

CNT-300A-FR



CNT-300-FR, CNT® 50 Ohm Braided Coaxial Cable, black non-halogenated, fire retardant polyolefin jacket, Dca s2 d2 Compliant

Product Classification

Product Type	Braided coaxial cable
Product Brand	CNT®
Product Series	CNT-300

General Specifications

Braid Coverage	87 %
Cable Type	CNT-300
Jacket Color	Black

Dimensions

Diameter Over Dielectric	4.83 mm 0.19 in
Diameter Over Jacket	7.62 mm 0.3 in
Diameter Over Tape	5.003 mm 0.197 in
Inner Conductor OD	1.78 mm 0.07 in
Outer Conductor OD	5.66 mm 0.223 in
Nominal Size	0.300 in

Electrical Specifications

Cable Impedance	50 ohm
Capacitance	80.4 pF/m 24.506 pF/ft
dc Resistance, Inner Conductor	11.05 ohms/km 3.368 ohms/kft
dc Resistance, Outer Conductor	8.5 ohms/km 2.591 ohms/kft
dc Test Voltage	2500 V
Jacket Spark Test Voltage (rms)	3500 V
Maximum Frequency	24.5 GHz

CNT-300A-FR

Operating Frequency Band	30 – 6000 MHz
Peak Power	10 kW
Shielding Effectiveness	90 dB
Velocity	83 %

Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)
30.0	3.8	1.16
50.0	4.9	1.5
150.0	7.9	2.4
220.0	9.5	2.9
450.0	13.1	4
900.0	19.4	5.9
1500.0	25.3	7.7
1800.0	28.2	8.6
2000.0	29.8	9.1
2500.0	33.8	10.3
3000.0	37.4	11.4
3500.0	41.5	12.65
4000.0	44.61	13.6
4500.0	47.75	14.55
5000.0	50.52	15.4
5200.0	51.83	15.8
5500.0	53.14	16.2
5800.0	54.78	16.7
6000.0	55.8	17

Material Specifications

Braid Material	Tinned copper
Dielectric Material	Foam PE
Jacket Material	Non-halogenated, fire retardant polyolefin
Inner Conductor Material	Copper-clad aluminum wire
Shield Tape Material	Aluminum

Mechanical Specifications

CNT-300A-FR

Minimum Bend Radius, single Bend	22.352 mm 0.88 in
Tensile Strength	23 kg 50.706 lb
Bending Moment	0.5 N-m 4.425 in lb
Flat Plate Crush Strength	0.5 kg/mm 27.999 lb/in

Environmental Specifications

Installation temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Operating Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Storage Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
EN50575 CPR Cable EuroClass Fire Performance	Dca
EN50575 CPR Cable EuroClass Smoke Rating	s2
EN50575 CPR Cable EuroClass Droplets Rating	d2
Smoke Index Test Method	IEC 61034
Toxicity Index Test Method	IEC 60754-2

Packaging and Weights

Cable weight	0.07 kg/m 0.047 lb/ft
Packaging Type	Reel

Regulatory Compliance/Certifications

Agency	Classification
CENELEC	EN 50575 compliant, Declaration of Performance (DoP) available
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

