#### CNT-400 CNT® Jumper with interface type N Male, 6 m



#### **Product Classification**

**Product Type** Braided cable assembly

**Product Brand CNT® Product Series** CNT-400

#### General Specifications

**Attachment, Connector A** Field attachment

**Body Style, Connector A** Straight CNT-400 **Cable Family** N Male

Interface, Connector A

Sold separately

**Specification Sheet Revision Level** 

#### Dimensions

Interface, Connector B

Length 6 m | 19.685 ft

**Nominal Size** 0.400 in

#### VSWR/Return Loss

**Frequency Band VSWR** Return Loss (dB)

700-3000 MHz 1.433 14.99

## Jumper Assembly Sample Label





### Regulatory Compliance/Certifications

Agency Classification

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

#### Included Products

400APNM-CS8 - Type N Male for CNT-400 braided cable. Not available in North America.

400PNM-CS8 – Type N Male for CNT-400 braided cable

CNT-400 - CNT-400, CNT® 50 Ohm Braided Coaxial Cable, variable, black PE jacket

CNT-400-SFR - CNT-400-SFR, C CNT® 50 Ohm Braided Coaxial Cable, black non-halogenated, fire retardant

polyolefin jacket, B2ca S1a d0 a1 Compliant

CNT-400-W - CNT-400-W, CNT® 50 Ohm Braided Coaxial Cable, variable, white PE jacket





Type N Male for CNT-400 braided cable. Not available in North America.

#### **Product Classification**

Regional Availability

China | EMEA | Europe | Latin America

Product Type Braided cable connector

Product Brand CNT® | ConQuest® | QR®

Ordering Note ANDREW® standard product in Asia Pacific | ANDREW® standard product

in Europe, the Middle East, and Africa

#### General Specifications

Body Style Straight

Inner Contact Attachment Method Captivated

Inner Contact Plating Silver

**Interface** N Male

Outer Contact Attachment Method Crimp

Outer Contact Plating Trimetal

#### Dimensions

 Width
 20.25 mm | 0.797 in

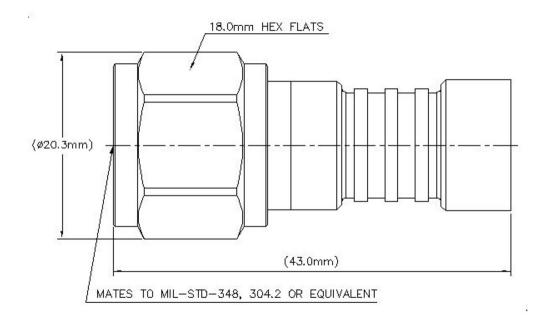
 Length
 43 mm | 1.693 in

 Diameter
 20.25 mm | 0.797 in

Nominal Size 0.405 in

## Outline Drawing





## **Electrical Specifications**

Insertion Loss, typical 0.05 dB **Cable Impedance** 50 ohm **Connector Impedance** 50 ohm 2500 V dc Test Voltage Inner Contact Resistance, maximum 1 m0hm Insulation Resistance, minimum 5000 MOhm 0 - 6000 MHz **Operating Frequency Band Outer Contact Resistance, maximum** 0.25 m0hm Peak Power, maximum 10 kW RF Operating Voltage, maximum (vrms) 707 V

### VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
0-3000 MHz	1.036	35.05
3000-6000 MHz	1.152	23.02

## Mechanical Specifications

Connector Retention Tensile Force330 N | 74.187 lbfConnector Retention Torque0.56 N-m | 4.956 in lb

ANDREW® an Amphenol company

Coupling Nut Proof Torque1.7 N-m | 15.046 in lbCoupling Nut Proof Torque MethodIEC 61169-16:9.3.6Coupling Nut Retention Force450 N | 101.164 lbf

**Coupling Nut Retention Force Method** IEC 61169-16:9.3.11

Interface Durability 500 cycles

Interface Durability MethodIEC 61169-16:9.5Mechanical Shock Test MethodIEC 60068-2-27

### **Environmental Specifications**

Operating Temperature  $-40 \,^{\circ}\text{C}$  to  $+85 \,^{\circ}\text{C}$  (-40  $^{\circ}\text{F}$  to  $+185 \,^{\circ}\text{F}$ )

Storage Temperature  $-65 \,^{\circ}\text{C}$  to  $+125 \,^{\circ}\text{C}$  (-85  $^{\circ}\text{F}$  to  $+257 \,^{\circ}\text{F}$ )

