | 4 046356 097369    |
| Note                     | Made-to-order      |
| sales group              | D117               |
| Pack                     | 1 pcs.             |
| Customs tariff           | 85444290           |
| Catalog page information | Page 183 (PC-2007) |

### Product notes

WEEE/RoHS-compliant since:  
01/01/2008



<http://www.download.phoenixcontact.com>  
Please note that the data given here has been taken from the online catalog. For comprehensive information and data, please refer to the user documentation. The General Terms and Conditions of Use apply to Internet downloads.

### Technical data

|                       |        |
|-----------------------|--------|
| <b>General data</b>   |        |
| Rated current at 40°C | 2 A    |
| Rated voltage         | 30 V   |
| Number of positions   | 8      |
| Volume resistance     | ≤ 5 mΩ |

|                                 |                                                      |
|---------------------------------|------------------------------------------------------|
| Insulation resistance           | $\geq 100 \text{ M}\Omega$                           |
| Length of cable                 | 10 m                                                 |
| Ambient temperature (operation) | -25 °C ... 90 °C (Male connector / female connector) |

#### General characteristics

|                             |                                             |
|-----------------------------|---------------------------------------------|
| Coding                      | A - standard                                |
| Surge voltage category      | II                                          |
| Pollution degree            | 3                                           |
| Degree of protection        | IP65/IP67/IP69K                             |
| Insertion/withdrawal cycles | $\geq 100$                                  |
| 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)              |
| Sealing material            | NBR                                         |
| Status display              | No                                          |

#### Conductor data

|                                         |                                                    |
|-----------------------------------------|----------------------------------------------------|
| Cable type                              | Ethernet                                           |
| Cable type (abbreviation)               | 94F                                                |
| Conductor cross section                 | 0.14 mm <sup>2</sup>                               |
| AWG signal line                         | 26                                                 |
| Conductor structure signal line         | 7x 0.16 mm                                         |
| Core diameter including insulation      | 1 mm                                               |
| External cable diameter                 | 6.40 mm                                            |
|                                         | 6.4 mm                                             |
| Wire colors                             | White-blue, white-orange, white-green, white-brown |
| External sheath, color                  | water blue RAL 5021                                |
| Insulation resistance                   | $\geq 5 \text{ G}\Omega \cdot \text{km}$           |
| Conductor resistance                    | $\leq 150 \text{ m}\Omega/\text{m}$                |
| Transmission characteristics (category) | CAT6 <sub>A</sub>                                  |
| Working capacitance                     | 42 pF                                              |
| Wave impedance                          | 100 $\Omega \pm 5\%$ (At 100 MHz)                  |
| Signal speed                            | 0.72 c                                             |
| Signal runtime                          | 46 ns/m                                            |

|                                               |                                    |
|-----------------------------------------------|------------------------------------|
| Shield attenuation                            | 60 dB (Up to 1000 MHz)             |
| Interference suppression                      | 90 dB (Up to 1000 MHz)             |
| Nominal voltage, conductor                    | 125 V                              |
| Test voltage, conductor                       | 1000 V                             |
| Twisted pairs                                 | 2 cores to the pair                |
| Type of pair shielding                        | Aluminum-lined polyester foil      |
| Overall twist                                 | 2 cores with 2 fillers to the core |
| Shielding                                     | Tinned copper braided shield       |
| Optical shield covering                       | 65 %                               |
| Outer sheath, material                        | PUR                                |
| Material conductor insulation                 | Cell PE                            |
| Conductor material                            | Bare Cu litz wires                 |
| Cable weight                                  | 44 kg/km                           |
| Smallest bending radius, fixed installation   | min. 32 mm                         |
| Smallest bending radius, movable installation | min. 32 mm                         |

#### Certificates / Approvals

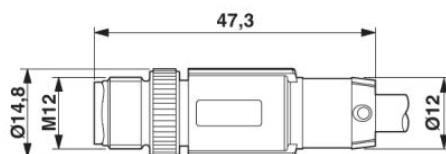


Certification

CUL Listed, UL Listed

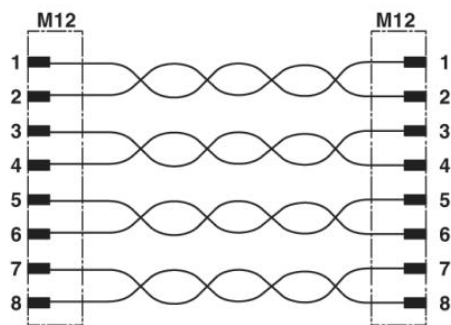
#### Diagrams/Drawings

Dimensioned drawing



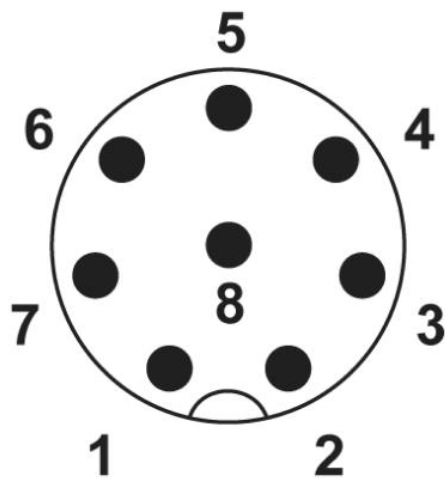
M12 x 1 male connector, straight, shielded

#### Circuit diagram

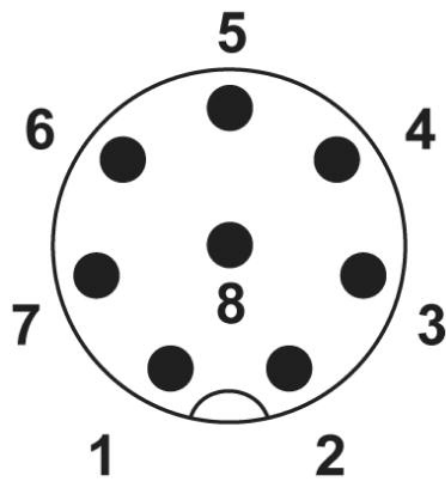


#### Contact assignment of the M12 plugs

#### Schematic diagram



Pin assignment M12 plug, 8-pos., view  
plug side



Pin assignment M12 plug, 8-pos., view  
plug side

**Address**

PHOENIX CONTACT Deutschland GmbH  
Flachsmarktstr. 8  
32825 Blomberg, Germany  
Phone +49 5235 3 12000  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.de>



© 2011 Phoenix Contact  
Technical modifications reserved;