

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 | stranded, silver plated copper |
| Diameter | 2.2 mm (19x25) |
| 2. Dielectric | Dielektrikum - Dielettrico - Diélectrique - Dieléctrico - Диэлектрик |
| Material | foam PE |
| Diameter over insulation | 9.7 mm |
| 3. Outer Conductor | Aussenleiter - Conduttore Esterno - Conducteur extérieur - Conductor externo - Внешний проводник |
| Material | braid + insulation + braid |
| Diameter screen | 10.4 mm |
| 3.1 Shielding braid | silver plated copper |
| Coverage: | 80% |
| 3.2 Insulation | flame resistant polyethylene |
| 3.3 Shielding braid | bare copper braid |
| Coverage | 80% |
| 4. Jacket | Aussenmantel - Guaina - Gaine - Revestimiento - Оболочка |
| Material | FRNC |
| Diameter: | 14.5 ± 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: 54 pF/m

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

7785ANH
Triax Cable 14 mm FRNC

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

Nominal velocity of propagation: 82%
Ausbreitungsgeschwindigkeit - Velocità Nominale di Propagazione - Vitesse de propagation nominale - Velocidad nominal de propagación - Номинальная скорость распространения сигнала

Max. DC loop resistance: 12.1 Ω/km
Schleifenwiderstand – Resistenza continua di Loop – xxx - Resistencia de bucle CC - Сопротивление петли пост. Тока

Max. inner conductor DC resistance @ 20 °C: 5.7 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: 6.4 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
Rueckflusdaempfung - 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	0.4	60	3.1
10	1.3	100	4.2
20	1.7	300	7.6
40	2.5	1000	14.3
50	2.8		

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 -40°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 235 kg/km
Gewicht - Peso Nominale del Cavo – Poids - Peso nominal del cable - Номинальный вес кабеля

Ordering information

MARKING

Jacket colour	Text
Red	BELDEN-NL BRILLIANCE (R) 7785ANH VIDEO TRIAX14 FRNC CEI 20-22III CEI 20-37/2/5/7

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

PACKAGING (PUT-UP, -0/+10%)

600m reels

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