

# C400D-DMDM-7M5-X

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CNT-400-DB CNT® Jumper with interface types 7-16 DIN Male and 7-16 DIN Male, 7.5 m



## Product Classification

|                       |                        |
|-----------------------|------------------------|
| <b>Product Type</b>   | Braided cable assembly |
| <b>Product Brand</b>  | CNT®                   |
| <b>Product Series</b> | CNT-400                |

## General Specifications

|   |                  |
|---|------------------|
| <b>Attachment, Connector B</b>            | Field attachment |
| <b>Body Style, Connector A</b>            | Straight         |
| <b>Body Style, Connector B</b>            | Straight         |
| <b>Cable Family</b>                       | CNT-400          |
| <b>Interface, Connector A</b>             | 7-16 DIN Male    |
| <b>Interface, Connector B</b>             | 7-16 DIN Male    |
| <b>Specification Sheet Revision Level</b> | A                |

## Dimensions

|                     |                   |
|---------------------|-------------------|
| <b>Length</b>       | 7.5 m   24.606 ft |
| <b>Nominal Size</b> | 0.400 in          |

## Electrical Specifications

|                         |        |
|-------------------------|--------|
| <b>DTF, Connector A</b> | -28 dB |
| <b>DTF, Connector B</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

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7-16 DIN Male for CNT-400 braided cable

## Product Classification

|                      |                         |
|----------------------|-------------------------|
| <b>Product Type</b>  | Braided cable connector |
| <b>Product Brand</b> | CNT®                    |

## General Specifications

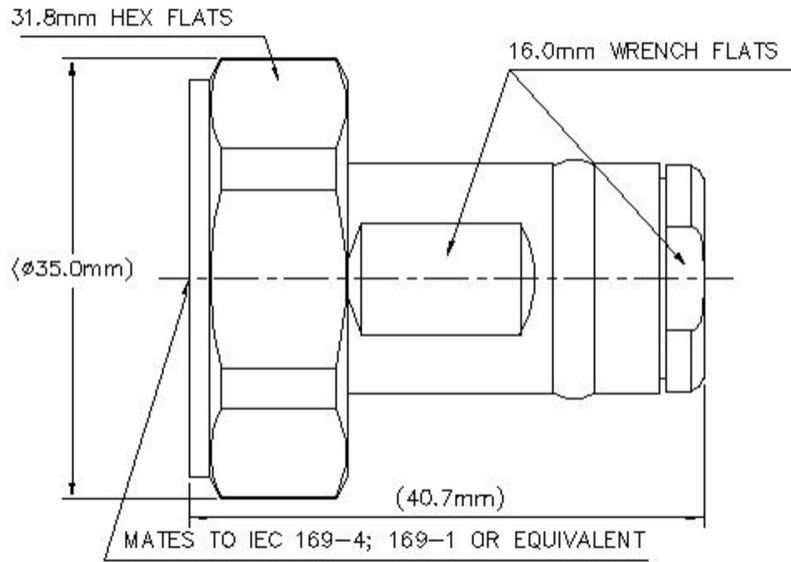
|  |               |
|--|---------------|
| <b>Body Style</b>                      | Straight      |
| <b>Inner Contact Attachment Method</b> | Captivated    |
| <b>Inner Contact Plating</b>           | Silver        |
| <b>Interface</b>                       | 7-16 DIN Male |
| <b>Outer Contact Attachment Method</b> | Clamp         |
| <b>Outer Contact Plating</b>           | Trimetal      |

## Dimensions

|                     |                     |
|---------------------|---------------------|
| <b>Width</b>        | 35 mm   1.378 in    |
| <b>Length</b>       | 40.73 mm   1.604 in |
| <b>Diameter</b>     | 35 mm   1.378 in    |
| <b>Nominal Size</b> | 0.405 in            |

