# C400F-TMTM-5M

CNT-400-FR CNT® Jumper with interface types TNC Male and TNC

Male, 5 m

#### **Product Classification**

**Product Type** Braided cable assembly

Product Brand CNT®
Product Series CNT-400

### General Specifications

Attachment, Connector A Factory attached

Attachment, Connector B Factory attached

Body Style, Connector A Straight
Body Style, Connector B Straight
Cable Family CNT-400
Interface, Connector A TNC Male
Interface, Connector B TNC Male

**Specification Sheet Revision Level** A

#### **Dimensions**

**Length** 5 m | 16.404 ft

Nominal Size 0.400 in

#### VSWR/Return Loss

 Frequency Band
 VSWR
 Return Loss (dB)

 700–2000 MHz
 1.288
 18

 2000–3000 MHz
 1.433
 15

## Jumper Assembly Sample Label





#### Included Products

400BPTM-C – TNC Male for CNT-400 braided cable

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

polyolefin jacket, Dca s2 d2 Compliant



#### TNC Male for CNT-400 braided cable

#### **Product Classification**

 Product Type
 Braided cable connector

 Product Brand
 CNT® | ConQuest®

## General Specifications

Body StyleStraightInner Contact Attachment MethodCaptivatedInner Contact PlatingGold

InterfaceTNC MaleOuter Contact Attachment MethodClampOuter Contact PlatingTrimetal

#### **Dimensions**

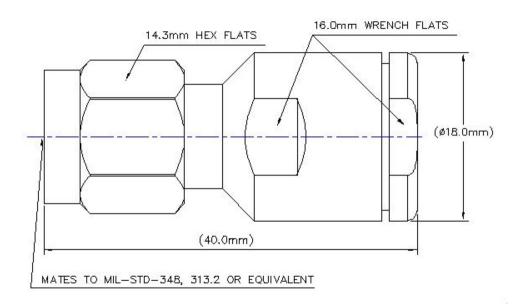
 Length
 41.24 mm | 1.624 in

 Diameter
 18 mm | 0.709 in

Nominal Size 0.405 in



### Outline Drawing



### **Electrical Specifications**

0.05 dB Insertion Loss, typical **Cable Impedance** 50 ohm **Connector Impedance** 50 ohm dc Test Voltage 1500 V Inner Contact Resistance, maximum 1.5 m0hm Insulation Resistance, minimum 5000 MOhm 0 - 6000 MHz **Operating Frequency Band** 0.4 m0hm **Outer Contact Resistance, maximum** Peak Power, maximum 5 kW RF Operating Voltage, maximum (vrms) 500 V

### VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
0-3000 MHz	1.046	32.96
3000-6000 MHz	1.18	22

Mechanical Specifications



**Connector Retention Tensile Force** 330 N | 74.187 lbf

**Connector Retention Torque** 0.56 N-m | 4.956 in lb

Coupling Nut Proof Torque 1.7 N-m | 15.046 in lb

**Coupling Nut Proof Torque Method** IEC 61169-17:9.3.6

Coupling Nut Retention Force 445 N | 100.04 lbf

**Coupling Nut Retention Force Method** IEC 61169-17:9.3.11

Interface Durability 500 cycles

**Interface Durability Method** IEC 61169-17:9.5

Mechanical Shock Test Method IEC 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 °C to +125 °C (-85 °F to +257 °F)

**Attenuation, Ambient Temperature** 20 °C | 68 °F

Average Power, Ambient Temperature  $40 \, ^{\circ}\text{C} \, \mid \, 104 \, ^{\circ}\text{F}$ 

**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** 41.85 g | 0.092 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-FR



CNT-400-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-400

General Specifications

Braid Coverage90 %Cable TypeCNT-400Jacket ColorBlack

**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 Impedance50 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



# CNT-400-FR

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-FR

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

**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 PerformanceDcaEN50575 CPR Cable EuroClass Smoke Ratings2EN50575 CPR Cable EuroClass Droplets Ratingd2

Fire Retardancy Test Method UL VW1/CATVX

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
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



