

# C400-NMNF-1M5

---

CNT-400 CNT® Jumper with interface types N Male and N Female, 1.5



## Product Classification

<b>Product Type</b>	Braided cable assembly
<b>Product Brand</b>	CNT®
<b>Product Series</b>	CNT-400

## General Specifications

<b>Body Style, Connector A</b>	Straight
<b>Body Style, Connector B</b>	Straight
<b>Cable Family</b>	CNT-400
<b>Interface, Connector A</b>	N Male
<b>Interface, Connector B</b>	N Female
<b>Specification Sheet Revision Level</b>	A

## Dimensions

<b>Length</b>	1.5 m   4.921 ft
<b>Nominal Size</b>	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-1M5



## 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

# 400BPNF-C

---



Type N Female for CNT-400 braided cable

## Product Classification

<b>Product Type</b>	Braided cable connector
<b>Product Brand</b>	CNT®   ConQuest®

## General Specifications

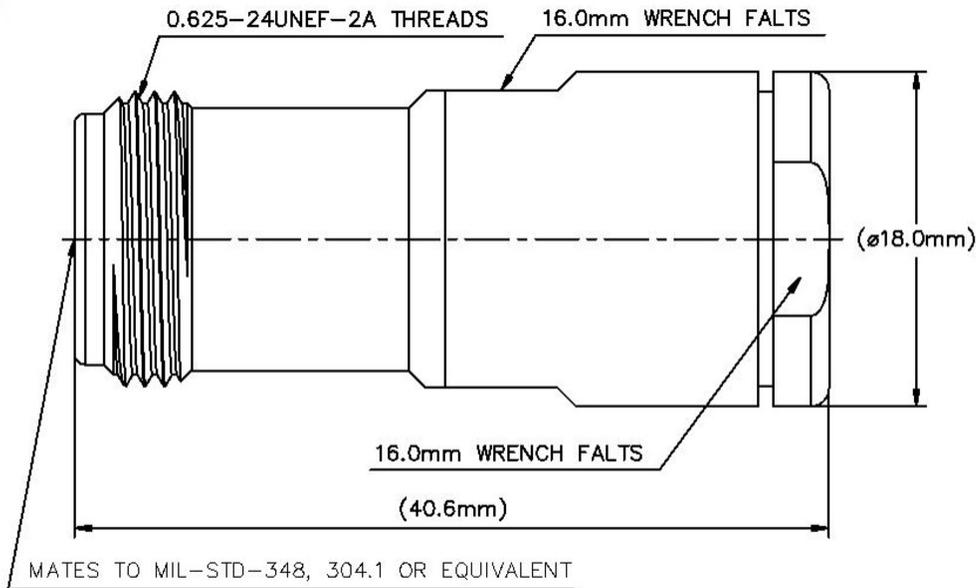
<b>Body Style</b>	Straight
<b>Inner Contact Attachment Method</b>	Captivated
<b>Inner Contact Plating</b>	Silver
<b>Interface</b>	N Female
<b>Outer Contact Attachment Method</b>	Clamp
<b>Outer Contact Plating</b>	Trimetal

## Dimensions

<b>Width</b>	18 mm   0.709 in
<b>Length</b>	40.55 mm   1.596 in
<b>Diameter</b>	18 mm   0.709 in
<b>Nominal Size</b>	0.405 in

# 400BPNF-C

## Outline Drawing



## Electrical Specifications

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

## VSWR/Return Loss

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

## Mechanical Specifications

<b>Connector Retention Tensile Force</b>	330 N   74.187 lbf
--	--------------------

# 400BPNF-C

---

<b>Connector Retention Torque</b>	0.56 N-m   4.956 in lb
<b>Interface Durability</b>	500 cycles
<b>Interface Durability Method</b>	IEC 61169-16:9.5
<b>Mechanical Shock Test Method</b>	IEC 60068-2-27

## Environmental Specifications

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

## Packaging and Weights

<b>Weight, net</b>	44.58 g   0.098 lb
--------------------	--------------------

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
CHINA-ROHS	Above maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
ROHS	Compliant/Exempted
UK-ROHS	Compliant/Exempted



## \* Footnotes

<b>Insertion Loss, typical</b>	0.05√freq (GHz) (not applicable for elliptical waveguide)
--------------------------------	---

# 400BPNF-C

---

**Immersion Depth**

Immersion at specified depth for 24 hours

# 400BPNM-C

---



Type N Male for CNT-400 braided cable

## Product Classification

<b>Product Type</b>	Braided cable connector
<b>Product Brand</b>	CNT®   ConQuest®

