# C400-DMDF

#### **Base Product**

CNT-400 CNT® Jumper with interface types 7-16 DIN Male and 7-16 DIN Female, variable length

### Product Classification

Product Type		Braided cable assembly	
Product Brand		CNT®	
Product Series		CNT-400	
General Specifications			
Attachment, Connector B		Field attachment	
Body Style, Connector A		Straight	
Body Style, Connector B		Straight	
Cable Family		CNT-400	
Interface, Connector A		7-16 DIN Male	
Interface, Connector B		7-16 DIN Female	
Specification Sheet Revision Level		A	
Variable Length		For custom lengths contact 828-324-2200 or 1-800-982-1708 (toll free), or your local CommScope representative	
Dimensions			
Length		0 m   0 ft	
Nominal Size		0.400 in	
VSWR/Return Loss			
Frequency Band	VSWR	Return Loss (dB)	

14.99

# Jumper Assembly Sample Label

1.433

700-3000 MHz

Page 1 of 25



# C400-DMDF



### Regulatory Compliance/Certifications

#### Classification

ISO 9001:2015

Agency

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

### Included Products

400BPDM-C	-	7-16 DIN Male for CNT-400 braided cable
400BPDM-CR	-	7-16 DIN Male for CNT-400 and CNT-400-Flex braided cable
400PDF-C	-	7-16 DIN Female for CNT-400 braided cable
400PDM-C	-	7-16 DIN Male for CNT-400 braided cable
CNT-400	-	CNT-400, CNT® 50 Ohm Braided Coaxial Cable, variable, black PE jacket
CNT-400-SFR	-	CNT-400-SFR, C CNT® 50 Ohm Braided Coaxial Cable, black non-halogenated, fire retardant polyolefin jacket, B2ca S1a d0 a1 Compliant
CNT-400-W	-	CNT-400-W, CNT® 50 Ohm Braided Coaxial Cable, variable, white PE jacket

Page 2 of 25





### Product Classification

Product Type Product Brand General Specifications Body Style Inner Contact Attachment Method Inner Contact Plating Interface Outer Contact Attachment Method Outer Contact Plating

#### Dimensions

 Width
 35 mm | 1

 Length
 40.73 mm | 1

 Diameter
 35 mm | 1

 Nominal Size
 0.405 in

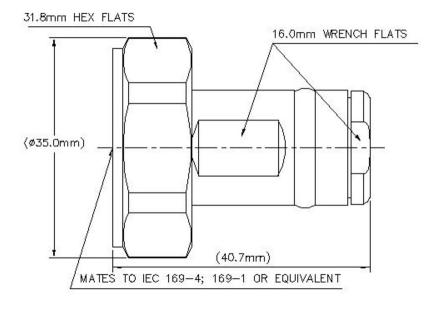
# Outline Drawing

#### 7-16 DIN Male for CNT-400 braided cable

Braided cable connector
CNT®
Ctuainht
Straight
Captivated
Silver
7-16 DIN Male
Clamp
Trimetal
35 mm   1.378 in
40.73 mm   1.604 in
35 mm   1.378 in
0.405 in

Page 3 of 25





# 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	2500 V
Inner Contact Resistance, maximum	1.5 mOhm
Insulation Resistance, minimum	10000 MOhm
Operating Frequency Band	0 – 6000 MHz
Outer Contact Resistance, maximum	0.4 mOhm
RF Operating Voltage, maximum (vrms)	894 V

# VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)	
0–3000 MHz	1.05	32.26	
3000-6000 MHz	1.119	25.01	
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 25

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COMMSCOPE®

Coupling Nut Proof Torque	35 N-m   309.776 in lb
Coupling Nut Proof Torque Method IEC 61169-4:9.3.6	
Coupling Nut Retention Force	1000 N   224.809 lbf
Coupling Nut Retention Force Method	IEC 61169-4:15.2.6
Interface Durability	500 cycles
Interface Durability Method	IEC 61169-4:17
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

44.58 g | 0.098 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
UK-ROHS	Compliant

