TECHNICAL DATASHEET	Code	74004NH
	Version	2
	Date	2011-05-03
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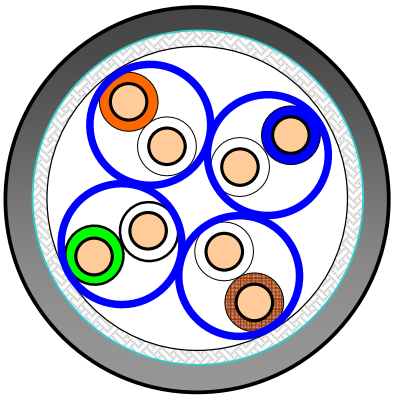
STANDARDS

- ISO/IEC 11801 and ISO/IEC 24702
- EN 50173 – 1
- TIA/EIA-568-B.2 (May 2001)

CABLE CONSTRUCTION



Conductor	
Material	Solid bare copper
Diameter	AWG 23
Insulation	
Material	Foam-Polyethylene
Diameter over insulated conductor	1.45 ± 0.05 mm
Pair	
Pair	2 twisted insulated conductors with overall foil
Number of pairs	4, all twisted together
Colour code pair 1	White & Blue
Colour code pair 2	White & Orange
Colour code pair 3	White & Green
Colour code pair 4	White & Brown
Shielding foil over element	
Material	Laminated Aluminium / Polyester
Position aluminium	Outside
Braid	
Material	Solid tinned copper
Coverage	≥ 65 %
Sheath	
Material	FRNC UV and oilresistant
Diameter	8.0 ± 0.3 mm

Electrical characteristics

Low frequency and D.C.		
D.C. resistance conductor	< 75	Ω/km
Resistance unbalance	< 2	%
D.C. insulation resistance	> 5000	MΩ.km
Dielectric strength cond. – cond. (2 sec.)	2.5	kV D.C.
Mutual capacitance	< 56	nF/km
Capacitance unbalance	< 1600	pF/km
High frequency		
Velocity of propagation		
@ 4 – 600 MHz	≥ 0.6	c
Skew		
@ 1 – 600 MHz	≤ 40	ns/100m
Propagation delay		
@ 1 – 600 MHz	≤ 534 + 36/Vf	ns/100m
Longitudinal attenuation		
@ 4 – 1000 MHz	≤ 1.8*Vf+0.01*f+0.2/Vf	dB/100m
Near end cross talk (NEXT)		
@ 1 – 31.25 MHz	≥ 80	dB
@ 31.25 – 1000 MHz	≥ 102.4 – 15 log(f)	dB
Power sum near end cross talk (PSNEXT)		
@ 1 – 31.25 MHz	≥ 77	dB
@ 31.25 – 1000 MHz	≥ 99.4 – 15 log(f)	dB
Equal level far end cross talk (ELFEXT)		
@ 1 – 5 MHz	≥ 80	dB
@ 5 – 1000 MHz	≥ 94.0 – 20 log(f)	dB
Power sum equal level far end cross talk (PSELFEXT)		
@ 1 – 5 MHz	≥ 77	dB
@ 5 – 1000 MHz	≥ 91.0 – 20 log(f)	dB
Attenuation cross talk ratio (ACR)		
@ 4 – 31.25 MHz	≥ 80 - (1.85*Vf+0.01*f+0.2/Vf)	dB
@ 31.25 – 1000 MHz	≥ (102.4 – 15 log(f)) - (1.8*Vf+0.01*f+0.2/Vf)	dB
Power sum attenuation cross talk ratio (PSACR)		
@ 4 – 31.25 MHz	≥ 77 - (1.8*Vf+0.01*f+0.2/Vf)	dB
@ 31.25 – 1000 MHz	≥ (99.4 – 15 log(f)) – (1.8*Vf+0.01*f+0.2/Vf)	dB
Input impedance open/short (Zo/s)		
@ 4-100 MHz	100 ± 15	Ω
@ 100 – 250 MHz	100 ± 22	Ω
@ 250 – 600 MHz	100 ± 25	Ω

Mean characteristic impedance (Zcm)		
@ 100 MHz	100 ± 5	Ω
Return Loss (RL)		
@ 4 ≤ f ≤ 10 MHz	≥ 20 + 5 log (f)	dB
@ 10 ≤ f ≤ 20 MHz	≥ 25	dB
@ 20 ≤ f ≤ 250 MHz	≥ 25 – 7 log (f/20)	dB
@ 250 ≤ f ≤ 600 MHz	≥ 17.3	dB
@ 600 ≤ f ≤ 1000 MHz	≥ 25 – 7 log (f/20)	dB
Coupling attenuation Type II		
@ 30 – 100 MHz	> 80	dB
@ 100 – 1000 MHz	> 80 – 20 log(f/100)	dB
Transfer Impedance (Z_T)		
@ 1 MHz	< 5	mΩ/m
@ 10 MHz	< 5	mΩ/m
@ 30 MHz	< 30	mΩ/m
@ 100 MHz	< 100	mΩ/m

MECHANICAL CHARACTERISTICS

Elongation at break conductor	≥ 10 %
Elongation at break insulation	≥ 100 %
Elongation at break sheath	≥ 100 %
Tensile strength sheath	≥ 9 Mpa

ENVIRONMENTAL AND OVERALL CHARACTERISTICS

Maximum operating voltage	30 V A.C.
Maximum continuous current per conductor (@25°C)	1.4 A rms
Halogen free acc to	IEC 60754-2 / EN50267-2-2
Smoke density	IEC 61034
Oil resistant acc	IEC 60811-2-1
Maximum pulling tension	80 N
Minimum bending / setting radius	80 / 40 mm
Temperature range during installation	0 / +50 °C
Temperature range during operation	-20 / +70 °C
Flame propagation bundle	IEC 60332-3-24 / EN50266-2-24 Cat C
Flame test single wire	IEC 60332-1-2

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.