## General Specifications

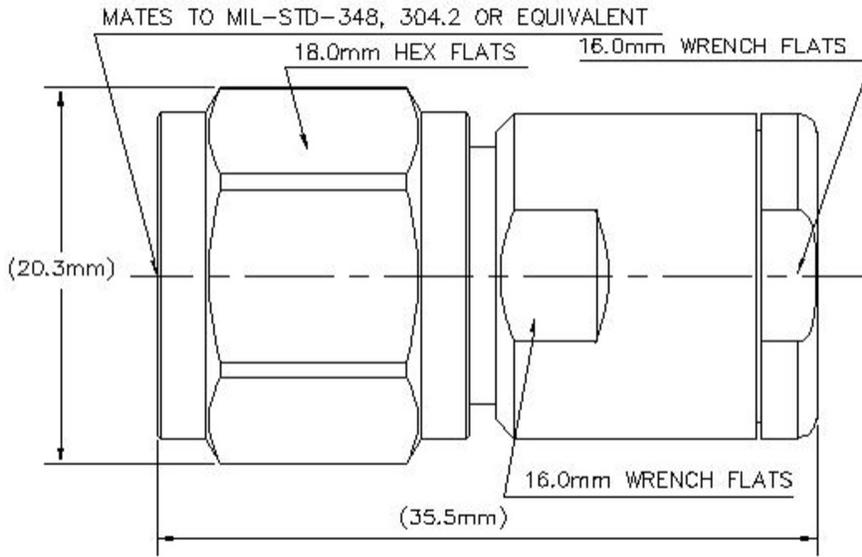
<b>Body Style</b>	Straight
<b>Inner Contact Attachment Method</b>	Captivated
<b>Inner Contact Plating</b>	Silver
<b>Interface</b>	N Male
<b>Outer Contact Attachment Method</b>	Clamp
<b>Outer Contact Plating</b>	Trimetal

## Dimensions

<b>Width</b>	20.25 mm   0.797 in
<b>Length</b>	35.48 mm   1.397 in
<b>Diameter</b>	20.25 mm   0.797 in
<b>Nominal Size</b>	0.405 in

## Outline Drawing

# 400BPNM-C



## Electrical Specifications

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

<b>Connector Retention Tensile Force</b>	330 N   74.187 lbf
<b>Connector Retention Torque</b>	0.56 N-m   4.956 in lb

# 400BPNM-C

---

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

## Environmental Specifications

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

## Packaging and Weights

<b>Weight, net</b>	37.55 g   0.083 lb
--------------------	--------------------

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
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 <a href="http://www.andrew.com/ProductCompliance">www.andrew.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant

# 400BPNM-C

---



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

## Product Classification

<b>Product Type</b>	Braided coaxial cable
<b>Product Brand</b>	CNT®
<b>Product Series</b>	CNT-400

## General Specifications

<b>Braid Coverage</b>	90 %
<b>Cable Type</b>	CNT-400
<b>Jacket Color</b>	Black

## Dimensions

<b>Diameter Over Dielectric</b>	7.24 mm   0.285 in
<b>Diameter Over Jacket</b>	10.29 mm   0.405 in
<b>Diameter Over Tape</b>	7.391 mm   0.291 in
<b>Inner Conductor OD</b>	2.74 mm   0.108 in
<b>Outer Conductor OD</b>	8.08 mm   0.318 in
<b>Nominal Size</b>	0.400 in

## Electrical Specifications

<b>Cable Impedance</b>	50 ohm
<b>Capacitance</b>	78 pF/m   23.774 pF/ft
<b>dc Resistance, Inner Conductor</b>	4.69 ohms/km   1.43 ohms/kft
<b>dc Resistance, Outer Conductor</b>	5.61 ohms/km   1.71 ohms/kft
<b>dc Test Voltage</b>	2500 V
<b>Jacket Spark Test Voltage (rms)</b>	4000 V
<b>Maximum Frequency</b>	16.2 GHz
<b>Operating Frequency Band</b>	30 – 6000 MHz
<b>Peak Power</b>	16 kW

# 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

<b>Braid Material</b>	Tinned copper
<b>Dielectric Material</b>	Foam PE
<b>Jacket Material</b>	Non-halogenated PE
<b>Inner Conductor Material</b>	Copper-clad aluminum wire
<b>Shield Tape Material</b>	Aluminum

## Mechanical Specifications

<b>Minimum Bend Radius, single Bend</b>	25.4 mm   1 in
<b>Tensile Strength</b>	73 kg   160.937 lb

# CNT-400

---

<b>Bending Moment</b>	0.7 N-m   6.196 in lb
<b>Flat Plate Crush Strength</b>	0.7 kg/mm   39.198 lb/in

## Environmental Specifications

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

## Packaging and Weights

<b>Cable weight</b>	0.1 kg/m   0.067 lb/ft
---------------------	------------------------

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
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 <a href="http://www.andrew.com/ProductCompliance">www.andrew.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant

