

Network cable - VS-M8MS-M8MS/93B-0,5 - 1402448

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Assembled ETHERNET cable, type B, shielded, star quad, AWG 22 stranded (7-wire), RAL 6018 (yellow-green), M8 Ethernet plug to M8 Ethernet plug, length: 0.5 m, suitable for PROFINET and EtherCAT



Key commercial data

| | |
|----------------------|----------|
| Packing unit | 1 pc |
| Custom tariff number | 85444210 |
| Country of origin | Germany |

Technical data

Dimensions

| | |
|-----------------|-------|
| Length of cable | 0.5 m |
|-----------------|-------|

Ambient conditions

| | |
|----------------------|------|
| Degree of protection | IP65 |
| | IP67 |

General data

| | |
|------------------------|------------------------------|
| Rated current at 40°C | 3 A |
| Rated voltage | 60 V |
| Number of positions | 4 |
| Standards/regulations | M8 connector IEC 61076-2-104 |
| Surge voltage category | II |
| Pollution degree | 3 |

Characteristics head 1

| | |
|------------------------------------------|-------------------------|
| Head type | Plug Straight M8 / IP67 |
| No. of positions (pin connector pattern) | 4 (4) |
| Color | black |

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Technical data

Characteristics head 1

| | |
|---------------------------------|----------------------------------------------------|
| Material (component) | CuSn (Contact) |
| | Ni/Au (Contact surface) |
| | TPU GF (Contact carriers) |
| | TPU, hardly inflammable, self-extinguishing (Grip) |
| | CuZn (nickel-plated) (Screw connection) |
| Shielded | Yes |
| Contact resistance | ≤ 5 mΩ |
| Insulation resistance | ≥ 100 MΩ |
| Insertion/withdrawal cycles | ≥ 100 |
| Torque | 0.2 Nm |
| Ambient temperature (operation) | -25 °C ... 90 °C |

Characteristics head 2

| | |
|------------------------------------------|----------------------------------------------------|
| Head type | Plug Straight M8 / IP67 |
| No. of positions (pin connector pattern) | 4 (4) |
| Color | black |
| Material (component) | CuSn (Contact) |
| | Ni/Au (Contact surface) |
| | CuZn (nickel-plated) (Screw connection) |
| | TPU GF (Contact carriers) |
| | TPU, hardly inflammable, self-extinguishing (Grip) |
| Shielded | Yes |
| Contact resistance | ≤ 5 mΩ |
| Insulation resistance | ≥ 100 MΩ |
| Insertion/withdrawal cycles | ≥ 100 |
| Torque | 0.2 Nm |
| Ambient temperature (operation) | -25 °C ... 90 °C |

Cable

| | |
|---------------------------------|------------------------------------------|
| Cable type | PROFINET PVC stranded CAT5e |
| Cable type (abbreviation) | 93B |
| UL AWM style | 21694 |
| Signal type/category | PROFINET CAT5 (IEC 11801:2002), 100 Mbps |
| | PROFINET CAT5e (TIA 568B:2001), 100 bps |
| 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 |

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Technical data

Cable

| | |
|-----------------------------------------------|----------------------------------------------------|
| Core diameter including insulation | approx. 1.5 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 |
| Torsion force | ± 180 °/m (30,000 torsion cycles) |
| Cable weight | 67 kg/km |
| Outer sheath, material | PVC |
| Material, inner sheath | PVC |
| Material conductor insulation | PE |
| Conductor material | Tin-plated Cu litz wires |
| Insulation resistance | ≥ 500 MΩ*km |
| Loop resistance | ≤ 120 Ω (per kilometer) |
| Working capacitance | 52 pF |
| Wave impedance | 100 Ω ±15 Ω (at 100 MHz) |
| Signal runtime | 5.3 ns/m |
| Coupling resistance | ≤ 20.00 mΩ/m |
| 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) |
| Ambient temperature (installation) | -20 °C ... 60 °C |
| Ambient temperature (storage/transport) | -50 °C ... 70 °C |

Classifications

eCl@ss

| | |
|------------|----------|
| eCl@ss 4.0 | 27060306 |
|------------|----------|

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Classifications

eCl@ss

| | |
|------------|----------|
| eCl@ss 4.1 | 27060306 |
| eCl@ss 5.0 | 27061801 |
| eCl@ss 5.1 | 27060307 |
| eCl@ss 6.0 | 27060390 |
| eCl@ss 7.0 | 27060390 |
| eCl@ss 8.0 | 27060390 |

ETIM

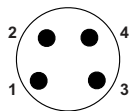
| | |
|----------|----------|
| ETIM 4.0 | EC002599 |
| ETIM 5.0 | EC000830 |

UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 26121609 |
| UNSPSC 7.0901 | 26121609 |
| UNSPSC 11 | 26121609 |
| UNSPSC 12.01 | 26121609 |
| UNSPSC 13.2 | 26121609 |

Drawings

Schematic diagram



Pin assignment M8 plug, 4-pos., view male side

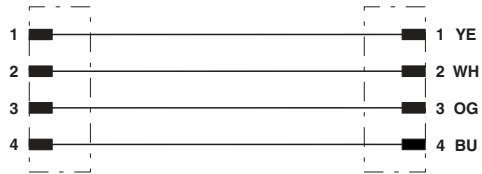
Cable cross section



PROFINET PVC stranded CAT5e [93B]

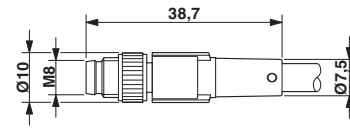
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Circuit diagram



Contact assignment of M8 plugs

Dimensioned drawing



M8 x 1 male plug, straight version