# C400-NMQMR-35

CNT-400 CNT  $\ensuremath{\mathbb{R}}$  Jumper with interface types N Male and QMA Male Right Angle, 10.67 m

14.99

## Product Classification

IP

Product Type		Braided cable assembly
Product Brand		CNT®
Product Series		CNT-400
General Specifications		
Body Style, Connector A		Straight
Body Style, Connector B		Right angle
Cable Family		CNT-400
Interface, Connector A		N Male
Interface, Connector B		QMA Male
Specification Sheet Revision Level		А
Dimensions		
Length		10.67 m   35.007 ft
Nominal Size		0.400 in
VSWR/Return Loss		
Frequency Band	VSWR	Return Loss (dB)

# **700–3000 MHz** 1.433

# Jumper Assembly Sample Label

Page 1 of 23



# C400-NMQMR-35



## Regulatory Compliance/Certifications

#### Agency

ROHS

#### Classification

CHINA-ROHS ISO 9001:2015 REACH-SVHC





#### Included Products

400APNM-C	<ul> <li>Type N Male for CNT-400 braided cable</li> </ul>	
400BPNM-C	<ul> <li>Type N Male for CNT-400 braided cable</li> </ul>	
400PQMR-CR	<ul> <li>QMA Male Right Angle for CNT-400 braided cable</li> </ul>	
CNT-400	<ul> <li>CNT-400, CNT® 50 Ohm Braided Coaxial Cable, variable, black PE</li> </ul>	jacket
CNT-400-SFR	<ul> <li>CNT-400-SFR, C CNT         50 Ohm Braided Coaxial Cable, black non-l polyolefin jacket, B2ca S1a d0 a1 Compliant     </li> </ul>	halogenated, fire retardant
CNT-400-W	<ul> <li>CNT-400-W, CNT</li></ul>	PE jacket

Page 2 of 23

©2022 CommScope, Inc. All rights reserved. All trademarks identified by ® or <sup>™</sup> are registered trademarks, respectively, of CommScope. All specifications are subject to change without notice. See www.commscope.com for the most current information. Revised: March 8, 2022

## **COMMSCOPE**<sup>®</sup>

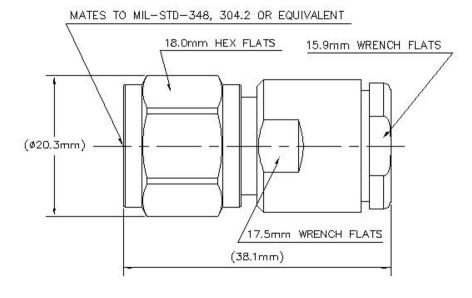
## Type N Male for CNT-400 braided cable

#### Product Classification

Product Type	Braided cable connector	
Product Brand	CNT®	
General Specifications		
Body Style	Straight	
Inner Contact Attachment Method	Captivated	
Inner Contact Plating	Gold	
Interface	N Male	
Outer Contact Attachment Method	Clamp	
Outer Contact Plating	Trimetal	
Dimensions		
Width	20.25 mm   0.797 in	
Length	38.22 mm   1.505 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
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
Peak Power, maximum	10 kW
RF Operating Voltage, maximum (vrms)	707 V

## VSWR/Return Loss

Frequency Band	VSWR		Return Loss (dB)
0–3000 MHz	1.046		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

Page 4 of 23



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 °C to +85 °C (-40 °F to +185 °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

47.08 g | 0.104 lb

## Regulatory Compliance/Certifications

#### Agency

ISO 9001:2015 REACH-SVHC ROHS

#### Classification

Designed, manufactured and/or distributed under this quality management system Compliant as per SVHC revision on www.commscope.com/ProductCompliance Compliant



Page 5 of 23



## \* Footnotes

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

Immersion Depth

Immersion at specified depth for 24 hours

Page 6 of 23





Product Classification

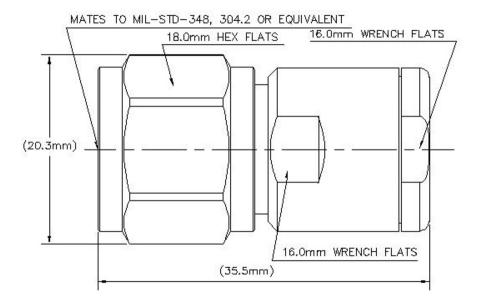
## Type N Male for CNT-400 braided cable

Product Type	Braided cable connector
Product Brand	CNT®   ConQuest®
General Specifications	
Body Style	Straight
Inner Contact Attachment Method	Captivated
Inner Contact Plating	Silver
Interface	N 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

Page 7 of 23





# 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
Peak Power, maximum	10 kW
RF Operating Voltage, maximum (vrms)	707 V

## VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)	
0–3000 MHz	1.046	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	

Page 8 of 23



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 °C to +85 °C (-40 °F to +185 °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

Page 9 of 23





# \* Footnotes

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

Immersion Depth

Immersion at specified depth for 24 hours

Page 10 of 23



# 400PQMR-CR



#### QMA Male Right Angle for CNT-400 braided cable

Braided cable connector

CNT®

0.405 in

Product Classification
------------------------

Product Type

**Product Brand** 

# General Specifications

Body Style	Right angle
Inner Contact Attachment Method	Solder
Inner Contact Plating	Gold
Interface	QMA Male
Outer Contact Attachment Method	Crimp
Outer Contact Plating	Trimetal
Pressurizable	No
Dimensions	
Height	33.5 mm   1.319 in
Width	15 mm   0.591 in
Length	29.03 mm   1.143 in

