

# C400D-DMDM-7M5-X



## 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	A

## Dimensions

Length	7.5 m   24.606 ft
Nominal Size	0.400 in

## Electrical Specifications

DTF, Connector A	-28 dB
DTF, Connector B	-28 dB

## Jumper Assembly Sample Label

# C400D-DMDM-7M5-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

# 400BPDM-C



7-16 DIN Male for CNT-400 braided cable

## Product Classification

Product Type	Braided cable connector
Product Brand	CNT®

## General Specifications

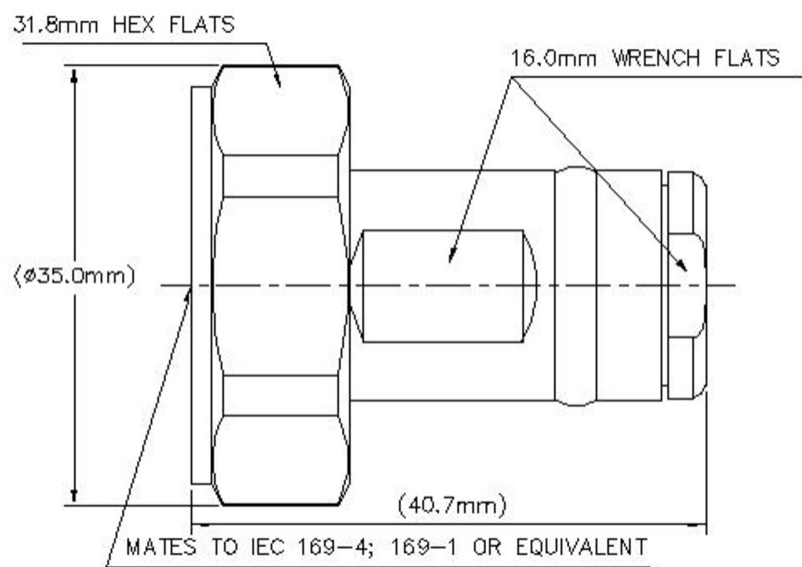
Body Style	Straight
Inner Contact Attachment Method	Captivated
Inner Contact Plating	Silver
Interface	7-16 DIN Male
Outer Contact Attachment Method	Clamp
Outer Contact Plating	Trimetal

## 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

# 400BPDM-C



## 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

# 400BPDM-C

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

# 400BPDM-C

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\* Footnotes

<b>Insertion Loss, typical</b>	0.05√freq (GHz) (not applicable for elliptical waveguide)
<b>Immersion Depth</b>	Immersion at specified depth for 24 hours

# 400BPDM-CR



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

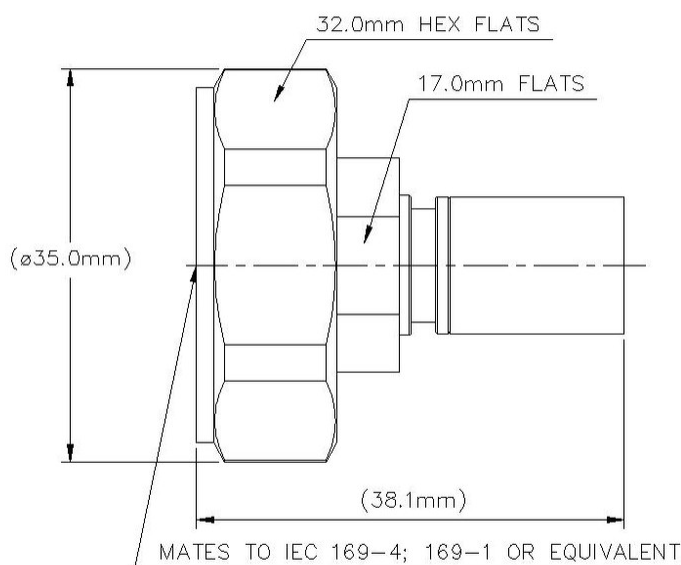
Body Style	Straight
Inner Contact Attachment Method	Solder
Inner Contact Plating	Silver
Interface	7-16 DIN Male
Outer Contact Attachment Method	Crimp
Outer Contact Plating	Trimetal

## 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

# 400BPDM-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	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

# 400BPDM-CR

## 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
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## Regulatory Compliance/Certifications

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

### \* Footnotes

# 400BPDM-CR

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**Insertion Loss, typical**  $0.05\sqrt{\text{freq (GHz)}}$  (not applicable for elliptical waveguide)

# 400PDM-C

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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

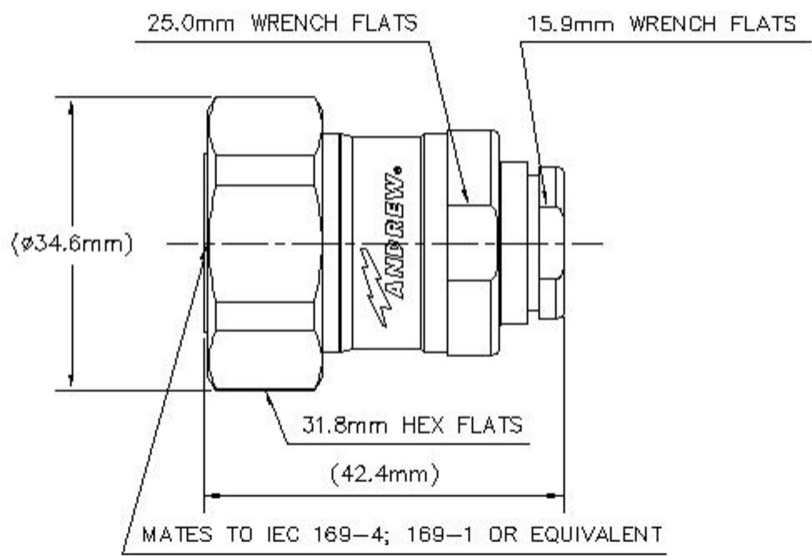
Body Style	Straight
Inner Contact Attachment Method	Captivated
Inner Contact Plating	Silver
Interface	7-16 DIN Male
Outer Contact Attachment Method	Clamp
Outer Contact Plating	Trimetal
Pressurizable	No

## 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

# 400PDM-C



## 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
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# 400PDM-C

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
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## Regulatory Compliance/Certifications

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

## \* Footnotes

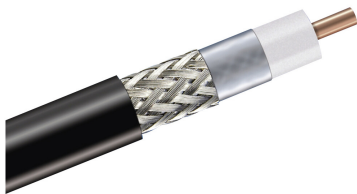
Insertion Loss, typical	0.05√freq (GHz) (not applicable for elliptical waveguide)
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# 400PDM-C

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

# CNT-400-DB

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	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

# CNT-400-DB

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

## Packaging and Weights

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

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system