

# C400-HM5M-1M5



## Product Classification

Product Type	Braided cable assembly
Product Brand	CNT®
Product Series	CNT-400

## General Specifications

Attachment, Connector A	Factory attached
Attachment, Connector B	Factory attached
Body Style, Connector A	Straight
Body Style, Connector B	Straight
Cable Family	CNT-400
Interface, Connector A	4.3-10 Male
Interface, Connector B	4.3-10 Male
Specification Sheet Revision Level	A

## Dimensions

Length	1.5 m   4.921 ft
Nominal Size	0.400 in

## VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
700–3000 MHz	1.101	26.4

## Jumper Assembly Sample Label

# C400-HM5



## Included Products

- 400PHM-C-CR – Type 4.3-10 Male connector for CNT-400 braided cable
- CNT-400 – CNT-400, CNT® 50 Ohm Braided Coaxial Cable, variable, black PE jacket

# 400PHM-C-CR



Type 4.3-10 Male connector for CNT-400 braided cable

## Product Classification

Product Type	Braided cable connector
Product Brand	CNT®

## General Specifications

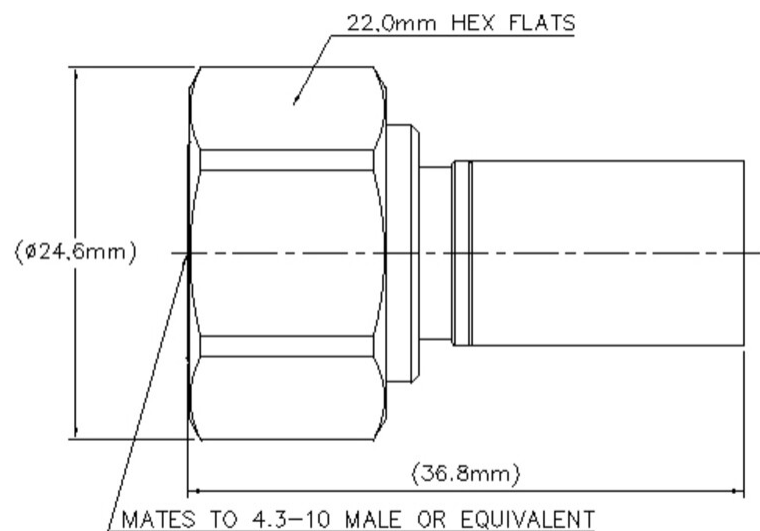
Body Style	Straight
Inner Contact Attachment Method	Captivated
Inner Contact Plating	Silver
Interface	4.3-10 Male
Outer Contact Attachment Method	Crimp
Outer Contact Plating	Trimetal

## Dimensions

Length	36.8 mm   1.449 in
Diameter	24.59 mm   0.968 in
Nominal Size	0.405 in

## Outline Drawing

# 400PHM-C-CR



## 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 mOhm
Insulation Resistance, minimum	5000 MOhm
Operating Frequency Band	0 – 6000 MHz
Outer Contact Resistance, maximum	1 mOhm
Peak Power, maximum	15 kW
RF Operating Voltage, maximum (vrms)	894 V

## VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
0-3000 MHz	1.101	26.4

## Mechanical Specifications

# 400PHM-C-CR

Connector Retention Tensile Force	330 N   74.187 lbf
Connector Retention Torque	0.56 N-m   4.956 in lb
Coupling Nut Proof Torque	8 N-m   70.806 in lb
Coupling Nut Proof Torque Method	IEC 61169-54:9.3.6
Coupling Nut Retention Force	450 N   101.164 lbf
Coupling Nut Retention Force Method	IEC 61169-54:9.3.11
Interface Durability	100 cycles
Interface Durability Method	IEC 61169-54:9.5
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
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
Water Jetting Test Method Note	Connector can meet IP67 when applying heat shrink tube per Installation Instruction 7857097 step 10

## Packaging and Weights

Weight, net	38.1 g   0.084 lb
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## Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
REACH-SVHC	Compliant as per SVHC revision on <a href="http://www.andrew.com/ProductCompliance">www.andrew.com/ProductCompliance</a>
ROHS	Compliant

# 400PHM-C-CR

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UK-ROHS

Compliant



## \* Footnotes

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

# 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
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

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

## Mechanical Specifications

Minimum Bend Radius, single Bend	25.4 mm   1 in
Tensile Strength	73 kg   160.937 lb



# CNT-400

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
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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

