

# SAC-8P-M12MS/ 2,0-940/M12MS

Order No.: 1543184



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: 2 m

Ethernet

## Commercial data

|                          |                                                                                                       |
|--------------------------|-------------------------------------------------------------------------------------------------------|
| EAN                      | <br>4 046356 097345 |
| Pack                     | 1                                                                                                     |
| Customs tariff           | 85444290                                                                                              |
| Catalog page information | Page 183 (PC-2007)                                                                                    |

## Product notes

WEEE/RoHS-compliant since:  
2006-04-24



## Technical data

### General data

|                       |                            |
|-----------------------|----------------------------|
| Rated current at 40°C | 2 A                        |
| Rated voltage         | 30 V                       |
| Number of positions   | 8                          |
| Volume resistance     | $\leq 5 \text{ m}\Omega$   |
| Insulation resistance | $\geq 100 \text{ M}\Omega$ |
| Length of cable       | 2 m                        |

|                                         |                                                      |
|-----------------------------------------|------------------------------------------------------|
| Ambient temperature (operation)         | -25 °C ... 90 °C (Male connector / female connector) |
| <b>General characteristics</b>          |                                                      |
| Coding                                  | A - standard                                         |
| Surge voltage category                  | II                                                   |
| Pollution degree                        | 3                                                    |
| Degree of protection                    | IP65/IP67/IP69K                                      |
| Insertion/withdrawal cycles             | ≥ 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                                                   |
| <b>Conductor data</b>                   |                                                      |
| 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                   | ≥ 5 GΩ*km                                            |
| Conductor resistance                    | ≤ 150 mΩ/m                                           |
| Transmission characteristics (category) | CAT6 <sub>A</sub>                                    |
| Working capacitance                     | 42 pF                                                |
| Wave impedance                          | 100 Ω ±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

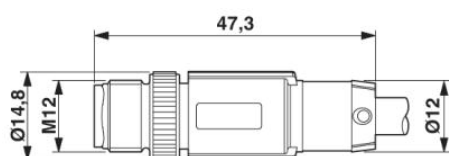


Certification

CUL Listed, UL Listed

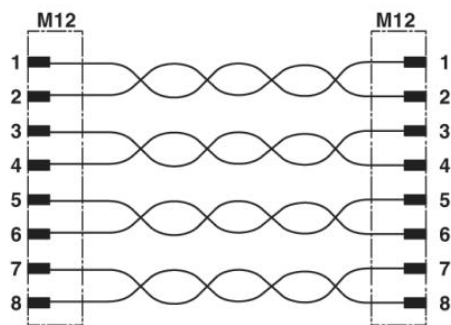
#### Drawings

Dimensioned drawing



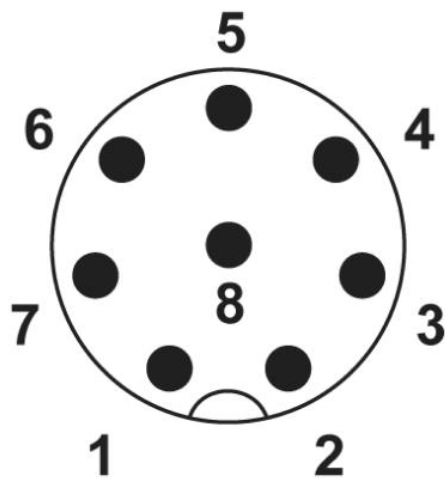
M12 x 1 male connector, straight, shielded

Circuit diagram

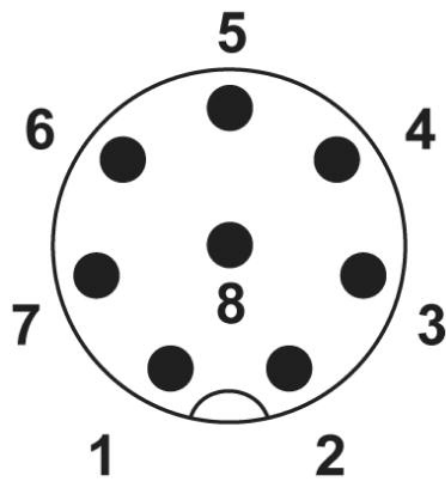


Contact assignment of the M12 plugs

Schematic diagram



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



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