## C400-DMDF

#### **Base Product**



CNT-400 CNT® Jumper with interface types 7-16 DIN Male and 7-16 DIN Female, variable length

#### **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 Female

Specification Sheet Revision Level A

Variable Length For custom lengths, contact your local ANDREW representative

**Dimensions** 

**Length** 0 m | 0 ft **Nominal Size** 0.400 in

VSWR/Return Loss

Frequency Band VSWR Return Loss (dB)

**700–3000 MHz** 1.433 14.99

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

400PDF-C - 7-16 DIN Female for CNT-400 braided cable 400PDM-C - 7-16 DIN Male for CNT-400 braided cable

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

CNT-400-SFR - CNT-400-SFR, C CNT® 50 Ohm Braided Coaxial Cable, black non-halogenated, fire retardant

polyolefin jacket, B2ca S1a d0 a1 Compliant

CNT-400-W - CNT-400-W, CNT® 50 Ohm Braided Coaxial Cable, variable, white 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

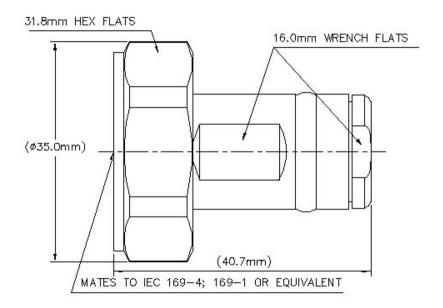
**Length** 40.73 mm | 1.604 in

**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 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

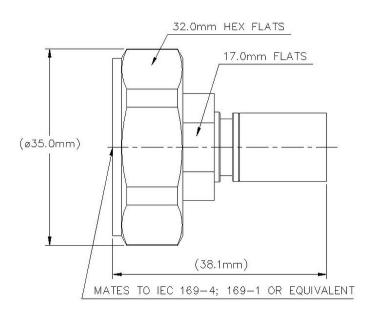
**Length** 38.12 mm | 1.501 in

**Diameter** 35 mm | 1.378 in

Nominal Size 0.405 in

Outline Drawing





## **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 Method IEC 61169-4:17

Mechanical Shock Test Method IEC 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  $^{\circ}\text{C}$  | 212  $^{\circ}\text{F}$ 

Climatic Sequence Test Method IEC 60068-1

Corrosion Test Method IEC 60068-2-11

Damp Heat Steady State Test MethodIEC 60068-2-3Thermal Shock Test MethodIEC 60068-2-14

Water Jetting Test Mating Mated

Water Jetting Test Method IEC 60529:2001, IP65

Packaging and Weights

Vibration Test Method

**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

IEC 60068-2-6

#### \* Footnotes



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



#### 7-16 DIN Female 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 Female

 Outer Contact Attachment Method
 Clamp

 Outer Contact Plating
 Trimetal

 Pressurizable
 No

#### **Dimensions**

 Width
 27.3 mm | 1.075 in

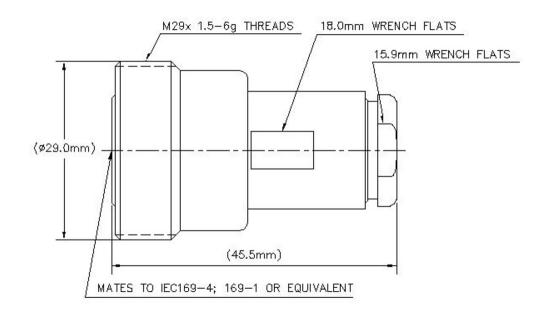
 Length
 45.47 mm | 1.79 in

 Diameter
 27.3 mm | 1.075 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, maximum0.4 mOhmInsulation Resistance, minimum10000 MOhmOperating Frequency Band0 - 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	1.065	30.05
3000-6000 MHz	1.172	22.03

Mechanical Specifications

**Connector Retention Tensile Force** 330 N | 74.187 lbf

ANDREW® an Amphenol company

## 400PDF-C

**Connector Retention Torque** 0.56 N-m | 4.956 in lb | 0.75 N-m | 6.638 in lb

Insertion Force 200 N | 44.962 lbf
Insertion Force Method IEC 61169-4:15.2.4

**Interface Durability** 500 cycles

Interface Durability Method IEC 61169-4:17

Mechanical Shock Test Method IEC 60068-2-27

### **Environmental Specifications**

Operating Temperature  $-40 \,^{\circ}\text{C}$  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 Temperature20 °C | 68 °FAverage Power, Ambient Temperature40 °C | 104 °FAverage Power, Inner Conductor Temperature100 °C | 212 °F

Climatic Sequence Test MethodIEC 60068-1Corrosion Test MethodIEC 60068-2-11Damp Heat Steady State Test MethodIEC 60068-2-3

Immersion Depth1 mImmersion Test MatingMated

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** 102 g | 0.225 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



