

TECHNICAL DATA SHEET	Code	1694ANH
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Precision Video Cable	date	2017-01-25
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APPLICATION

Low loss HDTV/SDI Digital coax used in analog and digital video circuits and high quality applications. The cable is UV-resistant and suitable for indoor and outdoor use.

CONSTRUCTION

1 2 3.1 3.2 4

1 Inner conductor Solid soft annealed copper

2 Dielectric Gas injected PE3.1 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: $1.02 \text{ mm} \pm 0.03 \text{ mm}$

2. Dielectric:

Diameter: $4.57 \text{ mm} \pm 0.15 \text{ mm}$

3. Outer conductor:

Nominal diameter screen: 5.4 mm Foil overlap: \geq 2 mm Coverage braid: 95 % \pm 5 %

4. Sheath:

Diameter: $6.96 \text{ mm} \pm 0.2 \text{ mm}$ Tensile strength: $\geq 9.0 \text{ N/mm}^2$ Elongation at break: $\geq 125 \text{ %}$

Corrosivity To meet European Standard HD602

LOI > 35%

5. Cable:

Storage/operating temperature: -30°C to $+70^{\circ}\text{C}$

Minimum installation temperature: -5 °C

Vertical flame spread: IEC 60332-3-24: Cat C (CEI 20-22-3)

Halogen free according
Halogen content
IEC 62821-1 (2014)
IEC 60754-1 (CEI 20-37/1)
Corrosivity of fire gasses
IEC 60754-2 (CEI 20-37/2)

Conductivity $\leq 2.5 \,\mu\text{S/mm}$

pH value ≥ 4.3

Smoke emission EN 61034-2:2005 (CEI 20-37/3)

Reaction to fire according EN50575 B2ca-s1,d1,a1



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Maximum tensile strength of cable: 300 N Minimum static bend radius: 70 mm

Electrical characteristics

Mean characteristic impedance: $75 \pm 3 \Omega$ Nominal DC resistance inner conductor: $21 \Omega/\text{km}$ Nominal DC resistance outer conductor: $9.2 \Omega/\text{km}$

Capacitance: 53 pF/m \pm 2 pF/m

 $\begin{tabular}{lll} Velocity ratio: & 0.82 \pm 0.02 \\ Nominal delay: & 4.07 ns/m \\ Insulation resistance: & > <math>10^4 \, M\Omega.km \,$

Voltage test of dielectric: 2 kVdcReturn loss at 5-1600 MHz: $\geq 23 \text{ dB}^*$ 1600-4500 MHz: $\geq 21 \text{ dB}^*$

4500-6000 MHz: $\geq 21 \text{ dB}^*$

* Max. 1 peak value 4 dB lower than specified.

Attenuation at	Nominal	Attenuation at	Nominal
1 MHz:	0.79 dB/100m	180 MHz:	8.43 dB/100m
3.6 MHz:	1.44 dB/100m	270 MHz:	10.40 dB/100m
5 MHz:	1.71 dB/100m	360 MHz:	12.11 dB/100m
6 MHz:	1.87 dB/100m	540 MHz:	14.77 dB/100m
7 MHz:	2.00 dB/100m	720 MHz:	17.39 dB/100m
10 MHz:	2.33 dB/100m	750 MHz:	17.72 dB/100m
12 MHz:	2.56 dB/100m	1000 MHz:	20.67 dB/100m
25 MHz:	3.54 dB/100m	1500 MHz:	25.59 dB/100m
67.5 MHz	5.41 dB/100m	2000 MHz:	30.19 dB/100m
71.5 MHz:	5.55 dB/100m	2250 MHz:	32.15 dB/100m
88.5 MHz:	6.10 dB/100m	3000 MHz:	37.73 dB/100m
100 MHz:	6.40 dB/100m	4500 MHz:	47.58 dB/100m
135 MHz:	7.35 dB/100m	6000 MHz:	58.07 dB/100m
143 MHz:	7.55 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.