Belden



Product: 7815A

CAT 6 4P 24AWG, F/UTP, PVC Jkt, Indoor, CM

Product Description

CAT 6 4PR x 24AWG F/UTP, Solid Bare Copper Conductor, PE Insulation, Overall Foil Shield,CM, PVC Jacket, Indoor

Technical Specifications

Product Overview

Suitable Applications:	Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU, Digital Video, RS-422, 250MHz Category 6

Construction Details

Conductor

Size	Stranding	Material	No. of Pairs
24	Solid	BC - Bare Copper	4

Insulation

Material	Nom. Insulation Diameter	Color Code
PE - Polyethylene	1.08 mm (0.0425 in)	Blue & White with Blue Stripe, Orange & White with Orange Stripe, Green & White with Green Stripe, Brown & White with Brown Stripe

Outer Shield

Shield Type	Material	Coverage
Tape	Bi-Laminate (Alum+Poly)	100%

Outer Jacket

Material	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	7.1 mm (0.28 in)	Yes

Electrical Characteristics

Electricals

Max. Conductor DCR	Max. Mutual Capacitance	Max. Capacitance Unbalance	Nom. Characteristic Impedance
93.8 Ohm/km (28.6 Ohm/1000ft)	56 pF/m (17 pF/ft)	330 pF/100m	100 Ohm

Delay

Frequency	Max. Delay	Max. Delay Skew	Nom. Velocity of Prop.
100 MHz	538 ns/100m	45 ns/100m	65%

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	2.0 dB/100m	74.3	72.3	72.3	70.3	67.8	64.8	20.0	40.0	35.0
4	3.8 dB/100m	65.3	63.3	61.5	59.5	55.8	52.8	23.0	40.0	23.0
8	5.3 dB/100m	60.8	58.8	55.5	54.5	49.7	46.7	24.5	40.0	16.9
10	6.0 dB/100m	59.3	57.3	53.3	50.3	47.8	44.8	25.0	40.0	15.0
16	7.6 dB/100m	56.2	54.2	48.7	46.7	43.7	40.7	25.0	38.0	10.9
20	8.5 dB/100m	54.8	52.8	46.3	44.3	41.8	38.8	25.0	37.0	9.0
25	9.5 dB/100m	53.3	51.3	43.8	41.8	39.8	36.8	24.3	36.0	7.0
31.25	10.7 dB/100m	51.9	49.9	41.4	39.4	37.9	34.9	23.6	35.1	

62.5	15.4 dB/100m	47.4	45.4	32.0	30.0	31.9	28.9	21.5	32.0	
100	19.8 dB/100m	44.3	42.3	24.5	22.5	27.8	24.8	20.1	30.0	
155	25.2 dB/100m	41.4	39.4	16.3	14.3	24.0	21.0	18.8	27.0	
200	29.0 dB/100m	39.8	37.8	10.8	8.8	21.8	18.8	18.0	27.0	
250	32.8 dB/100m	38.3	36.3			19.8	16.8	17.3		

Mechanical Characteristics

Temperature

Operating
-20°C To +75°C

Bend Radius

Installation Min.
56.8 mm (2.24 in)

Max. Pull Tension:	110 N (25 lbf)
Bulk Cable Weight:	49 kg/km (33 lbs/1000ft)

Standards and Compliance

Environmental Suitability:	Indoor, Indoor
Flammability / Reaction to Fire:	UL1685
NEC / UL Compliance:	CM
Data Category:	Category 6
TIA/EIA Compliance:	ANSI/TIA 568.2-D
ISO/IEC Compliance:	ISO/IEC 11801-1, IEC 61156-5
European Directive Compliance:	EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2)
APAC Compliance:	China RoHS II (GB/T 26572-2011)

Product Notes

Notes:	Jacket sequentially marked

History

Update and Revision:	Revision Number: 0.45 Revision Date: 09-07-2025

Part Numbers

Variants

Item #	Color	Putup Type	Length
7815A 006305M	Blue	Reel	305 m
7815A 005305M	Green	Reel	305 m
7815A 008305M	Grey	Reel	305 m
7815A 003305M	Orange	Reel	305 m
7815A 002305M	Red	Reel	305 m
7815A 009305M	White	Reel	305 m
7815A 004305M	Yellow	Reel	305 m

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