Attenuation, Ambient Temperature $20 \, ^{\circ}\text{C}$  |  $68 \, ^{\circ}\text{F}$ Average Power, Ambient Temperature $40 \, ^{\circ}\text{C}$  |  $104 \, ^{\circ}\text{F}$ Average Power, Inner Conductor Temperature $100 \, ^{\circ}\text{C}$  |  $212 \, ^{\circ}\text{F}$ 

Climatic Sequence Test MethodIEC 60068-1Corrosion Test MethodIEC 60068-2-11Damp Heat Steady State Test MethodIEC 60068-2-3

Immersion Depth1 mImmersion Test MatingMated

Immersion Test Method IEC 60529:2001, IP68

Thermal Shock Test MethodIEC 60068-2-14Vibration Test MethodIEC 60068-2-6

Packaging and Weights

Weight, net  $32.42 \text{ g} \mid 0.071 \text{ lb}$ 

## Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on www.andrew.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant





#### \* Footnotes

**Insertion Loss, typical** 0.05√ freq (GHz) (not applicable for elliptical waveguide)

**Immersion Depth** Immersion at specified depth for 24 hours





### Type N Male for CNT-400 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 Silver

**Interface** N Male

Outer Contact Attachment Method Crimp

Outer Contact Plating Trimetal

**Dimensions** 

**Width** 22.35 mm | 0.88 in

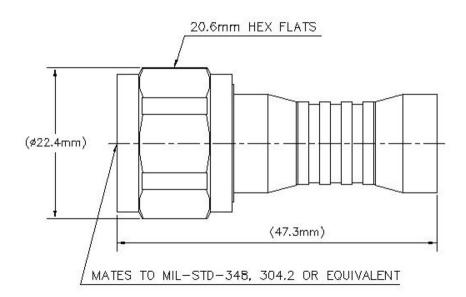
**Length** 47.3 mm | 1.862 in

**Diameter** 22.35 mm | 0.88 in

Nominal Size 0.405 in

Outline Drawing





## **Electrical Specifications**

Insertion Loss, typical 0.05 dB **Cable Impedance** 50 ohm **Connector Impedance** 50 ohm 2500 V dc Test Voltage Inner Contact Resistance, maximum 1 m0hm Insulation Resistance, minimum 5000 MOhm 0 - 6000 MHz **Operating Frequency Band Outer Contact Resistance, maximum** 0.25 m0hm Peak Power, maximum 10 kW RF Operating Voltage, maximum (vrms) 707 V

### VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
0-3000 MHz	1.065	30.05
3000-6000 MHz	1.119	25.02

## Mechanical Specifications

Connector Retention Tensile Force330 N | 74.187 lbfConnector Retention Torque0.56 N-m | 4.956 in lb

ANDREW® an Amphenol company

**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**  $-40 \,^{\circ}\text{C} \text{ to } +85 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F to } +185 \,^{\circ}\text{F})$ 

**Storage Temperature**  $-65 \,^{\circ}\text{C}$  to  $+125 \,^{\circ}\text{C}$  (-85  $^{\circ}\text{F}$  to  $+257 \,^{\circ}\text{F}$ )

**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** 42.68 g | 0.094 lb

## Regulatory Compliance/Certifications

#### Agency Classification

CHINA-ROHS Below maximum concentration value

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

REACH-SVHC Compliant as per SVHC revision on www.andrew.com/ProductCompliance

ROHS Compliant UK-ROHS Compliant





#### \* Footnotes

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

**Immersion Depth** Immersion at specified depth for 24 hours





CNT-400, CNT® 50 Ohm Braided Coaxial Cable, variable, black PE jacket

#### **Product Classification**

Product Type Braided coaxial cable

Product Brand CNT®
Product Series CNT-400

#### General Specifications

Braid Coverage 90 %

Cable Type CNT-400

Jacket Color Black

#### Dimensions

 Diameter Over Dielectric
 7.24 mm | 0.285 in

 Diameter Over Jacket
 10.29 mm | 0.405 in

 Diameter Over Tape
 7.391 mm | 0.291 in

 Inner Conductor OD
 2.74 mm | 0.108 in

 Outer Conductor OD
 8.08 mm | 0.318 in

Nominal Size 0.400 in

#### **Electrical Specifications**

Cable Impedance 50 ohm

 $\textbf{Capacitance} \hspace{1.5cm} 78 \text{ pF/m} \hspace{0.1cm} | \hspace{0.1cm} 23.774 \text{ pF/ft}$ 