#### 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** 

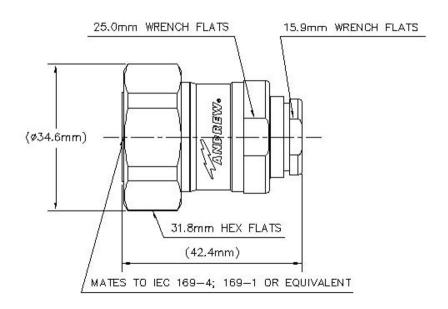
 Width
 34.6 mm | 1.362 in

 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	1 110	25.01

Mechanical Specifications

**Connector Retention Tensile Force** 330 N | 74.187 lbf

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Connector Retention Torque0.56 N-m4.956 in lbCoupling Nut Proof Torque50 N-m442.537 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**  $-40 \,^{\circ}\text{C} \text{ to } +85 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F to } +185 \,^{\circ}\text{F})$ 

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

Attenuation, Ambient Temperature  $$20\ ^{\circ}\text{C} \mid 68\ ^{\circ}\text{F}$$ 

**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

\* Footnotes

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



**Immersion Depth** 

Immersion at specified depth for 24 hours





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

 $\textbf{Capacitance} \hspace{1.5cm} 78 \, \text{pF/m} \hspace{.2cm} | \hspace{.2cm} 23.774 \, \text{pF/ft}$ 

dc Resistance, Inner Conductor4.69 ohms/km | 1.43 ohms/kftdc Resistance, Outer Conductor5.61 ohms/km | 1.71 ohms/kft

 $\mbox{dc Test Voltage} \qquad \qquad 2500 \ \mbox{V}$ 

Jacket Spark Test Voltage (rms) 4000 V

Maximum Frequency 16.2 GHz

Operating Frequency Band 30 - 6000 MHz

Peak Power 16 kW

ANDREW®
an Amphenol company

## CNT-400

Shielding Effectiveness 90 dB Velocity 85 %

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

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

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

### 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





## CNT-400-SFR



CNT-400-SFR, C CNT® 50 Ohm Braided Coaxial Cable, black non-halogenated, fire retardant polyolefin jacket, B2ca S1a d0 a1 Compliant

#### 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

 $\textbf{Capacitance} \hspace{1.5cm} 78 \text{ pF/m} \hspace{.1cm} | \hspace{.1cm} 23.774 \text{ pF/ft}$ 

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

dc Test Voltage2500 VJacket Spark Test Voltage (rms)4000 VMaximum Frequency16.2 GHz

**Operating Frequency Band** 30 – 6000 MHz

Peak Power 16 kW

ANDREW® an Amphenol company

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## CNT-400-SFR

 $\begin{array}{lll} \textbf{Shielding Effectiveness} & 90 \text{ dB} \\ \textbf{Velocity} & 85 \, \% \\ \end{array}$ 

Material Specifications

Braid Material Tinned copper

**Dielectric Material** Foam PE

Jacket Material Non-halogenated, fire retardant polyolefin

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

 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  $-40 \,^{\circ}\text{C}$  to  $+60 \,^{\circ}\text{C}$  (-40  $^{\circ}\text{F}$  to  $+140 \,^{\circ}\text{F}$ )

Operating Temperature  $-40 \,^{\circ}\text{C}$  to  $+60 \,^{\circ}\text{C}$  (-40  $^{\circ}\text{F}$  to  $+140 \,^{\circ}\text{F}$ )

Storage Temperature  $-40 \,^{\circ}\text{C}$  to  $+60 \,^{\circ}\text{C}$  (-40  $^{\circ}\text{F}$  to  $+140 \,^{\circ}\text{F}$ )

EN50575 CPR Cable EuroClass Fire PerformanceB2caEN50575 CPR Cable EuroClass Smoke Rating\$1aEN50575 CPR Cable EuroClass Droplets Ratingd0EN50575 CPR Cable EuroClass Acidity Ratinga1

Smoke Index Test Method IEC 61034

Toxicity Index Test Method IEC 60754-2

Packaging and Weights

**Cable weight** 0.1 kg/m | 0.067 lb/ft

Regulatory Compliance/Certifications

Agency Classification

CENELEC EN 50575 compliant, Declaration of Performance (DoP) available

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



# <u>CNT</u>-400-SFR





CNT-400-W, CNT® 50 Ohm Braided Coaxial Cable, variable, white 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 White

#### **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 Conductor4.69 ohms/km | 1.43 ohms/kftdc Resistance, Outer Conductor5.61 ohms/km | 1.71 ohms/kft



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## CNT-400-W

Maximum Frequency 16.2 GHz

Operating Frequency Band 30 - 6000 MHz

Peak Power16 kWShielding Effectiveness90 dBVelocity85 %

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 Bend25.4 mm | 1 inTensile Strength73 kg | 160.937 lbBending Moment0.7 N-m | 6.196 in lb

Flat Plate Crush Strength 0.7 kg/mm | 39.198 lb/in

**Environmental Specifications** 

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

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

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

Packaging and Weights

**Cable weight** 0.1 kg/m | 0.067 lb/ft

Regulatory Compliance/Certifications

Agency Classification

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

