



Part Number: 8770NH

Audio, Control and Instrumentation Cable 300 V, +60 °C, Foil Shield

Product Description

18 AWG stranded (16x30) tinned copper conductors, conductors cabled, polyethylene insulation, overall Beldfoil® shield (100% coverage), 20 AWG stranded tinned copper drain wire, NHRPO jacket.

Technical Specifications

Product Overview

Environmental Space:	Indoor - Euroclass B2ca
Suitable Applications:	Audio, Control & Instrumentation cable; For data transmission applications

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	No. of Conductors
18	16x30	Tinned copper	3

Conductor Count:	3
AWG Size:	18

Insulation

Material	Nominal Diameter	Diameter +/- Tolerance	Nominal Wall Thickness
Polyethylene	2.08 mm	0.05 mm	0.018 in

Color Chart

Number	Color
Wire 1	Black
Wire 2	Red
Wire 3	Clear

Outer Shield Material

Type	Material	Material Trade Name	Coverage [%]	Thickness of Foil	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Tape	Aluminum / Polyester	Z-fold®	100 %	9 / 12 µm	Tinned copper	AWG20/7	Stranded mm

Outer Jacket Material

Material	Color	Nominal Diameter	Nominal Wall Thickness
LSZH / FRNC (UV stabilised)	Chrome (RAL 7037)	6.25 mm	0.84 mm

Construction and Dimensions

Cabling

Lay Length	Twists
1.5 in	8 twist/ft

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR
21.7 Ohm/km	27.9 Ohm/km

Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield
78.7 pF/m	157.5 pF/m

Inductance

Nominal Inductance
0.605 μ H/m

Impedance

Nominal Characteristic Impedance
69 Ohm

Delay

Nominal Velocity of Propagation (VP) [%]
66 %

Current

Element	Max. Recommended Current [A]
Conductor	5.3 A

Voltage

UL Voltage Rating	Voltage Rating [V]
300V RMS (UL AWM Style 2093)	300 V

Temperature Range

Installation Temp Range:	-15°C To +80°C
UL Temp Rating:	60°C
Storage Temp Range:	-45°C To +80°C
Operating Temp Range:	-20°C To +60°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
Bulk Cable Weight:	38 lbs/1000ft
Max Recommended Pulling Tension:	335 N
Min Bend Radius During Installation:	62.5 mm
Min Bend Radius/Minor Axis:	2.5 in

Standards

NEC/(UL) Specification:	CMG
CEC/C(UL) Specification:	CMG
CPR Euroclass:	B2ca-s1,d1,a1
CENELEC Compliance:	EN 50290-2-27

Applicable Environmental and Other Programs

EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Indoor:	Yes
Suitability - Non-Halogenated:	Yes

Flammability, LSOH, Toxicity Testing

C(UL) Flammability:	FT4
UL Flammability:	UL1685 FT4 Loading
ISO/IEC Flammability:	IEC 60332-3-24
Amount of Halogen acc. to IEC 60754-1 & EN50267-1:	Zero

Part Number

Plenum (Y/N):	No
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Variants

Item #	Color
8770NH.00305	CHROME

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