



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
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Physical Characteristics (Overall)

Conductor

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

Conductor Count:	12
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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
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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
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Suitability

Suitability - Sunlight Resistance:	Yes
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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
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