## Outline Drawing

# 400BPDM-C



## Electrical Specifications

|   |                   |
|---|-------------------|
| <b>Insertion Loss, typical</b>              | 0.05 dB           |
| <b>Average Power at Frequency</b>           | 580.0 W @ 900 MHz |
| <b>Cable Impedance</b>                      | 50 ohm            |
| <b>Connector Impedance</b>                  | 50 ohm            |
| <b>dc Test Voltage</b>                      | 2500 V            |
| <b>Inner Contact Resistance, maximum</b>    | 1.5 mOhm          |
| <b>Insulation Resistance, minimum</b>       | 10000 MOhm        |
| <b>Operating Frequency Band</b>             | 0 – 6000 MHz      |
| <b>Outer Contact Resistance, maximum</b>    | 0.4 mOhm          |
| <b>RF Operating Voltage, maximum (vrms)</b> | 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

|  |                        |
|--|------------------------|
| <b>Connector Retention Tensile Force</b> | 330 N   74.187 lbf     |
| <b>Connector Retention Torque</b>        | 0.56 N-m   4.956 in lb |

# 400BPDM-C

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|  |                        |
|--|------------------------|
| <b>Coupling Nut Proof Torque</b>           | 35 N-m   309.776 in lb |
| <b>Coupling Nut Proof Torque Method</b>    | IEC 61169-4:9.3.6      |
| <b>Coupling Nut Retention Force</b>        | 1000 N   224.809 lbf   |
| <b>Coupling Nut Retention Force Method</b> | IEC 61169-4:15.2.6     |
| <b>Interface Durability</b>                | 500 cycles             |
| <b>Interface Durability Method</b>         | IEC 61169-4:17         |
| <b>Mechanical Shock Test Method</b>        | IEC 60068-2-27         |

## Environmental Specifications

|   |                                       |
|---|---------------------------------------|
| <b>Operating Temperature</b>                      | -40 °C to +85 °C (-40 °F to +185 °F)  |
| <b>Storage Temperature</b>                        | -65 °C to +125 °C (-85 °F to +257 °F) |
| <b>Attenuation, Ambient Temperature</b>           | 20 °C   68 °F                         |
| <b>Average Power, Ambient Temperature</b>         | 40 °C   104 °F                        |
| <b>Average Power, Inner Conductor Temperature</b> | 100 °C   212 °F                       |
| <b>Climatic Sequence Test Method</b>              | IEC 60068-1                           |
| <b>Corrosion Test Method</b>                      | IEC 60068-2-11                        |
| <b>Damp Heat Steady State Test Method</b>         | IEC 60068-2-3                         |
| <b>Immersion Depth</b>                            | 1 m                                   |
| <b>Immersion Test Mating</b>                      | Mated                                 |
| <b>Immersion Test Method</b>                      | IEC 60529:2001, IP68                  |
| <b>Thermal Shock Test Method</b>                  | IEC 60068-2-14                        |
| <b>Vibration Test Method</b>                      | IEC 60068-2-6                         |

## Packaging and Weights

|                    |                    |
|--------------------|--------------------|
| <b>Weight, net</b> | 44.58 g   0.098 lb |
|--------------------|--------------------|

## Regulatory Compliance/Certifications

| <b>Agency</b> | <b>Classification</b>  |
|---------------|--|
| 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.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a> |
| ROHS          | Compliant  |
| UK-ROHS       | Compliant  |

# 400BPDM-C

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## \* Footnotes

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

**Immersion Depth** Immersion at specified depth for 24 hours

# 400BPDM-CR

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

## Product Classification

|                      |                         |
|----------------------|-------------------------|
| <b>Product Type</b>  | Braided cable connector |
| <b>Product Brand</b> | CNT®                    |

## General Specifications

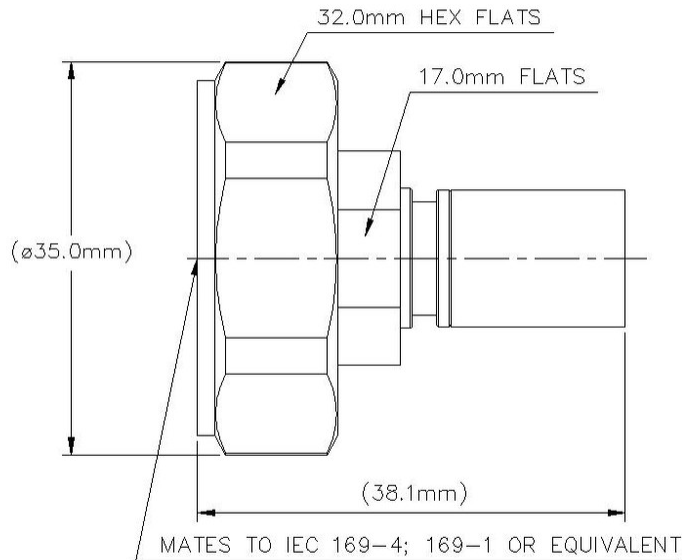
|  |               |
|--|---------------|
| <b>Body Style</b>                      | Straight      |
| <b>Inner Contact Attachment Method</b> | Solder        |
| <b>Inner Contact Plating</b>           | Silver        |
| <b>Interface</b>                       | 7-16 DIN Male |
| <b>Outer Contact Attachment Method</b> | Crimp         |
| <b>Outer Contact Plating</b>           | Trimetal      |

