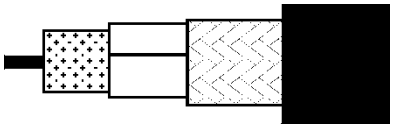
APPLICATION

Coaxial cables used for Radio-frequency designed according the International Standard IEC 1196.

CONSTRUCTION

1 2 3.1 3.2 4



1	Inner conductor	19x0.28 mm Stranded 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 the European Standard HD 50290_2_27.

REQUIREMENTS AND TEST METHODS

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

Mechanical characteristics

1. Inner conductor.	
Diameter:	1.41 mm ± 0.03 mm
2. Dielectric:	
Diameter:	3.9 mm ± 0.15 mm
Centricity:	≥ 0.85
Adhesion:	5 – 50 N at 25 mm
3. Outer conductor:	
Diameter screen:	4.5 mm ± 0.25 mm
Foil overlap:	≥ 2 mm
Coverage braid:	80 % ± 5 %
4. Sheath:	
Diameter:	5.4 mm ± 0.2 mm
Tensile strength:	≥ 9.0 N/mm^2
Elongation at break:	≥ 125 %
Corrosivity:	To meet European Standard HD60754-2
LOI:	> 35 %
Resistance to flame propagation:	To meet International Standard IEC 60332-1
5. Cable:	
Crush resistance of cable:	< 1% (load of 700N)
Storage/operating temperature:	-30°C to +70°C
Minimum installation temperature:	-5 °C
Minimum static bend radius:	60 mm

Electrical characteristics

Mean characteristic impedance:	50 ± 3 Ω
Regularity of impedance:	> 40 dB
DC loop resistance:	≤ 32.4 Ω/km
DC resistance inner conductor:	≤ 15.4 Ω/km
DC resistance outer conductor:	≤ 17.0 Ω/km
Capacitance:	84 pF/m ± 3 pF/m
Velocity ratio:	0.80 ± 0.02
Insulation resistance:	> 10^4 MΩ.km
Voltage test of dielectric:	2 kVdc
Screening efficiency 30-1000 MHz:	≥ 85 dB
Return loss at 5-30 MHz:	≥ 20 dB*
30-470 MHz:	≥ 20 dB*
470-1000 MHz:	≥ 18 dB*
1000-2000 MHz:	≥ 16 dB*
2000-3000 MHz:	≥ 15 dB*

* Max. 3 peak values 4 dB lower than specified.

Attenuation at	Nominal	Attenuation at	Nominal
5 MHz:	2.5 dB/100m	862 MHz:	27.3 dB/100m
50 MHz:	6.9 dB/100m	1000 MHz:	29.6 dB/100m
100 MHz:	9.1 dB/100m	1350 MHz:	34.9 dB/100m
230 MHz:	13.4 dB/100m	1750 MHz:	40.3 dB/100m
400 MHz:	18.0 dB/100m	2150 MHz:	46.0 dB/100m
800 MHz:	26.1 dB/100m	2400 MHz:	49.1 dB/100m

Maximum attenuation is 10% higher.

REVISIONS

#	Description	Date	Initials

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.