Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



9451SB Multi-Conductor - Audio, Control and Instrumentation Shipboard Cable





For more Information please call

1-800-Belden1



Description:

22 AWG stranded (7x30) tinned copper conductors, polypropylene insulation, twisted pair, overall Beldfoil shield (100% coverage), 22 AWG stranded TC drain wire, LSZH jacket.

Usage (Overall)

Suitable Applications:

Audio, Control, or Instrumentation for Marine Shipboard and Offshore use

Physical Characteristics (Overall)

Conductor

AWG:

	AWG	Stranding	Conductor Material
1	22	7x30	TC - Tinned Copper

Insulation

Insulation Material:

Insulation Material	Wall Thickness (in.)
PP - Polypropylene	.008

Outer Shield

Outer Shield Material:

Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100

Outer Shield Drain Wire AWG:

	AWG	Stranding	Drain Wire Conductor Material
ı	22	7x30	TC - Tinned Copper

Outer Jacket

Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (in.)
LSZH - Low Smoke Zero Halogen	.032

Overall Cable

Overall Nominal Diameter: 0.160 in.

Pair

Pair Color Code Chart:



Pair Lay Length & Direction:

Lay Length (in.)	Twists/ft. (twist/ft)
1.750	6.860

Mechanical Characteristics (Overall)

Operating Temperature Range:	-30°C To +105°C
UL Temperature Rating:	105°C
Bulk Cable Weight:	19.100 lbs/1000 ft.
Max. Recommended Pulling Tension:	27 lbs.

Page 1 of 3 01-06-2012

Detailed Specifications & Technical Data





9451SB Multi-Conductor - Audio, Control and Instrumentation Shipboard Cable

Min. Bend Radius (Install)/Minor Axis: 1.500 in. **Applicable Specifications and Agency Compliance (Overall) Applicable Standards & Environmental Programs** NEC/(UL) Specification: CMG-LS CEC/C(UL) Specification: CMG-LS **IEEE Specification:** Std. 45 clause 23 **EU CE Mark:** Yes EU Directive 2000/53/EC (ELV): Yes EU Directive 2002/95/EC (RoHS): Yes EU RoHS Compliance Date (mm/dd/yyyy): 08/01/2005 EU Directive 2002/96/EC (WEEE): Yes EU Directive 2003/11/EC (BFR): Yes CA Prop 65 (CJ for Wire & Cable): Yes MII Order #39 (China RoHS): Yes Other Specification: UL444, ABS Type Approval Certificate 05-HS500072B **Flame Test UL Flame Test:** UL1685 FT4 Loading, Limited Smoke C(UL) Flame Test: FT4, Limited Smoke **IEC Flame Test:** 60332-1, 60332-3-22 (Category A) **IEEE Flame Test:** 1202 Suitability Suitability - Indoor: Yes Suitability - Outdoor: Yes Sunlight Resistance: Yes Plenum/Non-Plenum

No

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm) 45

Plenum (Y/N):

Nom. Inductance:

Inductance (µH/ft)
.17

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft) 35

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)

Nominal Velocity of Propagation:

VP (%) 66

Nominal Delay:

Delay (ns/ft) 1.5

Nom. Conductor DC Resistance:

Page 2 of 3 01-06-2012

Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



9451SB Multi-Conductor - Audio, Control and Instrumentation Shipboard Cable

DCR @ 20°C (Ohm/1000 ft) 14.1

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 14.3

Max. Operating Voltage - UL:

Voltage 300 V RMS

Max. Recommended Current:

Current
2.9 Amps per conductor @ 25°C

Notes (Overall)

Notes: The jacket and shield are bonded so both can be removed on automatic stripping equipment. Drain wire is inside foil shield.

Related Documents:

No related documents are available for this product

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
9451SB 0101000	1,000 FT	20.000 LB	BLACK	С	2 #22 PP FS FRNHPO

Notes:

C = CRATE REEL PUT-UP.

Revision Number: 5 Revision Date: 02-20-2009

© 2012 Belden, Inc All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. This Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.

Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.

Page 3 of 3 01-06-2012