

TECHNICAL DATA SHEET	Code	1694ANH
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Precision Video Cable	date	2013-02-07
COAX RG6/U FRNC HDTV	page	1/2

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 content IEC 60754-1 (CEI 20-37/1) Corrosivity of fire gasses IEC 60754-2 (CEI 20-37/2)

Conductivity $\leq 100 \,\mu\text{S/cm}$

pH value > 3.5

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

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



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Electrical characteristics

540 MHz:

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: $53 \text{ pF/m} \pm 2 \text{ pF/m}$

Velocity ratio: 0.82 ± 0.02 Nominal delay:4.07 ns/mInsulation resistance: $> 10^4 \text{ M}\Omega.\text{km}$

Voltage test of dielectric: 2 kVdc Return loss at 5-1600 MHz: \geq 23 dB 1600-4500 MHz: \geq 21 dB

15.0 dB/100m

Attenuation at Nominal Attenuation at Nominal 17.5 dB/100m 1 MHz: $0.8 \, dB/100m$ 720 MHz: 3.6 MHz: 1.5 dB/100m 750 MHz: 17.9 dB/100m 10 MHz: 2.4 dB/100m 1000 MHz: 21.0 dB/100m 71.5 MHz: 5.6 dB/100m 1500 MHz: 26.0 dB/100m 135 MHz: 7.4 dB/100m 2250 MHz: 32.0 dB/100m 10.4 dB/100m 38.0 dB/100m 270 MHz: 3000 MHz: 360 MHz: 12.1 dB/100m 4500 MHz: 48.0 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.