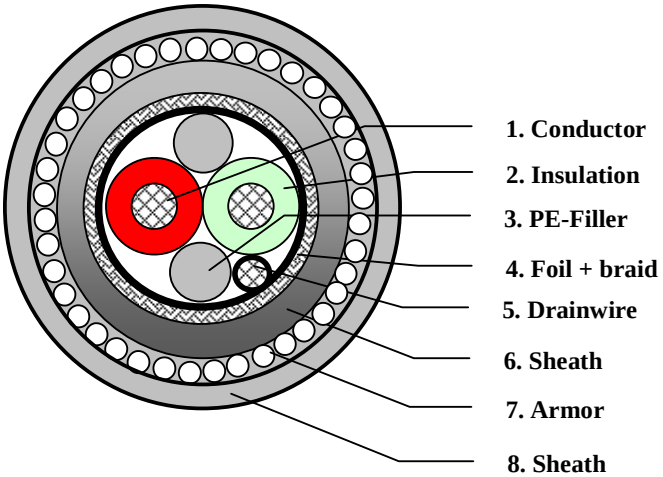
## APPLICATION

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 | Black |
| | Average thickness of sheath | > 1.27 mm |
| | Diameter over sheath | 12.8 ± 0.30 mm |

## 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.