



Product: [8770ELW](#)

Electronic, 3C #18 Str TC, PO ins, OS, LSNH Jkt 300V, Cca

Product Description

Electronic, 3 Conductor AWG 18 Tinned Copper - Stranded, Polyolefin (PO, PE, PP) insulation, Foil(s) or Copper Tape(s) shielding, LSZH / FRNC jacket , 300V, Cca

Technical Specifications

Product Overview

Suitable Applications:	Audio, Control & Instrumentation cable; For data transmission applications
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Physical Characteristics (Overall)

Conductor			
AWG	Stranding	Material	No. of Conductors
18	16x30	TC - Tinned Copper	3
Conductor Count:			
3			

Insulation			
Material	Nominal Diameter	Diameter +/- Tolerance	Nominal Wall Thickness
PE - 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							
Type	Material	Material Trade Name	Coverage [%]	Thickness of Foil	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Tape	Bi-Laminate (Alum+Poly)	Beldfoil® (Z-Fold®)	100%	9 / 12 µm	TC - Tinned Copper	AWG20/7	Stranded

Outer Jacket		
Material	Nominal Diameter	Nominal Wall Thickness
LSZH - Low Smoke Zero Halogen (Flame Retardant)	6.25 mm	0.84 mm

Construction and Dimensions

Cabling	
Description	Twists
3 wires twisted to cable core	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 µH/m

Impedance

Nominal Characteristic Impedance
69 Ohm

Delay

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

Current

Element	Max. Recommended Current [A]
Conductor(s)	5.3 Amps per Conductor

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
Max. Pull Tension:	335 N
Min. Bend Radius During Installation:	62.5 mm
Min. Bend Radius/Minor Axis:	2.5 in

Standards

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

Applicable Environmental and Other Programs

Environmental Space:	Indoor - Euroclass Cca
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
MIL Order #39 (China RoHS):	Yes

Suitability

Suitability - Indoor:	Yes
Suitability - Non-Halogenated:	Yes
Suitability - Sunlight Resistance:	Yes

Flammability, LS0H, Toxicity Testing

IEC Flammability:	IEC 60332-1-2
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%

Plenum/Non-Plenum

Plenum (Y/N):	No
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Related Part Numbers

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Variants

Item #
8770ELW.00305

History

Update and Revision:	Revision Number: 0.35 Revision Date: 06-28-2024
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