dc Resistance, Inner Conductor4.69 ohms/km | 1.43 ohms/kftdc Resistance, Outer Conductor5.61 ohms/km | 1.71 ohms/kft

dc Test Voltage 2500 V

Jacket Spark Test Voltage (rms) 4000 V

**Maximum Frequency** 16.2 GHz

Operating Frequency Band 30 - 6000 MHz

Peak Power 16 kW



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# CNT-400

Shielding Effectiveness 90 dB Velocity 85 %

#### Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)
30.0	2.49	0.76
50.0	3.18	0.97
150.0	4.92	1.5
220.0	6.23	1.9
450.0	8.86	2.7
900.0	12.8	3.9
1500.0	16.7	5.1
1800.0	18.4	5.6
2000.0	19.4	5.9
2400.0	21.65	6.6
2500.0	22	6.7
3000.0	24.6	7.5
4000.0	28.87	8.8
4500.0	30.84	9.4
5000.0	32.81	10
5200.0	33.46	10.2
5500.0	34.78	10.6
5800.0	35.76	10.9
6000.0	36.42	11.1

## Material Specifications

Braid MaterialTinned copperDielectric MaterialFoam PE

**Jacket Material** Non-halogenated PE

Inner Conductor Material Copper-clad aluminum wire

Shield Tape Material Aluminum

Mechanical Specifications

Minimum Bend Radius, single Bend25.4 mm | 1 inTensile Strength73 kg | 160.937 lb



## CNT-400

 Bending Moment
 0.7 N-m | 6.196 in lb

 Flat Plate Crush Strength
 0.7 kg/mm | 39.198 lb/in

## **Environmental Specifications**

Installation temperature  $-40 \,^{\circ}\text{C}$  to  $+85 \,^{\circ}\text{C}$  (-40  $^{\circ}\text{F}$  to  $+185 \,^{\circ}\text{F}$ )

Operating Temperature  $-40 \,^{\circ}\text{C}$  to  $+85 \,^{\circ}\text{C}$  (-40  $^{\circ}\text{F}$  to  $+185 \,^{\circ}\text{F}$ )

Storage Temperature  $-70 \,^{\circ}\text{C}$  to  $+85 \,^{\circ}\text{C}$  (-94  $^{\circ}\text{F}$  to  $+185 \,^{\circ}\text{F}$ )

Packaging and Weights

**Cable weight** 0.1 kg/m | 0.067 lb/ft

Compliant

## Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on www.andrew.com/ProductCompliance
ROHS	Compliant



**UK-ROHS** 

# CNT-400-SFR



CNT-400-SFR, C CNT® 50 Ohm Braided Coaxial Cable, black non-halogenated, fire retardant polyolefin jacket, B2ca S1a d0 a1 Compliant

#### Product Classification

Product Type Braided coaxial cable

Product Brand CNT®

Product Series CNT-400

General Specifications

Braid Coverage 90 %
Cable Type CNT-400
Jacket Color Black

**Dimensions** 

 Diameter Over Dielectric
 7.24 mm | 0.285 in

 Diameter Over Jacket
 10.29 mm | 0.405 in

 Diameter Over Tape
 7.391 mm | 0.291 in

 Inner Conductor OD
 2.74 mm | 0.108 in

 Outer Conductor OD
 8.08 mm | 0.318 in

Nominal Size 0.400 in

**Electrical Specifications** 

Cable Impedance 50 ohm

 $\textbf{Capacitance} \hspace{1.5cm} 78 \text{ pF/m} \hspace{.1cm} | \hspace{.1cm} 23.774 \text{ pF/ft}$ 

dc Resistance, Inner Conductor4.49 ohms/km | 1.369 ohms/kftdc Resistance, Outer Conductor5.61 ohms/km | 1.71 ohms/kft

dc Test Voltage2500 VJacket Spark Test Voltage (rms)4000 VMaximum Frequency16.2 GHz

**Operating Frequency Band** 30 – 6000 MHz

Peak Power 16 kW



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# CNT-400-SFR

Shielding Effectiveness 90 dB Velocity 85 %

#### Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)
30.0	2.49	0.76
50.0	3.18	0.97
150.0	4.92	1.5
220.0	6.23	1.9
450.0	8.86	2.7
900.0	12.8	3.9
1500.0	16.7	5.1
1800.0	18.4	5.6
2000.0	19.4	5.9
2400.0	21.65	6.6
2500.0	22	6.7
3000.0	24.6	7.5
4000.0	28.87	8.8
4500.0	30.84	9.4
5000.0	32.81	10
5200.0	33.46	10.2
5500.0	34.78	10.6
5800.0	35.76	10.9
6000.0	36.42	11.1

