

Network cable - VS-M12MS-IP20-93C-LI/2,0 - 1416188

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Assembled PROFINET cable, CAT5e, shielded, star quad, AWG 22 flexible cable conduit capable (7-wire), RAL 6018 (yellow-green), M12 plug on RJ45 plug/IP20, line, length 2 m



Key Commercial Data

| | |
|----------------------|----------|
| Packing unit | 1 STK |
| Custom tariff number | 85444210 |
| Country of origin | Poland |

Technical data

Environmental Product Compliance

| | |
|------------|--|
| China RoHS | No hazardous substances above threshold values |
|------------|--|

Dimensions

| | |
|-----------------|-----|
| Length of cable | 2 m |
|-----------------|-----|

General data

| | |
|----------------------|-------------------------------------|
| Number of positions | 4 |
| Signal type/category | PROFINET CAT5 (IEC 11801), 100 Mbps |
| Overvoltage category | I |
| Degree of pollution | 3 |

Characteristics head 1

| | |
|-----------|-------------------|
| Head type | Plug straight M12 |
|-----------|-------------------|

Characteristics head 2

| | |
|-----------|--------------------|
| Head type | Plug straight RJ45 |
|-----------|--------------------|

Standards and Regulations

Network cable - VS-M12MS-IP20-93C-LI/2,0 - 1416188

Technical data

Standards and Regulations

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

Cable

| | |
|---|--|
| Cable type | PROFINET drag chain CAT5 |
| Cable type (abbreviation) | 93C |
| Signal type/category | PROFINET CAT5 (IEC 11801), 100 Mbps |
| 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 | 1.5 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 | 5 x D |
| Minimum bending radius, flexible installation | 7.5 x D |
| Number of bending cycles | 3000000 |
| Bending radius | 100 mm |
| Traversing path | 10 m |
| Traversing rate | 4 m/s |
| Acceleration | 4 m/s ² |
| Torsion force | ± 30 °/m |
| Tensile strength short-term/long-term | ≤ 150 N |
| Cable weight | 61 kg/km |
| Outer sheath, material | PUR |
| Material, inner sheath | FRNC |
| Material conductor insulation | PE |
| Conductor material | Tin-plated Cu litz wires |
| Insulation resistance | ≥ 500 MΩ*km |
| Loop resistance | ≤ 120 Ω (per km) |
| Wave impedance | 100 Ω ±15 Ω (at 1 ... 100 MHz) |
| Signal speed | 0.66 c |
| Signal runtime | 5.3 ns/m |
| Coupling resistance | ≤ 20.00 mΩ/m (At 10 MHz) |

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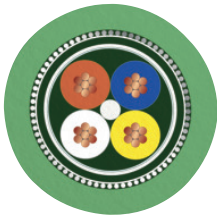
Technical data

Cable

| | |
|---|---|
| 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 IEC 60332-1-2 |
| Resistance to oil | in accordance with DIN EN 60811-2-1 |
| Other resistance | UV resistant |
| 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 |

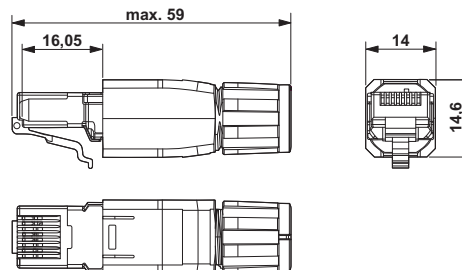
Drawings

Cable cross section



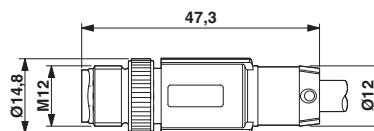
PROFINET drag chain CAT5 [93C]

Dimensional drawing



RJ45 connector, IP20

Dimensional drawing



Plug, M12 x 1, straight, shielded

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Classifications

eCl@ss

| | |
|------------|----------|
| eCl@ss 4.0 | 272607xx |
| eCl@ss 4.1 | 27260701 |
| eCl@ss 5.0 | 27260701 |
| eCl@ss 5.1 | 27060307 |
| eCl@ss 6.0 | 27061801 |
| eCl@ss 7.0 | 27061801 |
| eCl@ss 8.0 | 27060308 |
| eCl@ss 9.0 | 27060308 |

ETIM

| | |
|----------|----------|
| ETIM 3.0 | EC000830 |
| ETIM 4.0 | EC002599 |
| ETIM 5.0 | EC002599 |

UNSPSC

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|---------------|----------|
| UNSPSC 6.01 | 31261501 |
| UNSPSC 7.0901 | 31261501 |
| UNSPSC 11 | 31261501 |
| UNSPSC 12.01 | 31261501 |
| UNSPSC 13.2 | 31261501 |