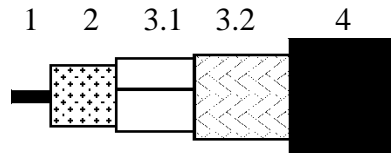


APPLICATION

Low loss HDTV/SDI Digital coax used in critical analog and digital video circuits and high quality applications such as live broadcast in network studios and pre- or post-production facilities. Cable is suitable for indoor and outdoor use.

CONSTRUCTION



| | | |
|-----|-----------------|------------------------------------|
| 1 | Inner conductor | Solid soft annealed copper |
| 2 | Dielectric | Gas injected PE |
| 3.1 | Foil | AL-PET-AL |
| 3.2 | Braid | Annealed tinned copper |
| 4 | Sheath | LSNH/FRNC according EN 50290-2-20. |

REQUIREMENTS AND TEST METHODS

Test methods in accordance with European standard EN 50117-1.

Mechanical characteristics

| | |
|------------------------------------|-------------------------------|
| 1. Inner conductor: | |
| Diameter: | 0.65 mm ± 0.02 mm |
| 2. Dielectric: | |
| Diameter: | 2.90 mm ± 0.15 mm |
| 3. Outer conductor: | |
| Nominal diameter screen: | 3.45 mm |
| Foil overlap: | ≥ 2 mm |
| Coverage braid: | 90 % ± 5 % |
| 4. Sheath: | |
| Diameter: | 4.45 mm ± 0.2 mm |
| Tensile strength: | ≥ 9.0 N/mm ² |
| Elongation at break: | ≥ 125 % |
| LOI | > 35% |
| 5. Cable: | |
| Storage/operating temperature: | -30°C to +70°C |
| Minimum installation temperature: | -5 °C |
| Resistance to flame propagation: | IEC 60332-1-2 (CEI20-35/1) |
| Corrosivity of fire gasses | IEC 60754-2 (CEI 20-37/2) |
| Conductivity | ≤ 100 μS/cm |
| pH value | ≥ 3,5 |
| Halogen content | IEC 60754-1 (CEI 20-37/1) |
| Smoke emission | EN 61034-2:2005 (CEI 20-37/3) |
| Maximum tensile strength of cable: | 160 N |
| Minimum static bend radius: | 45 mm |

Electrical characteristics

| | |
|--|-------------------------|
| Mean characteristic impedance: | 75 ± 3 Ω |
| Nominal DC resistance inner conductor: | 55 Ω/km |
| Nominal DC resistance outer conductor: | 17 Ω/km |
| Capacitance: | 53 pF/m ± 2 pF/m |
| Voltage rating: | 50 V a.c. or 75 V d.c. |
| Velocity ratio: | 0.84 ± 0.02 |
| Nominal delay: | 4.0 ns/m |
| Insulation resistance: | > 10 ⁴ MΩ.km |
| Return loss at 5-1600 MHz: | ≥ 23 dB |
| 1600-4500 MHz: | ≥ 21 dB |
| Transfer Impedance 5-30 MHz: | ≤ 15 mOhm/m |
| Screening attenuation: | |
| 30-1000 MHz: | ≥ 85 dB |
| 1000-2000 MHz: | ≥ 85 dB |
| 2000-3000 MHz: | ≥ 85 dB |
| 3000-4500 MHz: | ≥ 80 dB |

Nominal Attenuation:

$0.9 \cdot \sqrt{\text{freq}} + 0.002 \cdot \text{freq} + 0.8$ [dB/100m], with freq = frequency in [MHz]

| Attenuation at | Nominal | Attenuation at | Nominal |
|----------------|--------------|----------------|--------------|
| 1 MHz: | 1.7 dB/100m | 180 MHz: | 13.2 dB/100m |
| 3.6 MHz: | 2.5 dB/100m | 270 MHz: | 16.1 dB/100m |
| 5 MHz: | 2.8 dB/100m | 360 MHz: | 18.6 dB/100m |
| 6 MHz: | 3.0 dB/100m | 540 MHz: | 22.8 dB/100m |
| 7 MHz: | 3.2 dB/100m | 720 MHz: | 26.4 dB/100m |
| 10 MHz: | 3.7 dB/100m | 750 MHz: | 26.9 dB/100m |
| 12 MHz: | 4.0 dB/100m | 1000 MHz: | 31.3 dB/100m |
| 25 MHz: | 5.4 dB/100m | 1500 MHz: | 38.7 dB/100m |
| 67.5 MHz: | 8.3 dB/100m | 2000 MHz: | 45.0 dB/100m |
| 71.5 MHz: | 8.6 dB/100m | 2250 MHz: | 48.0 dB/100m |
| 88.5 MHz: | 9.5 dB/100m | 2500 MHz: | 50.8 dB/100m |
| 100 MHz: | 10 dB/100m | 3000 MHz: | 56.1 dB/100m |
| 135 MHz: | 11.5 dB/100m | 4000 MHz: | 65.7 dB/100m |
| 143 MHz: | 11.9 dB/100m | 4500 MHz: | 70.2 dB/100m |



Belden declares 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.