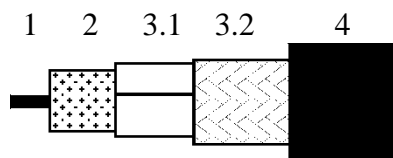


TECHNICAL DATA SHEET	Code	1855ENH
	version	8
Precesion Video Cable	date	2010-09-27
COAX FRNC HDTV	page	1/2

APPLICATION

Low loss HDTV/SDI Digital coax used in analog and digital video circuits and high quality applications. 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 the European Standard HD 624.

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 %
Corrosivity	To meet European Standard HD602
LOI	> 35%
5. Cable:	
Storage/operating temperature:	-30°C to +70°C
Minimum installation temperature:	-5 °C
Resistance to flame propagation:	To meet International Standard IEC 60332-1
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
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:

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

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.