Page 5 of 25





# \* Footnotes

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

**Immersion Depth** 

Immersion at specified depth for 24 hours

Page 6 of 25





#### 7-16 DIN Male for CNT-400 and CNT-400-Flex braided cable

Braided cable connector

CNT®

0.405 in

Due du et True e	
Product Type	

Product Brand

# General Specifications

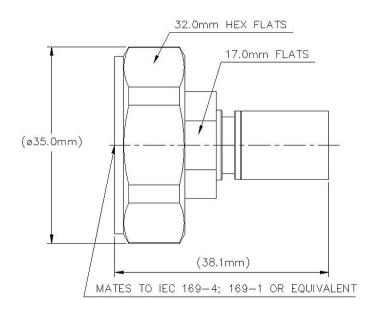
Body Style	Straight
Inner Contact Attachment Method	Solder
Inner Contact Plating	Silver
Interface	7-16 DIN Male
Outer Contact Attachment Method	Crimp
Outer Contact Plating	Trimetal
Dimensions	
Width	35 mm   1.378 in
Length	38.12 mm   1.501 in
Diameter	35 mm   1.378 in

# Outline Drawing

**Nominal Size** 

Page 7 of 25





# **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	2500 V
Inner Contact Resistance, maximum	1.5 mOhm
Insulation Resistance, minimum	10000 MOhm
Operating Frequency Band	0 – 6000 MHz
Outer Contact Resistance, maximum	0.4 mOhm
RF Operating Voltage, maximum (vrms)	894 V

# VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
0–3000 MHz	1.08	28.3
3000–6000 MHz	1.2	20.83

Page 8 of 25



#### 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	35 N-m   309.776 in lb	
Coupling Nut Proof Torque Method	IEC 61169-4:9.3.6	
Coupling Nut Retention Force	1000 N   224.809 lbf	
Coupling Nut Retention Force Method	IEC 61169-4:15.2.6	
Interface Durability	500 cycles	
Interface Durability Method	IEC 61169-4:17	
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

57.2 g | 0.126 lb

### Regulatory Compliance/Certifications

Classification

#### Agency

ISO 9001:2015

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

# \* Footnotes

Page 9 of 25

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

Page 10 of 25

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# 400PDF-C



### 7-16 DIN Female for CNT-400 braided cable

Braided cable connector

CNT® | ConQuest®

### Product Classification

Product Type Product Brand

# General Specifications

Body Style	Straight	
Inner Contact Attachment Method	Captivated	
Inner Contact Plating	Silver	
Interface	7-16 DIN Female	
Outer Contact Attachment Method	Clamp	
Outer Contact Plating	Trimetal	
Pressurizable	No	
Dimensions		
Width	27.3 mm   1.075 in	
Length	45.47 mm   1.79 in	
Diameter	27.3 mm   1.075 in	

# Outline Drawing

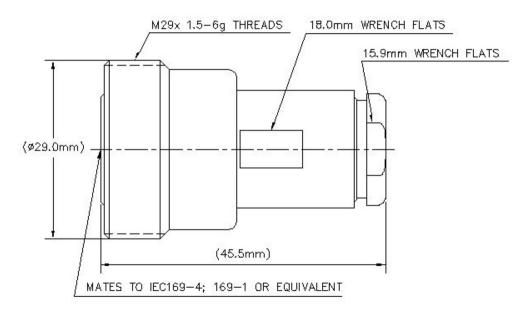
**Nominal Size** 

Page 11 of 25

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0.405 in





# **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	2500 V
Inner Contact Resistance, maximum	0.4 mOhm
Insulation Resistance, minimum	10000 MOhm
Operating Frequency Band	0 – 6000 MHz
Outer Contact Resistance, maximum	1.5 m0hm
Peak Power, maximum	16 kW
RF Operating Voltage, maximum (vrms)	894 V

# VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
0–3000 MHz	1.065	30.05
3000-6000 MHz	1.172	22.03

#### Mechanical Specifications

**Connector Retention Tensile Force** 

330 N | 74.187 lbf

Page 12 of 25



# 400PDF-C

Connector Retention Torque	0.56 N-m   4.956 in lb   0.75 N-m   6.638 in lb
Insertion Force	200 N   44.962 lbf
Insertion Force Method	IEC 61169-4:15.2.4
Interface Durability	500 cycles
Interface Durability Method	IEC 61169-4:17
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

