

Detailed Specifications & Technical Data



ENGLISH MEASUREMENT VERSION

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. (in.) |
|---------|-----|-----------|--------------------|------------|
| 3 | 22 | 7x30 | TC - Tinned Copper | .030 |

Total Number of Conductors: 6

Insulation

Insulation Material:

| Insulation Material | Wall Thickness (in.) | Dia. (in.) |
|---------------------|----------------------|------------|
| PP - Polypropylene | 0.010 | 0.050 |

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 Cable

Overall Nominal Diameter: 0.273 in.

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: 42 lbs/1000 ft.

Max. Recommended Pulling Tension: 79 lbs.

Min. Bend Radius/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

EU Directive 2011/65/EU (ROHS II): Yes

IEEE Specification: Std. 45 clause 23

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| | |
|---------------------------------------|--|
| 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 |
|---------------|----|

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

| |
|-----------------|
| Impedance (Ohm) |
| 50 |

Nom. Inductance:

| |
|--------------------|
| Inductance (µH/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 |

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 |

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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Revision Number: 5 Revision Date: 08-23-2012

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