

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. **Inner Conductor** Innenleiter - Conduttore Interno - Conducteur - Conductor - Проводник
Material: bare copper
Diameter: 1.4 mm
2. **Dielectric** Dielektrikum - Dielettrico - Diélectrique - Dieléctrico - Диэлектрик
Material: foam PE
Diameter over insulation: 6.5 mm
3. **Outer Conductor** Aussenleiter - Conduttore Esterno - Conducteur extérieur - Conductor externo - Внешний проводник
Material: braid + insulation + braid
Diameter screen: 9.2 mm
 - 3.1 Shielding braid: bare copper braid
Coverage: 90%
 - 3.2 Insulation: polyethylene
 - 3.3 Shielding braid: bare copper braid
Coverage: 80%
4. **Jacket** Aussenmantel - Guaina - Gaine - Revestimiento - Оболочка
Material: FRNC
Diameter: 11.0 ± 0.2 mm
Color and text: see table Marking

Requirements and test methods

Electrical characteristics

Mean characteristic impedance: 75 ± 3 Ω

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

Nominal capacitance conductor to shield: 55.3 pF/m

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

7784ENH
Triax Cable 11 mm Solid - FRNC

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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 Ω/km
Schleifenwiderstand – Resistenza continua di Loop – xxx - Resistencia de bucle CC - Сопротивление петли пост. Тока

Max. inner conductor DC resistance @ 20 °C: 10 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: 8 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	50	3.8
10	1.7	60	4.2
20	2.4	100	5.6
40	3.4	300	10.5



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 7784ENH TRIAX 11 FRNC

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.