



Product: <u>1886ELV</u> ☑

Category 7A Enhanced Cable, 4 Pair, S/FTP, LSZH Indoor CPR B2ca

# **Product Description**

Category 7A Enhanced Premise Horizontal Cable (1200MHz), 4-Pair, 23 AWG solid bare copper conductors, S/FTP, Foam Polyethylene insulation, each pair with Beldfoil® shield, overall tinned copper braid shield (30% coverage), LSZH jacket

## **Technical Specifications**

## **Product Overview**

	Suitable Applications:	Horizontal and building backbone cable; Support current and future Category 6a, 7 and 7a applications, such as: 10GBase - T (10 Gigabit Ethernet), 1000Base - T (Gigabit Ethernet), 100 Base - T, 10 Base - T, FDDI, ATM
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#### **Construction Details**

#### Conductor

I	Element	Size	Stranding	Material	No. of Pairs	No. of Elements
ľ	Individual Shielded Pair	23 AWG	Solid	BC - Bare Copper	4	8

### Insulation

Element	Material	Nom. Insulation Diameter	Color Code
Individual Shielded Pair	PE - Polyethylene (Foam)	1.42 mm (0.0559 in)	White & Blue, White & Orange, White & Green, White & Brown

## Cable Core

Description
4 shielded pairs twisted together

### Inner Shield

Element	Shield Type	Material	Coverage
Individual Shielded Pair	Таре	Bi-Laminate (Alum+Poly)	100%

Table Notes: Aluminum facing outside

## Outer Shield

Shield Type	Material	Coverage
Braid	Tinned Copper (TC)	30%

#### Outer Jacket

Material	Material		Ripcord
LSZH - Low Smoke Zero Halogen (Flame Retardant		7.7 mm (0.30 in)	Yes
Overall Cable Diameter (Nominal):	7.7 mm (0.30 in)		

### **Electrical Characteristics**

### Electricals

Max. Conductor DCR	Max. Mutual Capacitance	Max. Capacitance Unbalance	Nom. Characteristic Impedance
95 Ohm/km	56 pF/m (17 pF/ft)	160 pF/100m	100 Ohm

# Delay

Max. Delay Skew	Nom. Velocity of Prop.
25 ns/100m	76%

### **High Frequency**

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. NEXT [dB]	Min. PSNEXT [dB]	Min. ACR [dB]	Min. PSACR [dB]	Min. ACRF (ELFEXT) [dB]	Min. PSACRF (PSELFEXT) [dB]	Min. RL (Return Loss) [dB]	Min. TCL [dB]	Min. ELTCTL [dB]
1	2.1 dB/100m	78	75	75.9	72.9	78	75	20	40	35
4	3.7 dB/100m	78	75	74.3	71.3	78	75	23	34	23
10	5.8 dB/100m	78	75	72.2	69.2	75.3	72.3	25	30	15
16	7.3 dB/100m	78	75	70.7	67.7	71.2	68.2	25	28	10.9
31.2	10.3 dB/100m	78	75	67.7	64.7	65.4	62.4	23.6	25.2	5.1
62.5	14.6 dB/100m	78	75	63.4	60.4	59.4	56.4	21.5	22	
100	18.5 dB/100m	75.4	72.4	56.9	53.9	55.3	52.3	20.1	20	
155	23.2 dB/100m	72.5	69.5	49.3	46.3	51.5	48.5	18.8	18.1	
250	29.7 dB/100m	69.4	66.4	39.7	36.7	47.3	44.3	17.3	16	
500	42.8 dB/100m	64.9	61.9	22.2	19.2	41.3	38.3	17.3	16	
600	47.1 dB/100m	63.7	60.7	16.6	13.6	39.7	36.7	17.3		
1000	61.9 dB/100m	60.4	57.4	10.6	-4.5	35.3	32.3	15.1		
1200	68.4 dB/100m	59.2	56.2	-9.5	-12.1	33.7	30.7	14.3		
Table Notes:	Limits be	low 4MHz and at	ove 1000 MHz ar	e for informa	tion only; Refere	nce standard: IEC 611	56-5			

## Transfer Impedance

Frequency	Max. Transfer Impedance
1 Mhz	Max. 50 mOhm/m
10 Mhz	Max. 100 mOhm/m
30 Mhz	Max. 200 mOhm/m
100 Mhz	Max. 1000 mOhm/m

Transfer Impedance Class:	Grade 2
Screening Class:	Type Ib
Table Notes:	Coupling Attenuation

## Voltage

Voltage Rating 72 V DC

## **Mechanical Characteristics**

## Temperature

Installation -30°C to +60°C | 0°C To +50°C

## **Bend Radius**

Stationary Min.	Installation Min.
29 mm (1.1 in)	58 mm

Max. Pull Tension: 85 N (19 lbf) Bulk Cable Weight: 61 kg/km

# **Standards and Compliance**

Environmental Suitability:	Indoor - Euroclass B2ca
Flammability / Reaction to Fire	: IEC 60332-1-2
CPR Compliance:	CPR Euroclass: B2ca-s1a,d1,a1
IEEE Compliance:	PoE: IEEE 802.3bt Type 1, Type 2, Type 3, Type 4
Data Category:	Category 7A
TIA/EIA Compliance:	ANSI/TIA 568.2-D
ISO/IEC Compliance:	ISO/IEC 11801-1, IEC 61034-2 - Smoke Density Min Transmittance = 80%
CENELEC Compliance:	EN 50173-1, Segregation class according EN50174-2 = d
European Halogen Free Standards:	IEC 62821-1 Halogen Free Compliance = Yes, IEC 60754-1 - Halogen Amount = Zero, IEC 60754-2 - Halogen Acid Gas Amount - Max. Conductivity = 2.5 μS/mm, IEC 60754-2 - Halogen Acid Gas Amount - Min. pH = 4.3
European Directive Compliance:	EU CE Mark
UK Regulation Compliance:	UKCA Mark

# **Product Notes**

Notes: Electrical values are expected performance based on cable testing and representative performance within a typical Belden system.

### **History**

Update and Revision: Revision Number: 0.184 Revision Date: 06-20-2024

#### **Part Numbers**

### Variants

l	Item #	Color	Putup Type	Length	EAN
	1886ELV.00500	Gray, RAL 7032	Reel	500 m	8719605124029

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