

Network cable - NBC-MSX/10,0-94S SCO RAIL - 1415601

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Network cable, Ethernet CAT6_A (10 Gbps), 8-position, Elastomer electron beam cross-linked halogen-free, black, shielded, Plug straight M12 SPEEDCON / IP67, Coding: X, on free cable end, Cable length: 10 m

Product Features

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ Safety thanks to flame retardancy: PA 6.6 grip and RADOX® cable meet the highest requirements
- ✓ Securely locked by special vibration brake
- ✓ Resistant to temperature influences – tested for an extended temperature range and for resistance to temperature shocks
- ✓ Reliable signal transmission – 360° shielding in environments with electromagnetic interference



Ethernet



Key Commercial Data

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

Technical data

Dimensions

| | |
|-----------------|------|
| Length of cable | 10 m |
|-----------------|------|

Ambient conditions

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

General data

| | |
|-----------------------|-------|
| Rated current at 40°C | 0.5 A |
| Rated voltage | 48 V |

Network cable - NBC-MSX/10,0-94S SCO RAIL - 1415601

Technical data

General data

| | |
|-----------------------|--------------------------------------|
| Number of positions | 8 |
| Signal type/category | Ethernet CAT6 _A , 10 Gbps |
| Standards/regulations | M12 connector IEC 61076-2-109 |
| | Shock, vibration EN 50155 |

Characteristics head 1

| | |
|--|---|
| Head type | Plug straight M12 SPEEDCON / IP67 |
| No. of positions (pin connector pattern) | 8 |
| Coding | X (Data) |
| Color | black |
| Material (component) | CuZn (Contact) |
| | Ni/Au (Contact surface) |
| | TPU (Contact carriers) |
| | PA 6.6 (Grip) |
| | Zinc die-cast, nickel-plated (Screw connection) |
| Standards/regulations material | PA 6.6: Fire protection in rail vehicles - requirement sets R22, R23, and R24 acc. to DIN EN 45545-2 (Risk level HL1 - HL3) |
| Insulation resistance | ≥ 100 MΩ |
| Insertion/withdrawal cycles | ≥ 100 |
| Torque | 0.4 Nm |
| Ambient temperature (operation) | -25 °C ... 90 °C |

Characteristics head 2

| | |
|---|----------------|
| Head type | free cable end |
| Stripping length of the sheath (free conductor end) | 0.5 mm |

Cable

| | |
|------------------------------------|--|
| Cable type | Ethernet for rail applications |
| Cable type (abbreviation) | 94S |
| Signal type/category | Ethernet CAT7, 10 Gbps |
| Cable structure | 4x2xAWG26/7; S/FTP |
| Conductor cross section | 4x 2x 0.14 mm ² |
| AWG signal line | 26 |
| Conductor structure signal line | 7x 0.16 mm |
| Core diameter including insulation | 1.05 mm |
| Wire colors | White-blue, white-orange, white-green, white-brown |
| Twisted pairs | 2 cores to the pair |
| Type of pair shielding | Aluminum-lined polyester foil |
| Overall twist | 4 pairs, twisted |

Network cable - NBC-MSX/10,0-94S SCO RAIL - 1415601

Technical data

Cable

| | |
|--|---|
| Shielding | Tinned copper braided shield |
| External sheath, color | black |
| External cable diameter D | 6.6 mm ±0.2 mm |
| Minimum bending radius, fixed installation | 6 x D |
| Cable weight | 59 kg/km |
| Copper weight | 28 kg/km |
| Outer sheath, material | Elastomer electron beam cross-linked |
| Material conductor insulation | Cell PE |
| Conductor material | Tin-plated Cu litz wires |
| Insulation resistance | ≥ 5 GΩ*km |
| Conductor resistance | ≤ 145 Ω/km |
| Working capacitance | 44 nF (per kilometer) |
| Wave impedance | 100 Ω ±5 Ω (at 100 MHz) |
| Signal speed | 0.78 c |
| Signal runtime | 4.4 ns/m |
| Shield attenuation | 60 dB (Up to 1000 MHz) |
| Interference suppression | 90 dB (at 1000 MHz) |
| Coupling resistance | 5.00 mΩ/m (At 10 MHz) |
| Nominal voltage, cable | 125 V AC (U ₀) |
| Test voltage, cable | 1000 V AC |
| Special properties | Fire protection in rail vehicles as per BS 6853 Internal cable Ia, Ib, II/ external cable Ia, Ib, II |
| | Fire protection in rail vehicles as per DIN 5510-2 Fire protection level 1, 2, 3, 4 |
| | Fire protection in rail vehicles NF F16-101 Internal cable A1, A2, B/external cable A1, A2, B |
| | Fire protection in rail vehicles NF F16-101 Classification C/F1 |
| | Fire protection in rail vehicles NFPA130 |
| | Fire protection in rail vehicles PN-K-02511 |
| | Fire protection in rail vehicles UIC 564-2 Class A |
| | Fire protection in rail vehicles EN 45545-2 |
| Flame resistance | According to EN 60332-1-2 |
| | EN 60332-3-25 |
| Halogen-free | According to EN 50267-2-1 |
| | according to EN 60684-2 |
| Resistance to oil | according to EN 60684-2, 72 h at 100 °C, IRM 902 |
| Other resistance | Resistant to fuel according to EN 60684-2, 72 h at 100 °C, IRM 903 |

Network cable - NBC-MSX/10,0-94S SCO RAIL - 1415601

Technical data

Cable

| | |
|---------------------------------|---|
| | Resistant to ozone according to EN 50306-4, 72 h at 40 °C, procedure B, volume concentration 200×10^{-6} |
| Concentration of fumes | EN 61034-2 |
| Ambient temperature (operation) | -40 °C ... 80 °C (cable, fixed installation) |

Classifications

eCl@ss

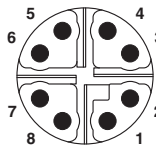
| | |
|------------|----------|
| eCl@ss 5.1 | 27060307 |
| eCl@ss 6.0 | 27060390 |

ETIM

| | |
|----------|----------|
| ETIM 4.0 | EC000237 |
| ETIM 5.0 | EC000237 |

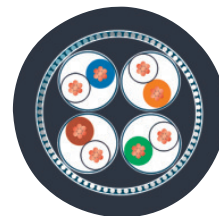
Drawings

Schematic diagram



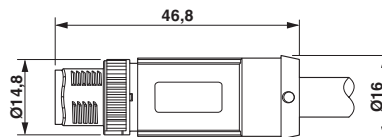
Pin assignment of M12 plug, 8-pos., X-coded, pin side view

Cable cross section



Ethernet for rail applications [94S]

Dimensional drawing



M12 SPEEDCON plug, straight, shielded

单击下面可查看定价，库存，交付和生命周期等信息

[>>Phoenix Contact\(菲尼克斯\)](#)