

PROFINET cable Cat 5, type A, solid

Function

For a PROFINET network in an industrial environment only shielded cabling and connecting elements are permissible. Industry-suitable cables can be exposed to extremely mechanical load requiring a special structure. Plug-and-socket connectors and cables from a well-coordinated system. Only those elements that have proven their compatibility are called PROFINET units.

Wires

- Copper strand: \varnothing 0,64 mm
- PE insulation: \varnothing 1,5 mm
- Wire colours: Yellow, orange, white, blue

Shielding

- Shield braid made of tinned copper wires
- Aluminum foil overlapping

Electrical properties at 20°C

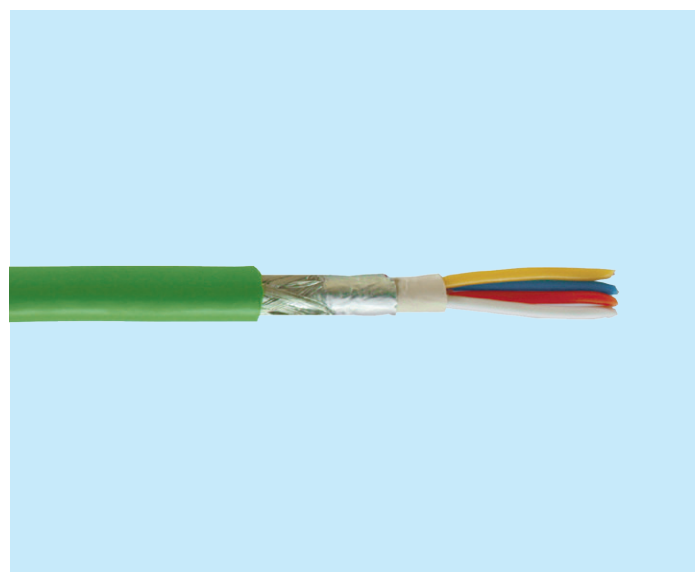
- Loop resistance per length: \leq 115 Ohm/km
- Signal term: \leq 5,3 ns/m
- Insulation resistance: \geq 500 MOhm *km
- Char. impedance (1-100 MHz): 100 \pm 15 Ohm
- Transfer impedance (10 MHz): \leq 10 mOhm/m
- Test voltage (Wire/Wire/Screen rms 50 Hz 1 Min.): 2000 V
- Electrical requirements according to EN 50288-2-1

Mechanical and thermal data

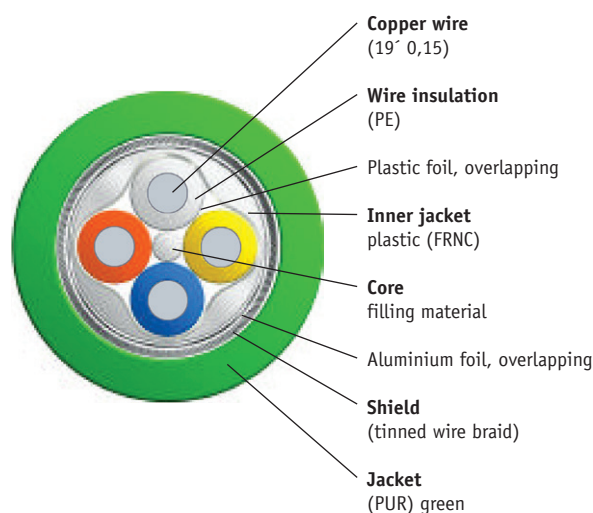
- Diameter
 - Inner conductor: \varnothing 0,64 mm
 - AWG cross section: AWG22
 - Core insulation: \varnothing 1,5 mm
 - Inner sheath of cable: \varnothing 0,9 mm
 - Cable sheath: \varnothing (6,5 \pm 0,2) mm
- Conductor material according to DIN EN 13602 Cu-ETP-A ...
- Shield material according to DIN EN 13602 Cu-ETP-A ...- B
- Insulation material according to DIN EN 50290-2-23 (VDE 0819), table L/MD (HD 624,3)
- Jacket material according to DIN EN 50290-2-22 (VDE 0819), connection type TM52 (HD 624,2)
- Of low flammability according to IEC 60332-1-2; UL 1685 (CSA FT 4)
- UL-File E119100 Vol.1 Sec.12 Site 1; UL-File E352715 Vol.1 Sec. 1 S. 2 confirmed CAT 5E; UL-File E116441 Vol.1 Sec. 6 S. 8; UL-File E306668 Vol.1 Sec. 3 S. 1; UL-Style 21694

General data

- RoHS compliant (directive 2011/65/EG)
- Sunlight resistance according to UL 1581 Sec.1200
- Limited oil resistance
- Tractive force: \leq 150 N
- Temperature range: -40°C bis +75°C
 - Storage: -20°C bis +60°C
 - Transport: -40°C bis +75°C
- Bending radius:
 - Bending radius for repeated usage: 7,5 x \varnothing
 - Bending radius for single usage: 3 x \varnothing
- PVC weight with Phthalat: 30,4 kg/km
- PVC weight with Phthalat: 0,0 kg/km
- Weight: Ca. 66 kg/km



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Engineering drawing

Ordering details

PROFINET cable Cat 5, type A, solid*

Art. No.

114050001

*) length on request