## 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

Minimum Bend Radius, single Bend25.4 mm | 1 inTensile Strength73 kg | 160.937 lb



# CNT-400-SFR

**Bending Moment** 0.7 N-m | 6.196 in lb

Flat Plate Crush Strength 0.7 kg/mm | 39.198 lb/in

## **Environmental Specifications**

Installation temperature  $-40 \,^{\circ}\text{C}$  to  $+60 \,^{\circ}\text{C}$  (-40  $^{\circ}\text{F}$  to  $+140 \,^{\circ}\text{F}$ )

Operating Temperature  $-40 \,^{\circ}\text{C}$  to  $+60 \,^{\circ}\text{C}$  (-40  $^{\circ}\text{F}$  to  $+140 \,^{\circ}\text{F}$ )

**Storage Temperature**  $-40 \,^{\circ}\text{C} \text{ to } +60 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F to } +140 \,^{\circ}\text{F})$ 

EN50575 CPR Cable EuroClass Fire PerformanceB2caEN50575 CPR Cable EuroClass Smoke Ratings1aEN50575 CPR Cable EuroClass Droplets Ratingd0EN50575 CPR Cable EuroClass Acidity Ratinga1

Smoke Index Test Method IEC 61034

Toxicity Index Test Method IEC 60754-2

Packaging and Weights

**Cable weight** 0.1 kg/m | 0.067 lb/ft

### 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

CENELEC



CNT-400-W, CNT® 50 Ohm Braided Coaxial Cable, variable, white PE jacket



#### **Product Classification**

Product Type Braided coaxial cable

Product Brand CNT®
Product Series CNT-400

#### General Specifications

Braid Coverage 90 %

Cable Type CNT-400

Jacket Color White

#### **Dimensions**

 Diameter Over Dielectric
 7.24 mm | 0.285 in

 Diameter Over Jacket
 10.29 mm | 0.405 in

 Diameter Over Tape
 7.391 mm | 0.291 in

 Inner Conductor OD
 2.74 mm | 0.108 in

 Outer Conductor OD
 8.08 mm | 0.318 in

Nominal Size 0.400 in

### **Electrical Specifications**

Cable Impedance 50 ohm

**Capacitance** 78 pF/m | 23.774 pF/ft

dc Resistance, Inner Conductor4.69 ohms/km | 1.43 ohms/kftdc Resistance, Outer Conductor5.61 ohms/km | 1.71 ohms/kft

dc Test Voltage 2500 VJacket Spark Test Voltage (rms) 4000 V



# CNT-400-W

Maximum Frequency 16.2 GHz

Operating Frequency Band 30 - 6000 MHz

Peak Power16 kWShielding Effectiveness90 dBVelocity85 %

#### Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)
30.0	2.49	0.76
50.0	3.18	0.97
150.0	4.92	1.5
220.0	6.23	1.9
450.0	8.86	2.7
900.0	12.8	3.9
1500.0	16.7	5.1
1800.0	18.4	5.6
2000.0	19.4	5.9
2400.0	21.65	6.6
2500.0	22	6.7
3000.0	24.6	7.5
4000.0	28.87	8.8
4500.0	30.84	9.4
5000.0	32.81	10
5200.0	33.46	10.2
5500.0	34.78	10.6
5800.0	35.76	10.9
6000.0	36.42	11.1

## Material Specifications

Braid Material Tinned copper
Dielectric Material Foam PE

Jacket Material Non-halogenated PE

Inner Conductor Material Copper-clad aluminum wire

Shield Tape Material Aluminum



# CNT-400-W

## Mechanical Specifications

Minimum Bend Radius, single Bend25.4 mm | 1 inTensile Strength73 kg | 160.937 lbBending Moment0.7 N-m | 6.196 in lb

Flat Plate Crush Strength 0.7 kg/mm | 39.198 lb/in

### **Environmental Specifications**

Installation temperature-40 °C to +85 °C (-40 °F to +185 °F)Operating Temperature-40 °C to +85 °C (-40 °F to +185 °F)Storage Temperature-70 °C to +85 °C (-94 °F to +185 °F)

Packaging and Weights

**Cable weight** 0.1 kg/m | 0.067 lb/ft

### Regulatory Compliance/Certifications

Agency Classification

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