

C300F-NMNM-6M-X

CNT-300-FR CNT® Jumper with interface types N Male and N Male,
6 m



Product Classification

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

General Specifications

Attachment, Connector A	Factory attached
Attachment, Connector B	Field attachment
Body Style, Connector A	Straight
Body Style, Connector B	Straight
Cable Family	CNT-300
Interface, Connector A	N Male
Interface, Connector B	N Male
Specification Sheet Revision Level	A

Dimensions

Length	6 m 19.685 ft
Nominal Size	0.300 in

Electrical Specifications

DTF, Connector A	-28 dB
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Jumper Assembly Sample Label

C300F-NMNM-6M-X



Regulatory Compliance/Certifications

Agency

ISO 9001:2015



Classification

Designed, manufactured and/or distributed under this quality management system

Included Products

- | | | |
|-------------|---|---|
| 300APNM-C | - | Type N Male for CNT-300 braided cable |
| CNT-300-FR | - | CNT-300-FR, CNT® 50 Ohm Braided Coaxial Cable, black non-halogenated, fire retardant polyolefin jacket, Dca s2 d2 Compliant |
| CNT-300A-FR | - | CNT-300-FR, CNT® 50 Ohm Braided Coaxial Cable, black non-halogenated, fire retardant polyolefin jacket, Dca s2 d2 Compliant |

300APNM-C



Type N Male for CNT-300 braided cable

Product Classification

Product Type	Braided cable connector
Product Brand	CNT®

General Specifications

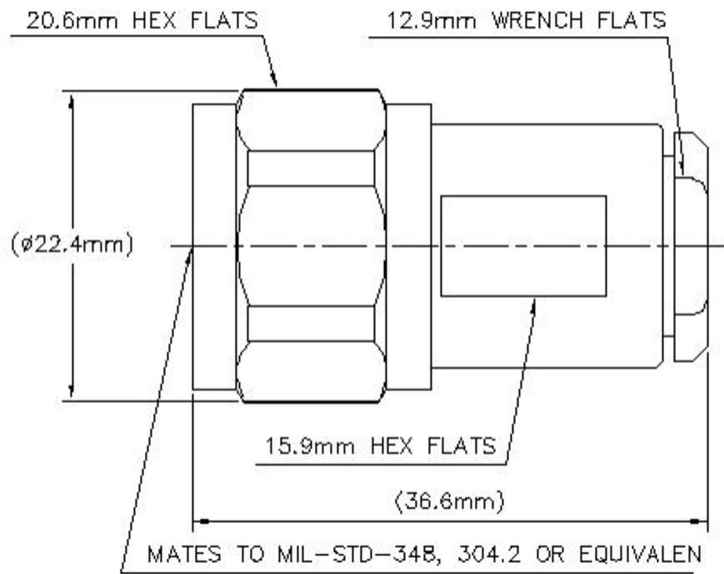
Body Style	Straight
Inner Contact Attachment Method	Captivated
Inner Contact Plating	Gold
Interface	N Male
Outer Contact Attachment Method	Clamp
Outer Contact Plating	Trimetal

Dimensions

Width	20.62 mm 0.812 in
Length	36.64 mm 1.443 in
Diameter	22.35 mm 0.88 in
Nominal Size	0.300 in

Outline Drawing

300APNM-C



Electrical Specifications

Insertion Loss, typical	0.05 dB
Average Power at Frequency	360.0 W @ 900 MHz
Cable Impedance	50 ohm
Connector Impedance	50 ohm
dc Test Voltage	2000 V
Inner Contact Resistance, maximum	1 mOhm
Insulation Resistance, minimum	5000 MOhm
Operating Frequency Band	0 – 6000 MHz
Outer Contact Resistance, maximum	0.25 mOhm
Peak Power, maximum	10 kW
RF Operating Voltage, maximum (vrms)	707 V

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
0–3000 MHz	1.07	30
3000–6000 MHz	1.23	20

Mechanical Specifications

Connector Retention Tensile Force	220 N 49.458 lbf
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300APNM-C

Connector Retention Torque	0.45 N-m 3.983 in lb
Coupling Nut Proof Torque	1.7 N-m 15.046 in lb
Coupling Nut Proof Torque Method	IEC 61169-16:9.3.6
Coupling Nut Retention Force	450 N 101.164 lbf
Coupling Nut Retention Force Method	IEC 61169-16:9.3.11
Interface Durability	500 cycles
Interface Durability Method	IEC 61169-16:9.5
Mechanical Shock Test Method	IEC 60068-2-27

Environmental Specifications

Operating Temperature	-40 °C to +85 °C (-40 °F to +185 °F)
Storage Temperature	-65 °C to +125 °C (-85 °F to +257 °F)
Attenuation, Ambient Temperature	20 °C 68 °F
Average Power, Ambient Temperature	40 °C 104 °F
Average Power, Inner Conductor Temperature	100 °C 212 °F
Climatic Sequence Test Method	IEC 60068-1
Corrosion Test Method	IEC 60068-2-11
Damp Heat Steady State Test Method	IEC 60068-2-3
Immersion Depth	1 m
Immersion Test Mating	Mated
Immersion Test Method	IEC 60529:2001, IP68
Thermal Shock Test Method	IEC 60068-2-14
Vibration Test Method	IEC 60068-2-6

Packaging and Weights

Weight, net	57.62 g 0.127 lb
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Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system



300APNM-C

* Footnotes

Insertion Loss, typical 0.05v-freq (GHz) (not applicable for elliptical waveguide)

Immersion Depth Immersion at specified depth for 24 hours

CNT-300-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	6.96 ohms/km 2.121 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-300-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
Shield Tape Material	Aluminum

Mechanical Specifications

CNT-300-FR

Minimum Bend Radius, single Bend	22.352 mm 0.88 in
Tensile Strength	55 kg 121.254 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	0.08 kg/m 0.054 lb/ft
Packaging Type	Reel

Regulatory Compliance/Certifications

Agency	Classification
CENELEC	EN 50575 compliant, Declaration of Performance (DoP) available
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
ROHS	Compliant



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

