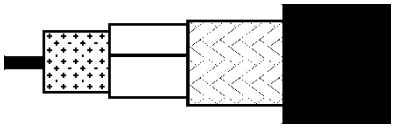
APPLICATION

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

CONSTRUCTION

1 2 3.1 3.2 4



1	Inner conductor	Solid soft annealed copper
2	Dielectric	Gas injected PE
3.1	Foil	Copper polyester
3.2	Braid	Annealed copper
4	Sheath	PVC according the European Standard HD 624.

REQUIREMENTS AND TEST METHODS

Test methods in accordance with International Standard IEC 1196.

Mechanical characteristics

1. Inner conductor.	
Diameter:	2.62 mm ± 0.03 mm
2. Dielectric:	
Diameter:	7.15 mm ± 0.2 mm
Centricity:	≥ 0.85
Adhesion:	41 – 410 N at 50 mm
3. Outer conductor:	
Diameter screen:	7.8 mm ± 0.25 mm
Foil overlap:	≥ 2 mm
Coverage braid:	49 % ± 5 %
4. Sheath:	
Diameter:	10.3 mm ± 0.3 mm
Tensile strength:	≥ 12.5 N/mm^2
Elongation at break:	≥ 150 %
5. Cable:	
Crush resistance of cable:	< 1% (load of 700N)
Storage/operating temperature:	-40°C to +70°C
Minimum installation temperature:	-5 °C
Minimum static bend radius:	100 mm

Electrical characteristics

Mean characteristic impedance:	50 ± 2 Ω
Regularity of impedance:	> 46 dB
DC loop resistance:	≤ 15.5 Ω/km
DC resistance inner conductor:	≤ 3.5 Ω/km
DC resistance outer conductor:	≤ 12.0 Ω/km
Capacitance:	80 pF/m ± 3 pF/m
Velocity ratio:	0.83 ± 0.02
Insulation resistance:	> 10^4 MΩ.km
Voltage test of dielectric:	3 kVdc
Screening efficiency 30-1000 MHz:	≥ 90 dB

Attenuation at	Nominal	Attenuation at	Nominal
5 MHz:	0.8 dB/100m	1000 MHz:	14.0 dB/100m
50 MHz:	2.8 dB/100m	1350 MHz:	16.7 dB/100m
100 MHz:	4.0 dB/100m	1750 MHz:	19.5 dB/100m
200 MHz:	5.7 dB/100m	2150 MHz:	22.1 dB/100m
400 MHz:	8.4 dB/100m	2400 MHz:	23.6 dB/100m
600 MHz:	10.5 dB/100m	5000 MHz:	37.4 dB/100m
800 MHz:	12.3 dB/100m	10000 MHz:	59.3 dB/100m

Maximum attenuation is 10% higher.

REVISIONS

#	Description	Date	Initials
4	Changed cu foil into CuPET foil, lowered temperature to -40C	20-10-2008	PBo

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.