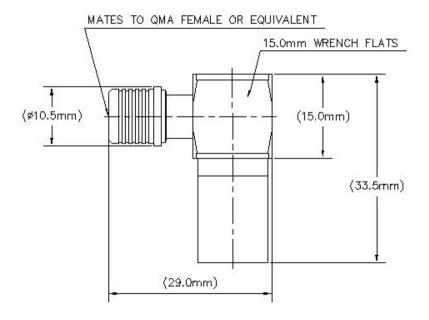
Nominal Size

# Outline Drawing

Page 11 of 23



# 400PQMR-CR



# **Electrical Specifications**

Insertion Loss, typical	0.05 dB
Average Power at Frequency	580.0 W @ 900 MHz
Cable Impedance	50 ohm
Connector Impedance	50 ohm
dc Test Voltage	1000 V
Inner Contact Resistance, maximum	3 m0hm
Insulation Resistance, minimum	5000 MOhm
Operating Frequency Band	0 – 6000 MHz
Outer Contact Resistance, maximum	2.5 m0hm
Peak Power, maximum	5 kW
RF Operating Voltage, maximum (vrms)	500 V

## VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
0–3000 MHz	1.065	30.05
3000-6000 MHz	1.082	28.1

## Mechanical Specifications

**Connector Retention Tensile Force** 

330 N | 74.187 lbf



# 400PQMR-CR

Connector Retention Torque	0.56 N-m   4.956 in lb   0.75 N-m   6.638 in lb	
Insertion Force 22 N   4.946 lbf		
Insertion Force Method	IEC 61169-15:9.3.5	
Interface Durability	100 cycles	
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)
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
Thermal Shock Test Method	IEC 60068-2-14
Vibration Test Method	IEC 60068-2-6
Water Jetting Test Mating	Mated
Water Jetting Test Method	IEC 60529:2001, IP65

## Packaging and Weights

Weight, net

39.14 g | 0.086 lb

## Regulatory Compliance/Certifications

#### Agency

CHINA-ROHS ISO 9001:2015 REACH-SVHC



#### Classification

Below maximum concentration value Designed, manufactured and/or distributed under this quality management system Compliant as per SVHC revision on www.commscope.com/ProductCompliance Compliant

# \* Footnotes

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

Page 13 of 23



Page 14 of 23



# CNT-400

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



### Product Classification

dc Test Voltage

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 Conductor	4.69 ohms/km   1.43 ohms/kft
dc Resistance, Outer Conductor	5.61 ohms/km   1.71 ohms/kft
	0500.1/

2500 V Jacket Spark Test Voltage (rms) 4000 V

Page 15 of 23



# CNT-400

Maximum Frequency	16.2 GHz
Operating Frequency Band	30 – 6000 MHz
Peak Power	16 kW
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 PE
Inner Conductor Material	Copper-clad aluminum wire
Shield Tape Material	Aluminum

Page 16 of 23



# 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

Aa	en	cv
лy	CII	C y

ROHS

#### Classification

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



Page 17 of 23



# CNT-400-SFR



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

#### Product Classification

dc Resistance, Outer Conductor

Jacket Spark Test Voltage (rms)

dc Test Voltage

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 Conductor	4.49 ohms/km   1.369 oh

78 pF/m | 23.774 pF/ft 4.49 ohms/km | 1.369 ohms/kft 5.61 ohms/km | 1.71 ohms/kft 2500 V

4000 V

Page 18 of 23



# CNT-400-SFR

Maximum Frequency	16.2 GHz
Operating Frequency Band	30 – 6000 MHz
Peak Power	16 kW
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

Page 19 of 23



# CNT-400-SFR

#### 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 +60 °C (-40 °F to +140 °F)
Operating Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Storage Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
EN50575 CPR Cable EuroClass Fire Performance	B2ca
EN50575 CPR Cable EuroClass Smoke Rating	s1a
EN50575 CPR Cable EuroClass Droplets Rating	d0
EN50575 CPR Cable EuroClass Acidity Rating	a1
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 ISO 9001:2015 EN 50575 compliant, Declaration of Performance (DoP) available Designed, manufactured and/or distributed under this quality management system



Page 20 of 23



1111

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



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 Conductor	4.69 ohms/km   1.43 ohms/kft
dc Resistance, Outer Conductor	5.61 ohms/km   1.71 ohms/kft
dc Test Voltage	2500 V

Jacket Spark Test Voltage (rms) 4000 V

Page 21 of 23



# CNT-400-W

Maximum Frequency	16.2 GHz
Operating Frequency Band	30 – 6000 MHz
Peak Power	16 kW
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 PE
Inner Conductor Material	Copper-clad aluminum wire
Shield Tape Material	Aluminum

Page 22 of 23



# CNT-400-W

## 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

#### Agency

#### Classification

ISO 9001:2015

Designed, manufactured and/or distributed under this quality management system



Page 23 of 23