## Dimensions

|                     |                     |
|---------------------|---------------------|
| <b>Width</b>        | 35 mm   1.378 in    |
| <b>Length</b>       | 38.12 mm   1.501 in |
| <b>Diameter</b>     | 35 mm   1.378 in    |
| <b>Nominal Size</b> | 0.405 in            |

## Outline Drawing

# 400BPDM-CR



## Electrical Specifications

|   |                   |
|---|-------------------|
| <b>Insertion Loss, typical</b>              | 0.05 dB           |
| <b>Average Power at Frequency</b>           | 580.0 W @ 900 MHz |
| <b>Cable Impedance</b>                      | 50 ohm            |
| <b>Connector Impedance</b>                  | 50 ohm            |
| <b>dc Test Voltage</b>                      | 2500 V            |
| <b>Inner Contact Resistance, maximum</b>    | 1.5 mOhm          |
| <b>Insulation Resistance, minimum</b>       | 10000 MOhm        |
| <b>Operating Frequency Band</b>             | 0 – 6000 MHz      |
| <b>Outer Contact Resistance, maximum</b>    | 0.4 mOhm          |
| <b>RF Operating Voltage, maximum (vrms)</b> | 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

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## Mechanical Specifications

|  |                        |
|--|------------------------|
| <b>Connector Retention Tensile Force</b>   | 330 N   74.187 lbf     |
| <b>Connector Retention Torque</b>          | 0.56 N-m   4.956 in lb |
| <b>Coupling Nut Proof Torque</b>           | 35 N-m   309.776 in lb |
| <b>Coupling Nut Proof Torque Method</b>    | IEC 61169-4:9.3.6      |
| <b>Coupling Nut Retention Force</b>        | 1000 N   224.809 lbf   |
| <b>Coupling Nut Retention Force Method</b> | IEC 61169-4:15.2.6     |
| <b>Interface Durability</b>                | 500 cycles             |
| <b>Interface Durability Method</b>         | IEC 61169-4:17         |
| <b>Mechanical Shock Test Method</b>        | IEC 60068-2-27         |

## Environmental Specifications

|   |                                       |
|---|---------------------------------------|
| <b>Operating Temperature</b>                      | -40 °C to +85 °C (-40 °F to +185 °F)  |
| <b>Storage Temperature</b>                        | -65 °C to +125 °C (-85 °F to +257 °F) |
| <b>Attenuation, Ambient Temperature</b>           | 20 °C   68 °F                         |
| <b>Average Power, Ambient Temperature</b>         | 40 °C   104 °F                        |
| <b>Average Power, Inner Conductor Temperature</b> | 100 °C   212 °F                       |
| <b>Climatic Sequence Test Method</b>              | IEC 60068-1                           |
| <b>Corrosion Test Method</b>                      | IEC 60068-2-11                        |
| <b>Damp Heat Steady State Test Method</b>         | IEC 60068-2-3                         |
| <b>Thermal Shock Test Method</b>                  | IEC 60068-2-14                        |
| <b>Vibration Test Method</b>                      | IEC 60068-2-6                         |
| <b>Water Jetting Test Mating</b>                  | Mated                                 |
| <b>Water Jetting Test Method</b>                  | IEC 60529:2001, IP65                  |

## Packaging and Weights

|                    |                   |
|--------------------|-------------------|
| <b>Weight, net</b> | 57.2 g   0.126 lb |
|--------------------|-------------------|

## Regulatory Compliance/Certifications

| <b>Agency</b> | <b>Classification</b>  |
|---------------|--|
| 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

|                      |                         |
|----------------------|-------------------------|
| <b>Product Type</b>  | Braided cable connector |
| <b>Product Brand</b> | CNT®   ConQuest®        |

