C400D-DMDM-3M-X

CNT-400-DB CNT® Jumper with interface types 7-16 DIN Male and 7-

Product Classification

Product Type Braided cable assembly

Product Brand CNT®
Product Series CNT-400

General Specifications

Attachment, Connector B Field attachment

Body Style, Connector AStraightBody Style, Connector BStraightCable FamilyCNT-400

Interface, Connector A7-16 DIN MaleInterface, Connector B7-16 DIN Male

Specification Sheet Revision Level A

Dimensions

Length 3 m | 9.843 ft

Nominal Size 0.400 in

Electrical Specifications

DTF, Connector A -28 dB

DTF, Connector B -28 dB

Jumper Assembly Sample Label





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



7-16 DIN 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 Silver

Interface 7-16 DIN Male

Outer Contact Attachment Method Clamp

Outer Contact Plating Trimetal

Dimensions

Width 35 mm | 1.378 in

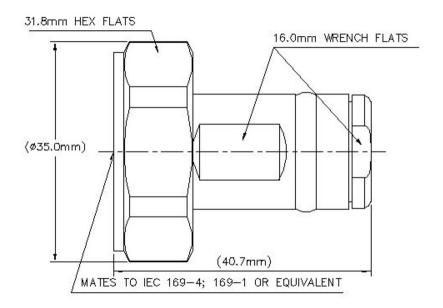
Length 40.73 mm | 1.604 in

Diameter 35 mm | 1.378 in

Nominal Size 0.405 in

Outline Drawing





Electrical Specifications

Insertion Loss, typical 0.05 dB

Average Power at Frequency 580.0 W @ 900 MHz

Cable Impedance50 ohmConnector Impedance50 ohmdc Test Voltage2500 V

Inner Contact Resistance, maximum1.5 mOhmInsulation Resistance, minimum10000 MOhmOperating Frequency Band0 - 6000 MHzOuter Contact Resistance, maximum0.4 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 Force330 N | 74.187 lbfConnector Retention Torque0.56 N-m | 4.956 in lb

ANDREW® an Amphenol company

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

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 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.andrew.com/ProductCompliance

ROHS Compliant UK-ROHS Compliant





* Footnotes

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

Immersion Depth Immersion at specified depth for 24 hours





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

Product Classification

Product Type Braided cable connector

Product Brand CNT®

General Specifications

Body Style Straight

Inner Contact Attachment MethodSolderInner Contact PlatingSilver

Interface 7-16 DIN Male

 Outer Contact Attachment Method
 Crimp

 Outer Contact Plating
 Trimetal

Dimensions

 Width
 35 mm | 1.378 in

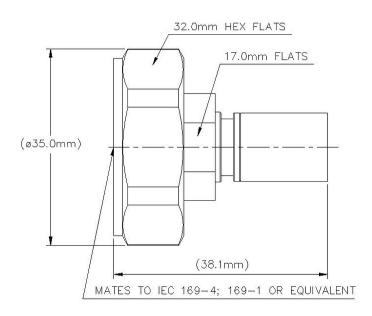
 Length
 38.12 mm | 1.501 in

Diameter 35 mm | 1.378 in

Nominal Size 0.405 in

Outline Drawing





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 m0hm

10000 MOhm Insulation Resistance, minimum **Operating Frequency Band** 0 - 6000 MHz 0.4 m0hm **Outer Contact Resistance, maximum**

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 Torque0.56 N-m4.956 in lbCoupling Nut Proof Torque35 N-m309.776 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 MethodIEC 61169-4:17Mechanical Shock Test MethodIEC 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 $-65 \,^{\circ}\text{C}$ 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 MethodIEC 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

* Footnotes



Insertion Loss, typical 0.05√ freq (GHz) (not applicable for elliptical waveguide)



7-16 DIN 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 PlatingSilver

Interface 7-16 DIN Male

 Outer Contact Attachment Method
 Clamp

 Outer Contact Plating
 Trimetal

 Pressurizable
 No

Dimensions

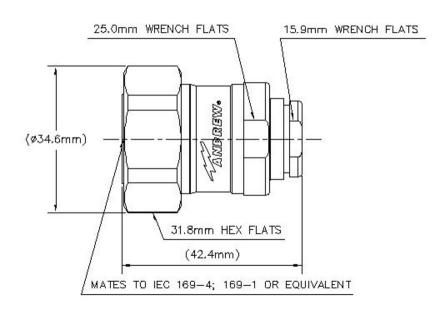
 Width
 34.6 mm | 1.362 in

 Length
 42.41 mm | 1.67 in

 Diameter
 34.6 mm | 1.362 in

Nominal Size 0.405 in

Outline Drawing



0.4 mOhm

Electrical Specifications

Inner Contact Resistance, maximum

Insertion Loss, typical 0.05 dB

Average Power at Frequency 580.0 W @ 900 MHz

Cable Impedance50 ohmConnector Impedance50 ohmdc Test Voltage2500 V

Insulation Resistance, minimum10000 MOhmOperating Frequency Band0 - 6000 MHz

Outer Contact Resistance, maximum1.5 mOhmPeak Power, maximum16 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

ANDREW® an Amphenol company

Connector Retention Torque0.56 N-m4.956 in lbCoupling Nut Proof Torque50 N-m442.537 in lb

Coupling Nut Proof Torque MethodIEC 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 $-40 \,^{\circ}\text{C} \text{ to } +85 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F to } +185 \,^{\circ}\text{F})$

Storage Temperature -65 °C to +125 °C (-85 °F to +257 °F)

Attenuation, Ambient Temperature 20 °C \mid 68 °F

Average Power, Ambient Temperature 40 $^{\circ}$ C | 104 $^{\circ}$ 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

* Footnotes

Insertion Loss, typical 0.05√ freq (GHz) (not applicable for elliptical waveguide)



Immersion Depth

Immersion at specified depth for 24 hours



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

 $\begin{tabular}{lll} \textbf{Capacitance} & 78 \ pF/m & | & 23.774 \ pF/ft \\ \end{tabular}$

dc Resistance, Inner Conductor4.49 ohms/km | 1.369 ohms/kftdc Resistance, Outer Conductor5.61 ohms/km | 1.71 ohms/kft

dc Test Voltage 2500 VJacket Spark Test Voltage (rms) 4000 V

Maximum Frequency 16.2 GHz

Operating Frequency Band 30 - 6000 MHz

Peak Power 16 kW



Page 15 of 17

CNT-400-DB

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 MaterialTinned copperDielectric MaterialFoam PEJacket MaterialPE

Inner Conductor Material Copper-clad aluminum wire

Shield Tape Material Aluminum

Mechanical Specifications

Minimum Bend Radius, single Bend25.4 mm | 1 inTensile Strength73 kg | 160.937 lb



CNT-400-DB

 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 $-40 \, ^{\circ}\text{C} \text{ to } +85 \, ^{\circ}\text{C} \, (-40 \, ^{\circ}\text{F to } +185 \, ^{\circ}\text{F})$ Operating Temperature $-40 \, ^{\circ}\text{C} \text{ to } +85 \, ^{\circ}\text{C} \, (-40 \, ^{\circ}\text{F to } +185 \, ^{\circ}\text{F})$ Storage Temperature $-70 \, ^{\circ}\text{C} \text{ to } +85 \, ^{\circ}\text{C} \, (-94 \, ^{\circ}\text{F to } +185 \, ^{\circ}\text{F})$

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

Regulatory Compliance/Certifications

Agency Classification

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