



Part Number: 1300SB

Category 5e, #24-4pr, F/UTP, LSZH Jacket, CMG-LS, Shipboard ABS Type Approved

Product Description

24 AWG solid bare copper conductors, polypropylene insulation, overall Beldfoil® shield, 24 AWG stranded tinned copper drain wire, low smoke zero halogen jacket.

Technical Drawing



Technical Specifications

Product Overview

Environmental Space:	Indoor/Outdoor
Suitable Applications:	Shipboard LAN/Data, WI-FI, Wireless LAN, Outdoor Antenna, Radio, Broadband, RF, Where ABS Type Approval is Required

Physical Characteristics (Overall)

Conductor

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

Conductor Count:	8
Total Number of Pairs:	4

Insulation

Material	Nominal Diameter	Nominal Wall Thickness
PP - Polypropylene	0.042 in	0.01 in

Bonded-Pair:	N/A
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Color Chart

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

Outer Shield Material

Type	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Tape	Aluminum/Polyester	Beldfoil®	100 %	TC - Tinned Copper	24	7x32

Outer Jacket Material

Material	Nominal Diameter
LSZH - Low Smoke Zero Halogen	0.26 in

Electrical Characteristics

Conductor DCR

Max. Conductor DCR	Max. DCR Unbalance
93.8 Ohm/km	3 %

Capacitance

Max. Capacitance Unbalance	Nom. Mutual Capacitance
330	15 pF/ft

Delay

Frequency [MHz]	Max. Delay	Max. Delay Skew	Nominal Velocity of Propagation (VP) [%]
100 MHz	538 ns/100m	45 ns/100m	70 %

High Freq

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. SRL (Structural Return Loss)	Max./Min. Input Impedance (unFitted)	Max./Min. Fitted Impedance
1 MHz	2 dB/100m	65.3 dB	62.3 dB	60.3 dB	60.3 dB	63.8 dB	60.8 dB	20 dB	20 dB	100 ± 15	100 ± 15
4 MHz	4.1 dB/100m	56.3 dB	53.3 dB	49.2 dB	49.2 dB	51.7 dB	48.7 dB	23 dB	23 dB	100 ± 15	100 ± 15
8 MHz	5.8 dB/100m	51.8 dB	48.8 dB	43 dB	43 dB	45.7 dB	42.7 dB	24.5 dB	24.5 dB	100 ± 15	100 ± 15
10 MHz	6.5 dB/100m	50.3 dB	47.3 dB	40.8 dB	40.8 dB	43.8 dB	40.8 dB	25 dB	25 dB	100 ± 15	100 ± 15
16 MHz	8.2 dB/100m	47.3 dB	44.3 dB	36.1 dB	36.1 dB	39.7 dB	36.7 dB	25 dB	25 dB	100 ± 15	100 ± 15
20 MHz	9.3 dB/100m	45.8 dB	42.8 dB	33.5 dB	33.5 dB	37.7 dB	34.7 dB	25 dB	25 dB	100 ± 15	100 ± 15
25 MHz	10.4 dB/100m	44.3 dB	41.3 dB	30.9 dB	30.9 dB	35.8 dB	32.8 dB	24.3 dB	24.3 dB	100 ± 15	100 ± 15
31.25 MHz	11.7 dB/100m	42.9 dB	39.9 dB	28.2 dB	28.2 dB	33.9 dB	30.9 dB	23.6 dB	23.6 dB	100 ± 15	100 ± 15
62.5 MHz	17 dB/100m	38.4 dB	35.4 dB	18.4 dB	18.4 dB	27.8 dB	24.8 dB	21.5 dB	21.5 dB	100 ± 15	100 ± 15
100 MHz	22 dB/100m	35.3 dB	32.3 dB	10.3 dB	10.3 dB	23.8 dB	20.8 dB	20.1 dB	20.1 dB	100 ± 15	100 ± 15

Voltage

UL Voltage Rating
300 V RMS

Temperature Range

UL Temp Rating:	90°C
Operating Temp Range:	-30°C To +105°C

Mechanical Characteristics

Bulk Cable Weight:	32.4 lbs/1000ft
Max Recommended Pulling Tension:	25 lbs
Min Bend Radius/Minor Axis:	2.5 in

Standards

NEC/(UL) Specification:	CMG-LS
CEC/C(UL) Specification:	CMG-LS
CPR Euroclass:	Eca
IEEE Specification:	Std. 45 clause 23

Other Specification:	NEMA WC-63.1 Category 5e, UL 444, ABS certificate 18-HS1803790-PDA
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Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2005-08-01
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Suitability - Sunlight Resistance:	Yes

Flammability, LSOH, Toxicity Testing

C(UL) Flammability:	FT4*Limited Smoke
UL Flammability:	UL1685 FT4 Loading, Limited Smoke
ISO/IEC Flammability:	60332-1, 60332-3-22 (Category A)
IEEE Flammability:	1202
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No
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Part Number

Variants

Item #	Color	UPC	Length	Footnote
1300SB 0101000	Black	612825111092	1,000 ft	C

Footnote:	C - CRATE REEL PUT-UP.
Patent:	https://www.belden.com/resources/patents

Product Notes

Notes:	RJ-45 Compatible. Jacket sequentially marked at 2 ft. intervals.
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History

Update and Revision:	Revision Number: 0.277 Revision Date: 08-22-2019
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