## General Specifications

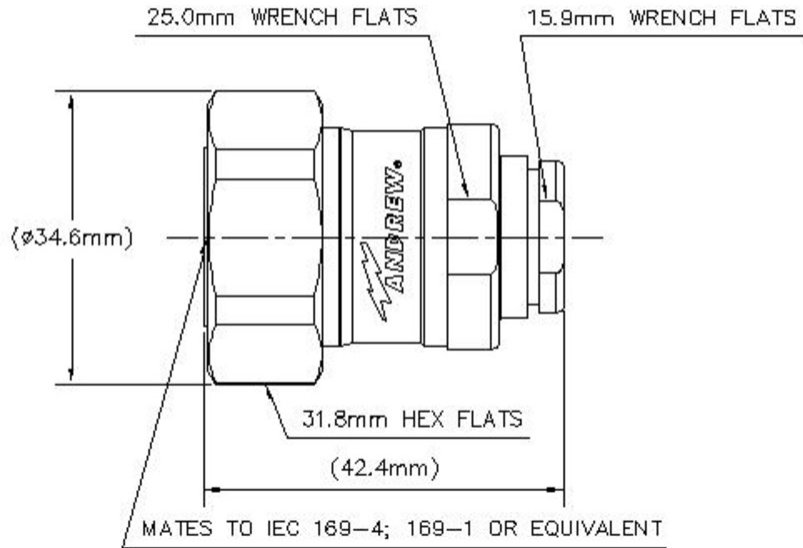
|  |               |
|--|---------------|
| <b>Body Style</b>                      | Straight      |
| <b>Inner Contact Attachment Method</b> | Captivated    |
| <b>Inner Contact Plating</b>           | Silver        |
| <b>Interface</b>                       | 7-16 DIN Male |
| <b>Outer Contact Attachment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

## Dimensions

|                     |                    |
|---------------------|--------------------|
| <b>Width</b>        | 34.6 mm   1.362 in |
| <b>Length</b>       | 42.41 mm   1.67 in |
| <b>Diameter</b>     | 34.6 mm   1.362 in |
| <b>Nominal Size</b> | 0.405 in           |

## Outline Drawing

# 400PDM-C



## Electrical Specifications

|   |                   |
|---|-------------------|
| <b>Insertion Loss, typical</b>              | 0.05 dB           |
| <b>Average Power at Frequency</b>           | 580.0 W @ 900 MHz |
| <b>Cable Impedance</b>                      | 50 ohm            |
| <b>Connector Impedance</b>                  | 50 ohm            |
| <b>dc Test Voltage</b>                      | 2500 V            |
| <b>Inner Contact Resistance, maximum</b>    | 0.4 mOhm          |
| <b>Insulation Resistance, minimum</b>       | 10000 MOhm        |
| <b>Operating Frequency Band</b>             | 0 – 6000 MHz      |
| <b>Outer Contact Resistance, maximum</b>    | 1.5 mOhm          |
| <b>Peak Power, maximum</b>                  | 16 kW             |
| <b>RF Operating Voltage, maximum (vrms)</b> | 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

|  |                    |
|--|--------------------|
| <b>Connector Retention Tensile Force</b> | 330 N   74.187 lbf |
|--|--------------------|

# 400PDM-C

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|  |                        |
|--|------------------------|
| <b>Connector Retention Torque</b>          | 0.56 N-m   4.956 in lb |
| <b>Coupling Nut Proof Torque</b>           | 50 N-m   442.537 in lb |
| <b>Coupling Nut Proof Torque Method</b>    | IEC 61169-4:9.3.6      |
| <b>Coupling Nut Retention Force</b>        | 800 N   179.847 lbf    |
| <b>Coupling Nut Retention Force Method</b> | IEC 61169-4:15.2.6     |
| <b>Interface Durability</b>                | 500 cycles             |
| <b>Interface Durability Method</b>         | IEC 61169-4:17         |
| <b>Mechanical Shock Test Method</b>        | IEC 60068-2-27         |

