# C400-NMNF-1M

CNT-400 CNT® Jumper with interface types N Male and N Female, 1 m



#### **Product Classification**

**Product Type** Braided cable assembly

Product Brand CNT®
Product Series CNT-400

## General Specifications

Body Style, Connector A Straight

Body Style, Connector B Straight

Cable Family CNT-400

Interface, Connector A N Male

Interface, Connector B N Female

Specification Sheet Revision Level A

#### **Dimensions**

**Length** 1 m | 3.281 ft

Nominal Size 0.400 in

### VSWR/Return Loss

 Frequency Band
 VSWR
 Return Loss (dB)

 700-2000 MHz
 1.222
 20.01

 2000-3000 MHz
 1.288
 18

Jumper Assembly Sample Label



# C400-NMNF-1M



## Regulatory Compliance/Certifications

#### Agency Classification

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



#### Included Products

400BPNF-C – Type N Female for CNT-400 braided cable 400BPNM-C – Type N Male for CNT-400 braided cable

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

jacket





## Type N Female for CNT-400 braided cable

#### **Product Classification**

 Product Type
 Braided cable connector

 Product Brand
 CNT® | ConQuest®

## General Specifications

Body StyleStraightInner Contact Attachment MethodCaptivatedInner Contact PlatingSilverInterfaceN Female

 Outer Contact Attachment Method
 Clamp

 Outer Contact Plating
 Trimetal

#### **Dimensions**

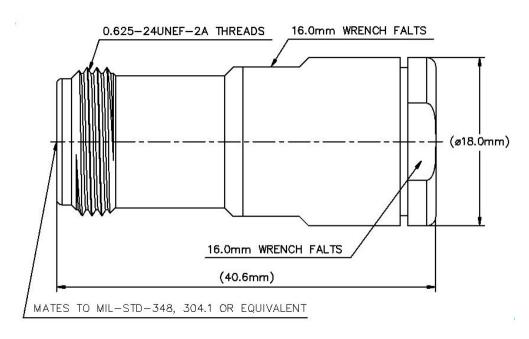
 Width
 18 mm | 0.709 in

 Length
 40.55 mm | 1.596 in

 Diameter
 18 mm | 0.709 in

Nominal Size 0.405 in

## Outline Drawing



## **Electrical Specifications**

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

### VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
0-3000 MHz	1.05	32.26
3000-6000 MHz	1.12	24.95

Mechanical Specifications

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

COMMSC PE°

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

Interface Durability 500 cycles

Interface Durability Method IEC 61169-16:9.5

Mechanical Shock Test Method IEC 60068-2-27

### **Environmental Specifications**

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

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

Attenuation, Ambient Temperature  $20 \, ^{\circ}\text{C} \mid 68 \, ^{\circ}\text{F}$ 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** 44.58 g | 0.098 lb

### Regulatory Compliance/Certifications

#### Agency Classification

CHINA-ROHS Above maximum concentration value

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

ROHS Compliant/Exempted



#### \* Footnotes

**Insertion Loss, typical** 0.05v<sup>-</sup>freq (GHz) (not applicable for elliptical waveguide)



**Immersion Depth** 

Immersion at specified depth for 24 hours



# 400BPNM-C



## Type N 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 PlatingSilverInterfaceN Male

 Outer Contact Attachment Method
 Clamp

 Outer Contact Plating
 Trimetal

#### **Dimensions**

 Width
 20.25 mm | 0.797 in

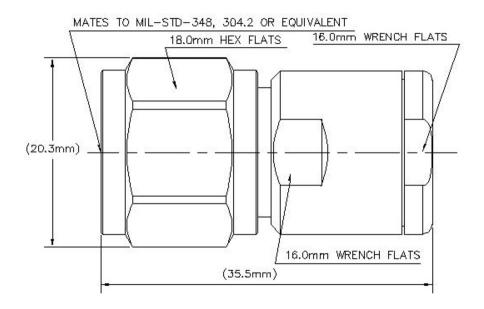
 Length
 35.48 mm | 1.397 in

 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

## VSWR/Return Loss

RF Operating Voltage, maximum (vrms)

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

707 V

## Mechanical Specifications

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

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## 400BPNM-C

**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 °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** 37.55 g | 0.083 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.commscope.com/ProductCompliance

ROHS Compliant



# 400BPNM-C



## \* Footnotes

**Insertion Loss, typical** 0.05v<sup>-</sup>freq (GHz) (not applicable for elliptical waveguide)

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







#### **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

**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

 $\begin{tabular}{lll} & dc \ Test \ Voltage & 2500 \ V \\ & \ Jacket \ Spark \ Test \ Voltage \ (rms) & 4000 \ V \\ \end{tabular}$ 

**COMMSCOPE®** 

# CNT-400

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

### 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 °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

cation

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

