



**Part Number: 8778LS**

Audio, Control and Instrumentation Cable Individually Shielded Pairs, RS-485

**Product Description**

22 AWG, Stranded (7 x 30) TC Conductors, Polypropylene Insulation, Individually Beldfoil® Shielded Pairs, 22 AWG Stranded TC Drain Wire, Chrome LSZH Jacket, 6 Pairs, Steel Wire Armor

**Technical Specifications**

**Product Overview**

Environmental Space:	Indoor
Suitable Applications:	Instrumentation and computer cable; For data transmission applications

**Physical Characteristics (Overall)**

**Conductor**

AWG	Stranding	Material	No. of Conductors	No. of Pairs
22	7x30	TC - Tinned Copper	12	6

Conductor Count:	12
Total Number of Pairs:	6

**Insulation**

Material	Nominal Diameter	Diameter +/- Tolerance
PP - Polypropylene	1.27 mm	0.05 mm

**Color Chart**

Number	Color
Pair 1	Black & Red
Pair 2	Black & White
Pair 3	Black & Green
Pair 4	Black & Blue
Pair 5	Black & Yellow
Pair 6	Black & Brown

Color Chart1, Table Note:	Shielded pairs
---------------------------	----------------

**Color Chart 2**

Number	Color
Pair 1	Red
Pair 2	Green
Pair 3	Blue
Pair 4	Blue
Pair 5	Blue
Pair 6	Blue

**Inner Shield Material**

Type	Layer	Material	Material Trade Name	Thickness of Foil	Drainwire Material	Drainwire AWG
Tape	1	Aluminum / Polyester	Z-fold®	9 / 12 µm	Tinned copper	AWG22/7
Foil	2	Polyester		12 µm		

**Inner Jacket Material**

Material	Color	Nominal Diameter	Nominal Wall Thickness
FRNC / LSZH	Chrome (RAL 7037)	9.5 mm	0.89 mm

#### Outer Shield Material

Material
Aluminum/Polyester

#### Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
LSZH / FRNC (UV stabilised)	13.9 mm	1.35 mm

## Construction and Dimensions

#### Cabling

Description	Filler
1 center filler and 6 pairs twisted to cable core covered with a polypropylene foil	Foamed flame retardant Polypropylene (2.50 mm)

#### Armor

Type of Armor	Material	Thickness of Armoring Wires	Coverage Percentage
Steel Wire Armoring	Galvanized steel wire	1.25 mm	Min. 95 %

## Electrical Characteristics

#### Conductor DCR

Nominal Conductor DCR	Nominal Inner Shield DCR
49.2 Ohm/km	34.8 Ohm/km

#### Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield
98.4 pF/m	180.4 pF/m

#### Inductance

Nominal Pair Inductance
0.59 µH/m

#### Impedance

Nominal Characteristic Impedance
50 Ohm

#### Current

Element	Max. Recommended Current [A]
Conductor	2 A

#### Voltage

Voltage Rating [V]
300 V

## Temperature Range

Installation Temp Range:	-15°C To +80°C
Storage Temp Range:	-45°C To +80°C
Operating Temp Range (Flexible Install):	-15°C To +80°C
Operating Temp Range (Fixed Install):	-45°C To +80°C

## Mechanical Characteristics

Oil Resistance:	IEC 60811-404
Min Bend Radius During Installation:	208.5 mm

## Standards

CENELEC Compliance:	EN 50290-2-27
---------------------	---------------

## Applicable Environmental and Other Programs

EU RoHS Compliance Date (yyyy-mm-dd):	2005-01-01
---------------------------------------	------------

## Flammability, LSOH, Toxicity Testing

ISO/IEC Flammability:	IEC 60332-3-24
Amount of Halogen acc. to IEC 60754-1 & EN50267-1:	Zero

## Part Number

### Variants

Item #	Color	Length
8778LS.001000	Black	1,000 m
8778LS.00500	Black	500 m

## History

Update and Revision:	Revision Number: 0.163 Revision Date: 09-02-2019
----------------------	--

© 2019 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 here in 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 "ASIS" 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 all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information 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. The 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.