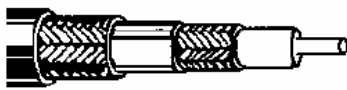


## Application

Triaxial cable is used to interconnect video cameras to related equipment. Triax cables contain 2 isolated shields and a solid or stranded center conductor. Isolated shields allow the triax to provide multiple functions over 1 cable through multiplexing techniques, e.g. DC power to camera, intercom to operator, teleprompter feeds, monitoring feeds and even automatic or robotic functions.

## Construction & Dimensions

4 3.3 3.2 3.1 2 1



### 1. Conductor

### 2. Dielectric

#### 3.1 Braid

#### 3.2 Insulation

#### 3.3 Braid

### 4. Jacket

- |                           |  |
|---------------------------|--|
| 1. <b>Inner Conductor</b> | Innenleiter - Conduttore Interno - Conducteur - Conductor - Проводник                            |
| Material                  | bare copper  |
| Diameter                  | 1.4 mm   |
| 2. <b>Dielectric</b>      | Dielektrikum - Dielettrico - Diélectrique - Dieléctrico - Диэлектрик                             |
| Material                  | foam PE  |
| Diameter over insulation  | 6.5 mm   |
| 3. <b>Outer Conductor</b> | Aussenleiter - Conduttore Esterno - Conducteur extérieur - Conductor externo - Внешний проводник |
| Material                  | braid + insulation + braid   |
| Diameter screen           | 7.2 mm   |
| 3.1 Shielding braid       | bare copper braid  |
| Coverage:                 | 90%  |
| 3.2 Insulation            | polyethylene   |
| 3.3 Shielding braid       | bare copper braid  |
| Coverage                  | 80%  |
| 4. <b>Jacket</b>          | Aussenmantel - Guaina - Gaine - Revestimiento - Оболочка   |
| Material                  | PVC  |
| Diameter:                 | 11.0 ± 0.2 mm  |
| Color and text:           | see table Marking  |

## Requirements and test methods

### Electrical characteristics

Mean characteristic impedance:  $75 \pm 3 \Omega$

Wellenwiderstand - Impedenza Caratteristica Principale - Impédance nominale - Características eléctricas - Электрические характеристики

Nominal capacitance conductor to shield: 55.0 pF/m

Capacitance - Capacità Nominale Conduttore/Schermo - Capacité nominale entre conducteur et blindage - Capacitancia nominal de conductor a blindaje - Номинальная емкость "проводник-экран"

**7784E**  
**Triax Cable 11 mm Solid - PVC**

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**Nominal velocity of propagation:** 81%  
Ausbreitungsgeschwindigkeit - Velocità Nominale di Propagazione - Vitesse de propagation nominale - Velocidad nominal de propagación - Номинальная скорость распространения сигнала

**Max. DC loop resistance:** 18.2 Ω/km  
Schleifenwiderstand – Resistenza continua di Loop – xxx - Resistencia de bucle CC - Сопротивление петли пост. Тока

**Max. inner conductor DC resistance @ 20 °C:** 11.2 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

**Max. outer conductor DC resistance @ 20 °C:** 7.4 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:** ≥ 21 dB  
Rueckflussdaempfung - Perdite Cumulative di Riflessione - Taux de réflexion du signal - Pérdida de retorno - Обратные потери на

**Screening attenuation at 30-1000 MHz:** ≥ 75 dB  
Schirmungsmass – Effic. Schermatura - xxx de blindage

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

MHz	dB/100m	MHz	dB/100m
1	0.5	100	5.8
3	0.8	300	10.6
5	1.3	750	15.6
10	1.7		



**Mechanical and physical characteristics**

Temperature range - storage/operation -20°C to +80°C  
Temperature range - installation -5 °C to + 80°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** 146 kg/km  
Gewicht - Peso Nominale del Cavo – Poids - Peso nominal del cable - Номинальный вес кабеля

**Ordering information**

**MARKING**

Jacket colour	Text
Red	BELDEN 7784E TRIAX 11 PVC

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

**PACKAGING (PUT-UP, -0/+5%)**

500m reels

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