

Detailed Specifications & Technical Data



ENGLISH MEASUREMENT VERSION

8777SB Multi-Conductor - Audio, Control and Instrumentation Shipboard Cable



For more Information
please call

1-800-Belden1



Description:

22 AWG stranded (7x30) tinned copper conductors, twisted pairs, polypropylene insulation, individually Beldfoil® shielded (100% coverage), 22 AWG stranded tinned copper drain wire each pair, LSZH jacket.

Usage (Overall)

Suitable Applications: Audio, Control, or Instrumentation for Marine Shipboard and Offshore use.

Physical Characteristics (Overall)

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material	Dia. (in.)
3	22	7x30	TC - Tinned Copper	.030

Insulation

Insulation Material:

Insulation Material	Wall Thickness (in.)	Dia. (in.)
PP - Polypropylene	.010	.050

Inner Shield

Inner Shield Material:

Layer #	Inner Shield Trade Name	Type	Inner Shield Material	Coverage (%)	Stranding	Dia. (in.)	Conductor Material
1	Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100			

Inner Shield Drain Wire AWG:

AWG
22

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
LSZH - Low Smoke Zero Halogen

Overall Cabling

Overall Nominal Diameter: 0.273 in.

Pair

Pair Color Code Chart:

Number	Color
1	Black & Red
2	Black & White
3	Black & Green

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: 42.900 lbs/1000 ft.

Detailed Specifications & Technical Data



ENGLISH MEASUREMENT VERSION

8777SB Multi-Conductor - Audio, Control and Instrumentation Shipboard Cable

Max. Recommended Pulling Tension:	79 lbs.
Min. Bend Radius (Install)/Minor Axis:	2.750 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-H500072B

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

Plenum (Y/N):	No
---------------	----

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)
50

Nom. Inductance:

Inductance (μ H/ft)
0.18

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
30

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)
55

Nominal Velocity of Propagation:

VP (%)
66

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
15.0

Detailed Specifications & Technical Data



ENGLISH MEASUREMENT VERSION

8777SB Multi-Conductor - Audio, Control and Instrumentation Shipboard Cable

Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C: 10.600 Ohm/1000 ft

Max. Operating Voltage - UL:

Voltage
300 V RMS (CMG)

Max. Recommended Current:

Current
2 Amps per conductor @ 25°C

Related Documents:

No related documents are available for this product

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8777SB 0101000	1,000 FT	46.000 LB	BLACK	C	3 FSPR #22 PP FRNHPO

Notes:

C = CRATE REEL PUT-UP.

Revision Number: 4 Revision Date: 02-20-2009

© 2011 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.