

Bus system cable - SAC-4P-M12MSD/ 5,0-933 - 1524310

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Bus system cable, PROFINET CAT5 (100 Mbps), 4-position, PVC, green RAL 6018, shielded, Plug straight M12, D-coded, on free cable end, Cable length: 5 m



Key Commercial Data

| | |
|--------------------------------------|----------|
| Packing unit | 1 pc |
| Weight per Piece (excluding packing) | 380.0 g |
| Custom tariff number | 85444290 |
| Country of origin | Poland |

Technical data

Dimensions

| | |
|--|-------|
| Length of cable | 5 m |
| Stripping length of the free conductor end | 50 mm |

Ambient conditions

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

General

| | |
|-----------------------|--|
| Note | This product corresponds to the PROFINET Cabling and Interconnection Technology Guideline for PROFINET regulations, version 2.00, order no: 2.252, Chapter 8.2 Connectors for Outside Environment (Balanced cabling) |
| Rated current at 40°C | 4 A |
| Rated voltage | 250 V |
| Number of positions | 4 |
| Insulation resistance | ≥ 100 MΩ |
| Coding | D - data |

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Technical data

General

| | |
|-----------------------------|-------------------------------------|
| Signal type/category | PROFINET CAT5 (IEC 11801), 100 Mbps |
| Status display | No |
| Overvoltage category | II |
| Degree of pollution | 3 |
| Insertion/withdrawal cycles | ≥ 100 |

Material

| | |
|--|---|
| Flammability rating according to UL 94 | V0 |
| Contact material | CuSn |
| Contact surface material | Ni/Au |
| Contact carrier material | PA 66 |
| Material of grip body | TPU, hardly inflammable, self-extinguishing |
| Material, knurls | Zinc die-cast, nickel-plated |

Standards and Regulations

| | |
|--|----|
| Flammability rating according to UL 94 | V0 |
|--|----|

Cable

| | |
|---|--|
| Cable type | PROFINET PVC stranded CAT5 |
| Cable type (abbreviation) | 93B |
| Cable abbreviation | 2YY(ST)CY |
| UL AWM style | 21694 |
| Cable structure | 1x4xAWG22/7; SF/TQ |
| Conductor cross section | 4x 0.34 mm ² |
| AWG signal line | 22 |
| Conductor structure signal line | 7x 0.25 mm |
| Core diameter including insulation | 1.55 mm |
| Wire colors | White, yellow, blue, orange |
| Overall twist | Star quad |
| Shielding | Aluminum-coated foil, tinned copper braided shield |
| Optical shield covering | 85 % |
| External sheath, color | green RAL 6018 |
| Outer sheath thickness | approx. 0.9 mm |
| External cable diameter D | 6.5 mm ±0.2 mm |
| Minimum bending radius, fixed installation | 3 x D |
| Minimum bending radius, flexible installation | 7 x D |
| Cable weight | 67 kg/km |
| Outer sheath, material | PVC |
| Material, inner sheath | PVC |

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Technical data

Cable

| | |
|---------------------------------|---|
| Material conductor insulation | PE |
| Conductor material | Tin-plated Cu litz wires |
| Insulation resistance | $\geq 500 \text{ M}\Omega \cdot \text{km}$ |
| Loop resistance | $\leq 120 \text{ }\Omega$ (per kilometer) |
| Wave impedance | $100 \text{ }\Omega \pm 15 \text{ }\Omega$ (at 100 MHz) |
| Signal speed | 0.66 c |
| Signal runtime | 5.3 ns/m |
| Coupling resistance | $\leq 20.00 \text{ m}\Omega/\text{m}$ (At 10 MHz) |
| Nominal voltage, cable | 600 V |
| Test voltage Core/Core | 2000 V (50 Hz, 1 min.) |
| Test voltage Core/Shield | 2000 V (50 Hz, 1 min.) |
| Flame resistance | According to UL 1685 (CSA FT 4) |
| Resistance to oil | Resistant to oil to a limited extent |
| Other resistance | UV resistant According to UL 1581, Section 1200 |
| Ambient temperature (operation) | -40 °C ... 70 °C (cable, fixed installation) |
| | -40 °C ... 70 °C (cable, flexible 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 2.0 | EC000830 |
| ETIM 3.0 | EC001855 |
| ETIM 4.0 | EC001855 |
| ETIM 5.0 | EC001855 |

UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 31251501 |
| UNSPSC 7.0901 | 31251501 |

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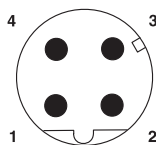
Classifications

UNSPSC

| | |
|--------------|----------|
| UNSPSC 11 | 31251501 |
| UNSPSC 12.01 | 31251501 |
| UNSPSC 13.2 | 31251501 |

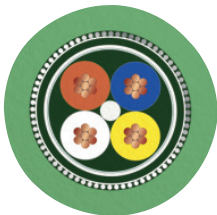
Drawings

Schematic diagram



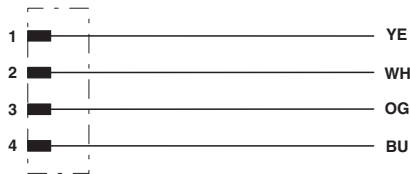
Pin assignment M12 male connector, 4-pos., D-coded, male side

Cable cross section



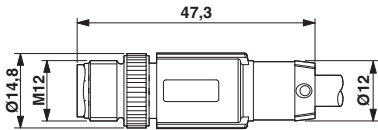
PROFINET PVC stranded CAT5 [93B]

Circuit diagram



Contact assignment of the M12 connector

Dimensional drawing



Plug, M12 x 1, straight, shielded

Mouser Electronics

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