



Product: [1888EPE](#)

Cat 7A+ Cable, S/FTP, PE, 4 Pair, AWG 22, Outdoor

Product Description

CAT7A (1200MHz), 4-Pair, S/FTP shielded, Premise Horizontal Cable, 22 AWG solid bare copper conductors, Foam Polyolefin insulation, each pair with Beldfoil® shield, overall tinned copper braid shield (50% coverage), PE jacket

Technical Specifications

Product Overview

Suitable Applications:	Horizontal and building backbone cable; Support current and future Cat. 6a, 7 and 7a applications such as; 10GBase-T (10 Gigabit Ethernet), 1000Base-T (Gigabit Ethernet), 100 Base-T, 10 Base-T, FDDI and ATM; Outdoor
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Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	No. of Pairs
22	Solid	BC - Bare Copper	4

Conductor Count:	8
Total Number of Pairs:	4

Insulation

Material	Nominal Diameter
PO - Polyolefin (Foam)	1.6 mm

Bonded-Pair:	No
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Color Chart

Number	Color
Pair 1	White / Blue
Pair 2	White / Orange
Pair 3	White / Green
Pair 4	White / Brown

Outer Shield Material

Type	Layer	Material	Min. Coverage [%]
Tape	1	Bi-Laminate (Alum+Poly)	
Braid	2	Tinned Copper (TC)	50%

Table Notes:	Aluminium facing outside
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Outer Jacket Material

Material	Nominal Diameter	Diameter +/- Tolerance
PE - Polyethylene	7.8 mm	0.3 mm

Construction and Dimensions

Min Elongation at Breakof Conductors:	10 %
Min Elongation at Breakof Insulation:	100 %
Min Elongation at Breakof Jacket:	100 %
Min Tensile Strength of Jacket:	9 MPa

Electrical Characteristics

Conductor DCR

Max. Conductor DCR	Max DCR Unbalanced Between Pairs [%]	Max. DCR Unbalanced Within Pair [%]
95 Ohm/km	4 %	2 %

Capacitance

Max. Capacitance Unbalanced Pair to Pair	Max. Mutual Capacitance
1,600 pF/m	56 pF/m

Delay

Max. Delay Skew
25 ns/100m

High Freq

Frequency [MHz]	Max. Insertion Loss (Attenuation)
1 MHz	2.1 dB/100m
4 MHz	3.7 dB/100m
10 MHz	5.8 dB/100m
16 MHz	7.3 dB/100m
31.2 MHz	10.3 dB/100m
62.5 MHz	14.6 dB/100m
100 MHz	18.5 dB/100m
155 MHz	23.2 dB/100m
250 MHz	29.7 dB/100m
500 MHz	42.8 dB/100m
600 MHz	47.1 dB/100m
1000 MHz	61.9 dB/100m
1200 MHz	68.4 dB/100m

Table Notes:	Limits below 4 MHz are for information only. Values at 1200 MHz are for information only
Coupling Attenuation Class:	Type I
Segregation class according EN50174-2:	d
Transfer Impedance Class:	Grade 1

Current

Max. Recommended Current [A]
1.5 Amps per Conductor

Voltage

Voltage Rating [V]
Max. 72 V DC

Temperature Range

Installation Temp Range:	0°C To +50°C
Operating Temp Range:	-30°C To +60°C

Mechanical Characteristics

Bulk Cable Weight:	67 kg/km
Max. Pull Tension:	105 N

Standards

IEC Compliance:	ISO/IEC 11801-1
CPR Euroclass:	Fca
GENELEC Compliance:	EN 50173-1
Data Category:	Category 7A
ANSI Compliance:	ANSI/TIA 568.2-D (2018)
IEEE Compliance:	PoE: IEEE 802.3bt Type 1, Type 2, Type 3, Type 4

Applicable Environmental and Other Programs

Environmental Space:	Outdoor
EU RoHS Compliance Date (yyyy-mm-dd):	2015-05-29

Flammability, LSOH, Toxicity Testing

Burning Load:	1500 kJ/m
IEC 60754-1 (EN50267-1)- Halogen Amount:	Zero
IEC 60754-2 (EN50267-2)- Halogen Acid Gas Amount - Max. Conductivity:	2.5 µS/mm
IEC 60754-2 (EN50267-2)- Halogen Acid Gas Amount - Min. pH:	4.3
IEC 61034-2 (EN 61034-2) (VDE 0482-1034) - Smoke Density Min. Transmittance:	60%

Part Number

Variants

Item #	Color	Putup Type	Length	EAN
1888EPE.00500	Black	Reel	500 m	8719605004826
1888EPE.001000	Black	Reel	1,000 m	8719605125187

Product Notes

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

Update and Revision:	Revision Number: 0.152 Revision Date: 09-25-2020
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