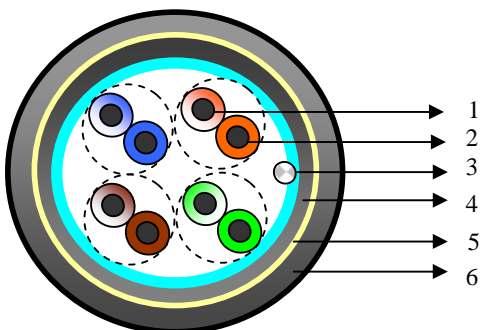


## APPLICATION

Cat 5e up-jacketed RJ45 compatible cable for use in digital audio systems

## CONSTRUCTION



### 1. Conductor

Material:

Solid bare copper wire

Diameter of conductor

0.51 mm (AWG 24)

### 2. Insulation

Material

Polyolefin

Nominal diameter over insulation

1.06 mm

Nominal wall thickness insulation

0.26 mm

### 3. Shield: Beldfoil® + drainwire

Foil bonded to inner sheath

Aluminium-polyester tape

Drainwire AWG24

stranded tinned copper 7x0.2

### 4. Inner sheath

Material

PVC

Diameter over sheath

6.6 mm

Nominal wall thickness of sheath

0.5 mm

Colour of sheath

Black

### 5. Foil

Non-woven foil

### 6. Outer sheath element

Material

PVC

Nominal diameter over sheath

7.50 mm

Maximum diameter over sheath

7.75 mm

Nominal wall thickness of sheath

0.55 mm

Colour of sheath

Black Matte

**REQUIREMENTS AND TEST METHODS**

**Electrical:**

Nom. Mutual Capacitance @ 1 KHz:	49 pF/m
Maximum Capacitance Unbalance (pF/100 m):	66 pF/100 m
Nominal Velocity of Propagation:	70 %
Maximum Delay (ns/100 m):	538 ns/100 m
Maximum Delay Skew (ns/100m):	45 ns/100 m
Maximum Conductor DC Resistance @ 20 Deg. C:	9.4 Ω/100 m
Maximum DCR Unbalance @ 20 Deg. C:	3 %

Frequency (MHz)	Max. Attenuation (dB/100 m)	Min. NEXT (dB)	Min. PSNEXT (dB)	Min. PSACR (dB)	Min. Return Loss (dB)
1	2.0	65.3	65.3	62.9	20
4	4.1	56.3	56.3	51.5	23
8	5.8	51.8	51.8	45.0	24.5
10	6.5	50.3	50.3	42.6	25
16	8.2	47.3	47.3	37.5	25
20	9.3	45.8	45.8	34.8	25
25	10.4	44.3	44.3	31.9	24.3
31.25	11.7	42.9	42.9	29.0	23.6
62.5	17.0	38.4	38.4	18.3	21.5
100	22	35.3	35.3	9.2	20.1

Frequency (MHz)	Input (Unfitted) Impedance (Ω)	Fitted Impedance (Ω)	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
1	100 ± 12	105 ± 10	63.8	60.8
4	100 ± 12	100 ± 10	51.7	48.7
8	100 ± 12	100 ± 10	45.7	42.7
10	100 ± 12	100 ± 10	43.8	40.8
16	100 ± 12	100 ± 10	39.7	36.7
20	100 ± 12	100 ± 10	37.7	34.7
25	100 ± 15	100 ± 10	35.8	32.8
31.25	100 ± 15	100 ± 10	33.9	30.9
62.5	100 ± 15	100 ± 10	27.8	24.8
100	100 ± 18	100 ± 10	23.8	20.8

**Mechanical & physical:**

Resistance to flame propagation	IEC 60332-1
Bending radius/setting radius of cable	10*D/5*D
Temperature range operating and processing	-5°C to +75°C
Temperature range for storage	-25°C to +75°C

Belden CDT believes 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.

