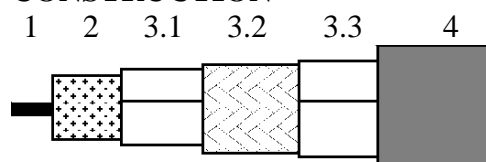
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APPLICATION

Low loss HDTV/SDI Digital coax used in analog and digital video circuits and high quality applications. The outer conductor is designed for high screening attenuation and low transfer impedance. The 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 bonded to dielectric
3.2	Braid	Annealed tinned copper
3.3	Foil	AL-PET (L-folded) bonded to sheath
4	Sheath	LSNH/FRNC

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 (both):	≥ 2 mm
Coverage braid:	80 % ± 5 %
4. Sheath:	
Diameter:	4.45 mm ± 0.2 mm
Tensile strength:	≥ 9.0 N/mm ²
Elongation at break:	≥ 125 %
Corrosivity	To meet EN 50290-2-27
5. Cable:	
Storage/operating temperature:	-30°C to +70°C
Minimum installation temperature:	-5 °C
Vertical flame spread:	IEC 60332-3-24: Cat C (CEI 20-22-3)
Halogen content	IEC 60754-1 (CEI 20-37/1)
Corrosivity of fire gasses	IEC 60754-2 (CEI 20-37/2)
Conductivity	≤ 100 μS/cm
pH value	≥ 3,5
Smoke emission	EN 61034-2:2005 (CEI 20-37/3)

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Maximum tensile strength of cable: 160 N
Minimum static bend radius: 45 mm

Electrical characteristics

Mean characteristic impedance: $75 \pm 3 \Omega$
Nominal DC resistance inner conductor: $55 \Omega/\text{km}$
Nominal DC resistance outer conductor: $17 \Omega/\text{km}$
Capacitance: $53 \text{ pF/m} \pm 2 \text{ pF/m}$
Velocity ratio: 0.84 ± 0.02
Nominal delay: 4.0 ns/m
Insulation resistance: $> 10^4 \text{ M}\Omega.\text{km}$
Return loss at 5-1600 MHz: $\geq 23 \text{ dB}$
1600-4500 MHz: $\geq 21 \text{ dB}$
Screening attenuation at
30-1000 MHz: $\geq 85 \text{ dB}$
1000-2000 MHz: $\geq 75 \text{ dB}$
2000-3000 MHz: $\geq 65 \text{ dB}$
3000-4500 MHz: $\geq 65 \text{ dB}$
Transfer impedance $\leq 5 \text{ m}\Omega/\text{m}$

Nominal Attenuation:
 $0.9 \cdot \sqrt{\text{freq}} + 0.002 \cdot \text{freq} + 0.8 \text{ [dB/100m]}$, 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.

