

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



For more Information  
please call

1-800-Belden1



### General 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. (mm)
3	22	7x30	TC - Tinned Copper	0.762

**Total Number of Conductors:** 6

#### Insulation

**Insulation Material:**

Insulation Material	Wall Thickness (mm)	Dia. (mm)
PP - Polypropylene	0.254	1.270

#### Inner Shield

**Inner Shield Material:**

Layer #	Inner Shield Trade Name	Type	Inner Shield Material	Coverage (%)	Stranding	Dia. (mm)	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 Cable

**Overall Nominal Diameter:** 6.934 mm

#### Pair

**Pair Color Code Chart:**

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

### Mechanical Characteristics (Overall)

**Operating Temperature Range:** -30°C To +105°C

**UL Temperature Rating:** 105°C

**Bulk Cable Weight:** 62.504 Kg/Km

**Max. Recommended Pulling Tension:** 351.408 N

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

Min. Bend Radius/Minor Axis: 69.850 mm

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMG-LS
CEC/C(UL) Specification:	CMG-LS
EU Directive 2011/65/EU (ROHS II):	Yes
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:	UL1581 Vertical Tray, UL1685 FT4 Loading, Limited Smoke
CSA Flame Test:	FT4
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
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### Electrical Characteristics (Overall)

#### Nom. Characteristic Impedance:

Impedance (Ohm)

50

#### Nom. Inductance:

Inductance (µH/m)

0.59058

#### Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m)

98.43

#### Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m)

180.455

#### Nominal Velocity of Propagation:

VP (%)

66

#### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)

49.215

METRIC MEASUREMENT VERSION

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

Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C: 34.779 Ohm/km

### Max. Operating Voltage - UL:

<b>Voltage</b>
300 V RMS (CMG)

### Max. Recommended Current:

<b>Current</b>
2 Amps per conductor @ 25°C

### 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.

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