102 g | 0.225 lb

# Regulatory Compliance/Certifications

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

# \* Footnotes

Insertion Loss, typical	$0.05\sqrt{-}$ freq (GHz) (not applicable for elliptical waveguide)
Immersion Depth	Immersion at specified depth for 24 hours

Page 13 of 25



#### 7-16 DIN Male for CNT-400 braided cable

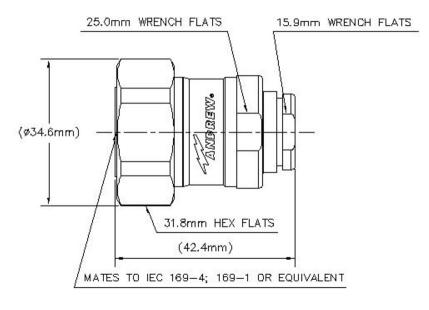
#### Product Classification

Product Type	ype   Braided cable connector	
Product Brand	CNT®   ConQuest®	
General Specifications		
Body Style	Straight	
Inner Contact Attachment Method	Captivated	
Inner Contact Plating	Silver	
Interface	7-16 DIN Male	
Outer Contact Attachment Method	Clamp	
Outer Contact Plating	Trimetal	
Pressurizable	No	
Dimensions		
Width	34.6 mm   1.362 in	
Length	42.41 mm   1.67 in	
Diameter	34.6 mm   1.362 in	
Nominal Size	0.405 in	

# Outline Drawing

Page 14 of 25





# **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	2500 V
Inner Contact Resistance, maximum	0.4 mOhm
Insulation Resistance, minimum	10000 MOhm
Operating Frequency Band	0 – 6000 MHz
Outer Contact Resistance, maximum	1.5 mOhm
Peak Power, maximum	16 kW
RF Operating Voltage, maximum (vrms)	894 V

# VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
0–3000 MHz	1.058	31
3000-6000 MHz	1.119	25.01

#### Mechanical Specifications

**Connector Retention Tensile Force** 

330 N | 74.187 lbf

Page 15 of 25



Connector Retention Torque	0.56 N-m   4.956 in lb
Coupling Nut Proof Torque	50 N-m   442.537 in lb
Coupling Nut Proof Torque Method	IEC 61169-4:9.3.6
Coupling Nut Retention Force	800 N   179.847 lbf
Coupling Nut Retention Force Method	IEC 61169-4:15.2.6
Interface Durability	500 cycles
Interface Durability Method	IEC 61169-4:17
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

125.06 g | 0.276 lb

### Regulatory Compliance/Certifications

Classification

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

#### \* Footnotes

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

Page 16 of 25



**Immersion Depth** 

Immersion at specified depth for 24 hours

Page 17 of 25



# CNT-400

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



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

2500 V

Jacket Spark Test Voltage (rms) 4000 V

dc Test Voltage

Page 18 of 25



# CNT-400

Maximum Frequency	16.2 GHz
Operating Frequency Band	30 – 6000 MHz
Peak Power	16 kW
Shielding Effectiveness	90 dB
Velocity	85 %

### 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

## 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
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
UK-ROHS	Compliant

Page 19 of 25







Page 20 of 25



# 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

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

	50 01111
Capacitance	78 pF/m   23.774 pF/ft
dc Resistance, Inner Conductor	4.49 ohms/km   1.369 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 25

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# CNT-400-SFR

Maximum Frequency	16.2 GHz
Operating Frequency Band	30 – 6000 MHz
Peak Power	16 kW
Shielding Effectiveness	90 dB
Velocity	85 %
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 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

Page 22 of 25



# CNT-400-SFR

#### Agency

CENELEC ISO 9001:2015

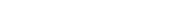
#### Classification

EN 50575 compliant, Declaration of Performance (DoP) available Designed, manufactured and/or distributed under this quality management system

Page 23 of 25



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



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	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 24 of 25



# CNT-400-W

Maximum Frequency	16.2 GHz
Operating Frequency Band	30 – 6000 MHz
Peak Power	16 kW
Shielding Effectiveness	90 dB
Velocity	85 %

#### 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

#### 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 k

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 25 of 25

