## C400F-TMTM-5M

CNT-400-FR CNT® Jumper with interface types TNC Male and TNC Male,  $5\,\mbox{m}$ 



### **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



# C400F-TMTM-5M



### 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**

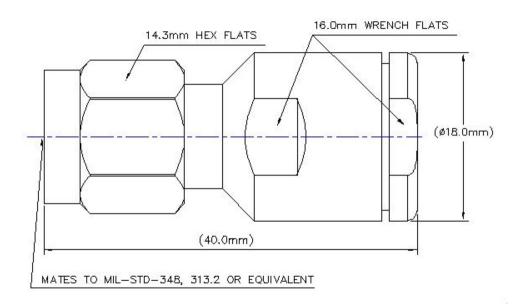
 Length
 41.24 mm | 1.624 in

 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 1.5 m0hm Inner Contact Resistance, maximum 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

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

**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 °C to +85 °C (-40 °F to +185 °F)

**Storage Temperature** -65 °C to +125 °C (-85 °F to +257 °F)

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

**Average Power, Ambient Temperature** 40 °C | 104 °F

100 °C | 212 °F **Average Power, Inner Conductor Temperature** 

**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	

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

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

**COMMSCOPE®** 

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 Impedance** 50 ohm

**Capacitance** 78 pF/m | 23.774 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 Voltage 2500 V

Jacket Spark Test Voltage (rms) 4000 V

COMMSC PE°

# CNT-400-FR

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, fire retardant polyolefin

Inner Conductor Material Copper-clad aluminum wire

Shield Tape Material Aluminum



# CNT-400-FR

### Mechanical Specifications

Minimum Bend Radius, single Bend 25.4 mm | 1 in

**Tensile Strength** 73 kg | 160.937 lb

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

EN50575 CPR Cable EuroClass Fire Performance Dca

EN50575 CPR Cable EuroClass Smoke Rating \$2

EN50575 CPR Cable EuroClass Droplets Rating d2

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.commscope.com/ProductCompliance

ROHS Compliant