## Environmental Specifications

|   |                                       |
|---|---------------------------------------|
| <b>Operating Temperature</b>                      | -40 °C to +85 °C (-40 °F to +185 °F)  |
| <b>Storage Temperature</b>                        | -65 °C to +125 °C (-85 °F to +257 °F) |
| <b>Attenuation, Ambient Temperature</b>           | 20 °C   68 °F                         |
| <b>Average Power, Ambient Temperature</b>         | 40 °C   104 °F                        |
| <b>Average Power, Inner Conductor Temperature</b> | 100 °C   212 °F                       |
| <b>Climatic Sequence Test Method</b>              | IEC 60068-1                           |
| <b>Corrosion Test Method</b>                      | IEC 60068-2-11                        |
| <b>Damp Heat Steady State Test Method</b>         | IEC 60068-2-3                         |
| <b>Immersion Depth</b>                            | 1 m                                   |
| <b>Immersion Test Mating</b>                      | Mated                                 |
| <b>Immersion Test Method</b>                      | IEC 60529:2001, IP68                  |
| <b>Thermal Shock Test Method</b>                  | IEC 60068-2-14                        |
| <b>Vibration Test Method</b>                      | IEC 60068-2-6                         |

## Packaging and Weights

|                    |                     |
|--------------------|---------------------|
| <b>Weight, net</b> | 125.06 g   0.276 lb |
|--------------------|---------------------|

## Regulatory Compliance/Certifications

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

## \* Footnotes

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

# 400PDM-C

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**Immersion Depth**

Immersion at specified depth for 24 hours

# CNT-400-DB

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

## Product Classification

|                       |                       |
|-----------------------|-----------------------|
| <b>Product Type</b>   | Braided coaxial cable |
| <b>Product Brand</b>  | CNT®                  |
| <b>Product Series</b> | CNT-400               |

## General Specifications

|                       |         |
|-----------------------|---------|
| <b>Braid Coverage</b> | 86 %    |
| <b>Cable Type</b>     | CNT-400 |
| <b>Jacket Color</b>   | Black   |

## Dimensions

|                                 |                     |
|---------------------------------|---------------------|
| <b>Diameter Over Dielectric</b> | 7.24 mm   0.285 in  |
| <b>Diameter Over Jacket</b>     | 10.29 mm   0.405 in |
| <b>Diameter Over Tape</b>       | 7.391 mm   0.291 in |
| <b>Inner Conductor OD</b>       | 2.74 mm   0.108 in  |
| <b>Outer Conductor OD</b>       | 8.08 mm   0.318 in  |
| <b>Nominal Size</b>             | 0.400 in            |

## Electrical Specifications

|  |                               |
|--|-------------------------------|
| <b>Cable Impedance</b>                 | 50 ohm                        |
| <b>Capacitance</b>                     | 78 pF/m   23.774 pF/ft        |
| <b>dc Resistance, Inner Conductor</b>  | 4.49 ohms/km   1.369 ohms/kft |
| <b>dc Resistance, Outer Conductor</b>  | 5.61 ohms/km   1.71 ohms/kft  |
| <b>dc Test Voltage</b>                 | 2500 V                        |
| <b>Jacket Spark Test Voltage (rms)</b> | 4000 V                        |

# CNT-400-DB

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|                                 |               |
|---------------------------------|---------------|
| <b>Maximum Frequency</b>        | 16.2 GHz      |
| <b>Operating Frequency Band</b> | 30 – 6000 MHz |
| <b>Peak Power</b>               | 16 kW         |
| <b>Shielding Effectiveness</b>  | 90 dB         |
| <b>Velocity</b>                 | 85 %          |

## Attenuation

| <b>Frequency (MHz)</b> | <b>Attenuation (dB/100 m)</b> | <b>Attenuation (dB/100 ft)</b> |
|------------------------|-------------------------------|--------------------------------|
| 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

|                                 |                           |
|---------------------------------|---------------------------|
| <b>Braid Material</b>           | Tinned copper             |
| <b>Dielectric Material</b>      | Foam PE                   |
| <b>Jacket Material</b>          | PE                        |
| <b>Inner Conductor Material</b> | Copper-clad aluminum wire |
| <b>Shield Tape Material</b>     | Aluminum                  |



# CNT-400-DB

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## Mechanical Specifications

|   |                          |
|---|--------------------------|
| <b>Minimum Bend Radius, single Bend</b> | 25.4 mm   1 in           |
| <b>Tensile Strength</b>                 | 73 kg   160.937 lb       |
| <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 |