
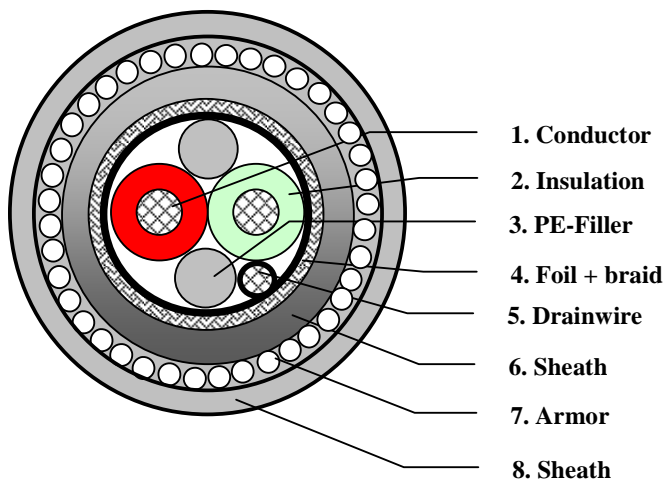


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|  | TECHNICAL DATA SHEET | | code | 70001LS |
| | PROFIBUS ELS CABLE | | version | 1 |
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APPLICATION

Instrumentation and computer cable for Data Transmission applications.

CONSTRUCTION



| | |
|------------------------------|---|
| 1. Conductor | 18 AWG (7x26AWG) tinned copper wire |
| 2. Insulation | |
| Material | Foamed polyethylene |
| Diameter over insulation | 2.50 ± 0.05 mm |
| Nominal insulation thickness | 0.65 mm |
| Colour of insulation | Red and Green |
| 3. PE filler | nom 1.65 mm |
| 4. Foil + Braid | |
| Material | Aluminium / Polyester |
| Thickness | 9 / 23 µm |
| Coverage of braided screen | > 85% |
| 5. Drainwire | 20 AWG (7x28AWG) tinned copper wire (in contact with foil and braid) |
| 6. Sheath | |
| Material | FRNC (UV stabilised) |
| Nominal jacket thickness | 1.15 mm |
| Nominal diameter over jacket | 8.0 mm |
| Colour | Black |
| 7. Armouring | |
| Material | galvanised steel wire 0.9 mm |
| Optical coverage | >95 % |
| 8. Sheath | |
| Material | FRNC (UV stabilised) |
| Colour | Blue |
| Average thickness of sheath | > 1.27 mm |
| Diameter over sheath | 12.8 ± 0.30 mm |

| | | | | |
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REQUIREMENTS AND TEST METHODS

Electrical:

| | | |
|--|---------|---------|
| Max. operating voltage | 300 | V rms |
| Max. capacitance between conductors of a pair @ 1kHz | 80 | nF/km |
| Max. capacitance unbalance cond. to shield @ 1 kHz | 4 | nF/km |
| Maximum conductor DC-resistance @ 20°C | 20.5 | Ω/km |
| Maximum shield DC-resistance @ 20°C | 9.0 | Ω/km |
| Nom. velocity of propagation | 77 | % |
| Impedance @ 31.25 kHz | 100 +/- | 20 Ω |
| Max. attenuation @ 39 kHz | 0.3 | dB/100m |

Mechanical and physical:

| | |
|---|------------------------------------|
| Flame resistance | IEC 332-3C |
| Oil resistance | ASTMD741 |
| Radiation resistance | IEC544 (CERN) |
| Application specification | BS 7655 section 6.1 table 1, LTS 3 |
| Halogen content according to IEC754-1 | zero |
| Corrosivity of fire gasses according to IEC754-2 | |
| Conductivity | ≤ 100 μS/cm |
| pH value | ≥ 3.5 |
| Temperature range installing | -15 to +70 °C |
| Temperature range operating (moving installation) | -15 to +70 °C |
| Temperature range operating (fixed installation) | -45 to +70 °C |
| Temperature range storage | -45 to +70 °C |
| Minimum bending radius /setting | 120 / 80 mm |
| Maximum pulling tension | 50 N |



Belden CDT believes this product to be in compliance with the environmental regulations EU RoHS (Directive 2002/95/EC, 27 January 2003); this is valid for all material produced after the RoHS compliant date for this product.