

1303E - CATSNAKE Category 6A Cable, 4 Pair, S/FTP, PVC PVC upjacketed

Item: 20119452



Product Overview

Suitable Applications

Field deployable CAT6a patch horizontal and building backbone cable; AVB, Dante, CobraNET, eSnake, Ethersound, Digital audio over Ethernet; Support current and future Category 6A and 6 applications, such as: 10GBase - T(10 Gigabit Ethernet), 1000 Base - T (Gigabit Ethernet), 100 Base - T, 10 Base - T, FDDI, ATM; Compatible connectors Belden R301601 000S1 (T568A) and R301602 000S1 (T568B)

Construction Details

CONDUCTOR

Element	Size	Stranding	Material	No. of Pairs	No. of Elements
Individual Shielded Pair	24 AWG	7x32	BC - Bare Copper	4	8

INSULATION

Element	Material	Nom. Insulation Diameter	Color Code
Individual Shielded Pair	PE - Polyethylene (Foam)	1.4 mm (0.055 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	Tape	Bi-Laminate (Alum+Poly)	100%

Table Notes

Aluminum facing outside

OUTER SHIELD

Shield Type	Material	Coverage	Drainwire Type
Braid	Tinned Copper (TC)	80%	26 AWG (7x34) TC

OUTER JACKET

Layer	Separator	Material	Nom. Diameter
1		PVC - Polyvinyl Chloride	7.2 mm (0.28 in)
2	non-Woven Tape	PVC - Polyvinyl Chloride	8.7 mm (0.34 in)

Table Notes

Matte Finish, Rugged Sheath

Overall Cable Diameter (Nominal)

8.7 mm (0.34 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	77%

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. PSANEXT [dB]	Min. PSA/ [dB]
1	2.5 dB/100m	75.3	72.3	72.8	69.8	68	65	20	67	67
4	4.6 dB/100m	66.3	63.3	61.7	58.7	56	53	23	67	66.2
10	7.1 dB/100m	60.3	57.3	53.2	50.2	48	45	25	67	58.2
16	9 dB/100m	57.2	54.2	48.3	45.3	43.9	40.9	25	67	54.1
31.2	12.6 dB/100m	52.9	49.9	50.4	47.3	38.1	35.1	23.6	67	48.3
62.5	18 dB/100m	48.4	45.4	30.4	27.4	32.1	9.1	21.5	65.6	42.3
100	23 dB/100m	45.3	42.3	22.3	19.3	28	25	20.1	62.5	38.2
125	25.8 dB/100m	43.8	40.8	18	15	26.1	23.1	19.4	61	36.3
200	33.1 dB/100m	40.8	37.8	7.7	4.7	22	19	18	58	32.2
250	37.3 dB/100m	39.3	36.3	2	-1	20	17	17.3	56.5	30.2
300	41.1 dB/100m	38.1	35.1	-3	-6	18.5	15.5	17.3	55.3	28.7
500	54.3 dB/100m	34.8	31.8	-19.5	-22.5	14	11	17.3	52	24.2

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

VOLTAGE

Voltage Rating

72 V DC

Mechanical Characteristics

TEMPERATURE

Operating	Installation	Storage
-30°C to +60°C	0°C To +50°C	-30°C To +60°C

TRAILING/FLEXING PROPERTIES

Motion	Number of Cycles	Radius	Speed	Acceleration	Traverse Length
Trailing/Bending	2,000,000	80 mm	5 m/s	5 m/s ²	5 m

BEND RADIUS

Stationary Min.	Installation Min.
32 mm (1.3 in)	64 mm
Max. Pull Tension	75 N (17 lbf)
Bulk Cable Weight	83 kg/km

Standards and Compliance

Environmental Suitability	Indoor
Flammability / Reaction to Fire	IEC 60332-1-2
IEEE Compliance	PoE: IEEE 802.3bt Type 1, Type 2, Type 3, Type 4
Data Category	Category 6A
TIA/EIA Compliance	ANSI/TIA 568.2-D
ISO/IEC Compliance	ISO/IEC 11801-1, IEC 61156-6
CENELEC Compliance	EN 50173-1, Segregation class according EN50174-2 = c
European Directive Compliance	EU CE Mark, REACH
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: 0.540 Revision Date: 04-29-2024