# C400D-DMDM-1M-X

CNT-400-DB CNT  $\ensuremath{\mathbb{R}}$  Jumper with interface types 7-16 DIN Male and 7-16 DIN Male, 1 m

### 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 Male
Specification Sheet Revision Level	А
Dimensions	
Length	1 m   3.281 ft
Nominal Size	0.400 in
Electrical Specifications	
DTF, Connector A	-28 dB

# Jumper Assembly Sample Label

**DTF, Connector B** 

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-28 dB



# C400D-DMDM-1M-X



### Regulatory Compliance/Certifications

#### Agency

#### Classification

ISO 9001:2015

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
400PDM-C	-	7-16 DIN Male for CNT-400 braided cable
CNT-400-DB	-	CNT-400-DB, CNT® 50 Ohm Braided Coaxial Cable, flooded, black PE jacket

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### 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

Width35Length40Diameter35Nominal Size0.4

### Outline Drawing

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

CNT® Straight Captivated Silver 7-16 DIN Male Clamp Trimetal 35 mm | 1.378 in

Braided cable connector

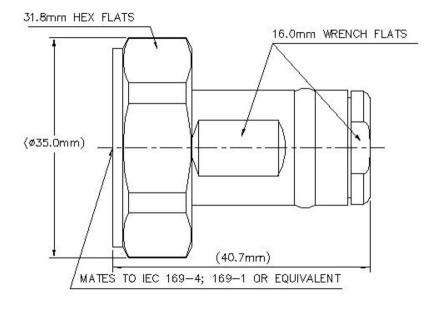
40.73 mm | 1.604 in

35 mm | 1.378 in

0.405 in

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# 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	1.12	25
Mechanical Specifications		
Connector Retention Tensile Force		330 N   74.187 lbf
Connector Retention Torque		0.56 N-m   4.956 in lb

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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

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# \* Footnotes

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

Immersion Depth

Immersion at specified depth for 24 hours

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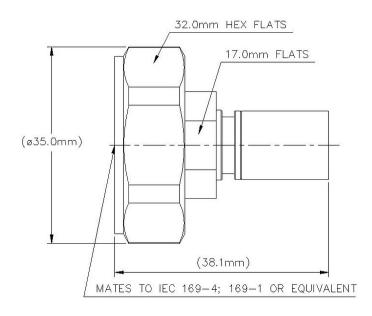
#### 7-16 DIN Male for CNT-400 and CNT-400-Flex braided cable

**Product Type** Braided cable connector Product Brand CNT® 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 Nominal Size 0.405 in

### Outline Drawing

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## **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

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### 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

#### Agency

Classification

ISO 9001:2015

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



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# \* Footnotes

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

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

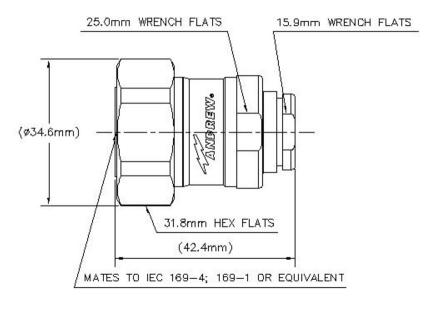
#### Product Classification

Product Type	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

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## **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 m0hm
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	1.06	31
3000-6000 MHz	1.12	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	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

Agency

#### Classification

ISO 9001:2015

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



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## \* Footnotes

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

Immersion Depth

Immersion at specified depth for 24 hours

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# CNT-400-DB



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

#### Product Classification

Product Type	Braided coaxial cable
Product Brand	CNT®
Product Series	CNT-400
General Specifications	
Braid Coverage	86 %
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 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

Maximum Frequency

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16.2 GHz



# CNT-400-DB

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

Tinned copper
Foam PE
PE
Copper-clad aluminum wire
Aluminum

# Mechanical Specifications

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# CNT-400-DB

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)
Corrosion Protection	Flooding compound
Water Jetting Test Method	GR-421-CORE, Section 4.3.5.1

# Packaging and Weights

Cable weight	0.07 kg/m   0.047 lb/ft
Packaging Type	Reel

Classification

#### Regulatory Compliance/Certifications

#### Agency

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ISO 9001:2015

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