



Product: [8778NH](#)

Audio, Control & Instrument, #22-6pr, PP, Individ. Foil, LSZH Jkt, Dca

Product Description

6-Pair, 22 AWG stranded (7x30) tinned copper conductor, polypropylene insulation, twisted pairs individually shielded with Beldfoil® (100% coverage), overall LSZH jacket and 22 AWG stranded tinned copper drain wire, Flame resistance IEC 60332-3C

Technical Specifications

Product Overview

Suitable Applications:	low voltage analog signals (4-20ma, 0-10v, ...); low voltage digital control (24v, ...); line level audio; computer communication; panel wiring
------------------------	---

Physical Characteristics (Overall)

Conductor

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

Conductor Count:	12
------------------	----

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

Table Notes:	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

Type	Layer	Material	Material Trade Name	Thickness of Foil	Drainwire Material	Drainwire AWG
Tape	1	Bi-Laminate (Alum+Poly)	Beldfoil® (Z-Fold®)	9 / 12 µm	TC - Tinned Copper	AWG22/7
Tape	2	Polyester		12 µm		

Outer Shield

Material

Bi-Laminate (Alum+Poly)

Outer Jacket

Material	Nominal Diameter	Nominal Wall Thickness
LSZH - Low Smoke Zero Halogen (Flame Retardant)	9.5 mm	0.89 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 (Blue, 2.50 mm)

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(s)	2 A

Voltage

Voltage Rating [V]
300 V

Temperature Range

Installation Temperature Range:	-15°C To +80°C
Storage Temperature 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:	95 mm

Standards

CPR Euroclass:	Dca-s1,d1,a1
CENELEC Compliance:	EN 50290-2-20

Applicable Environmental and Other Programs

Environmental Space:	Indoor - Euroclass Dca
----------------------	------------------------

Suitability

Suitability - Sunlight Resistance:	Yes
------------------------------------	-----

Flammability, LS0H, Toxicity Testing

IEC Flammability:	IEC 60332-1-2, IEC 60332-3-24
IEC 60754-1 - Halogen Amount:	Zero
IEC 60754-2 - Halogen Acid Gas Amount - Max. Conductivity:	2.5 µS/mm

IEC 60754-2 - Halogen Acid Gas Amount - Min. pH:	4.3
IEC 61034-2 - Smoke Density Min. Transmittance:	60%

Related Part Numbers

Variants

Item #	Color	Put-Up Type	Length	EAN
8778NH.00152	Chrome	Reel	152 m	8719605019707
8778NH.00305	Chrome	Reel	305 m	8719605019714
8778NH.00500	Chrome	Reel	500 m	8719605019721
8778NH.001000	Chrome	Reel	1,000 m	8719605019691

History

Update and Revision:	Revision Number: 0.240 Revision Date: 12-22-2023
----------------------	--

© 2024 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.