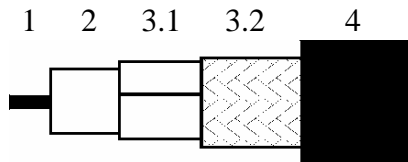


## Application

Precision video cables are used in critical analog and digital video circuits and high quality applications such as live broadcast (HDTV/SDI) in network studios and pre- or post-production facilities.

## Construction & Dimensions



- 1. Conductor**
- 2. Dielectric**
- 3.1 Foil**
- 3.2 Braid**
- 4. Jacket**

1. **Inner Conductor** Innenleiter - Conduttore Interno – Conducteur – Conductor - Проводник  
 Material solid, bare copper  
 Diameter 1.0 mm (18 AWG)  
 RG Type 6/U
2. **Dielectric** Dielektrikum – Dielettrico – Diélectrique – Dieléctrico - Диэлектрик  
 Material gas injected HDPE  
 Diameter over insulation 4.57 mm
3. **Outer Conductor** Aussenleiter - Conduttore Esterno - Conducteur extérieur - Conductor externo - Внешний проводник  
 Material foil + braid  
 Diameter screen 5.4 mm
  - 3.1 Shielding foil Duofoil®  
 Coverage: 100%
  - 3.2 Shielding braid tinned copper braid  
 Coverage 95%
4. **Jacket** Aussenmantel – Guaina – Gaine – Revestimiento - Оболочка  
 Material FRNC (LSNH)  
 Diameter:  $6.9 \pm 0.2$  mm  
 Color and text: see table Marking

## Requirements and test methods

### Electrical characteristics

Mean characteristic impedance:	$75 \pm 1.5 \Omega$
Wellenwiderstand - Impedenza Caratteristica Principale - Impédance nominale - Características eléctricas - Электрические характеристики	
Nominal capacitance conductor to shield:	53 pF/m
Kapazitaet - Capacità Nominale Conduttore/Schermo - Capacité nominale entre conducteur et blindage - Capacitancia nominal de conductor a blindaje - Номинальная емкость "проводник-экран"	
Nominal velocity of propagation:	82%
Ausbreitungsgeschwindigkeit - Velocità Nominale di Propagazione - Vitesse de propagation nominale - Velocidad nominal de prpagación - Номинальная скорость распространения сигнала	
Nominal Delay:	4.068 ns/m

## 1694ANH FRNC Precision Video Cable

Rev. 2/ 2005-01-05 DRAFT 2/2

Nom. inner conductor DC resistance @ 20 °C: 21 Ω/km

Gleichstromwiderstand Innenleiter - Resistenza Nominale DC del Conduttore Interno - Résistance du conducteur intérieur - Resistencia CC nominal del conductor interno - Номин. сопротивление пост. тока внутреннего проводника при

Nom. outer conductor DC resistance @ 20 °C: 9 Ω/km

Gleichstromwiderstand Aussenleiter - Resistenza Nominale DC del Conduttore Esterno - Résistance du conducteur extérieur - Resistencia CC nominal del conductor externo - Номин. сопротивление пост. тока внутреннего проводника при

Return loss at 5- 850 MHz: ≥ 23 dB  
851-3000 MHz: ≥ 21 dB

Rueckflussdaempfung - Perdite Cumulative di Riflessione - Taux de réflexion du signal - Pérdida de retorno - Обратные потери на

Nominal Attenuation: Wellendaempfung - Attenuazione Nominale – Affaiblissement - Atenuación nominal - Номинальное затухание

MHz	dB/100m	MHz	dB/100m
1	0.8	360	11.2
3.58	1.4	540	13.9
5	2.3	720	16.2
71.5	5.2	1500	24.0
135	6.9	2250	29.9
270	9.7	3000	35.0

Flame Resitance: CEI 20-22 III (acc. EN50266-2-4, IEC 60332-3-24 cat.C)  
CEI 20-37/2/5/7 (acc. EN50267-2-1, 50268-2, NES 713)



### Mechanical and physical characteristics

Temperature range - storage/operation -30°C to +70°C  
Temperature range - installation -5 °C to + 70°C

Minimum bending radius 10x Ø cable

Biegeradius - Raggio Minimo di Curvatura - Rayon de courbure minimum - Radio de curvatura mínimo - Минимальный радиус изгиба

Nominal cable weight 59.6 kg/km

Gewicht - Peso Nominale del Cavo – Poids - Peso nominal del cable - Номинальный вес кабеля

### Ordering information

#### MARKING

Jacket colour	Text
black	BELDEN 1694ANH FRNC CEI 20-22III CEI 20-37/2/5/7

Meter marking: yes, MM-YY: month and year of manufacturing

#### PACKAGING (PUT-UP, +/-2%)

305m reels

Each reel is labelled with the following data: Belden Logo, Belden code number, item description, length on the reel and date of manufacturing.