CX3250004 | 100T135P3500JCASS COEX

ConQuest® Cable in Conduit, 1 in, SDR 13.5, terracotta (P3® 500 JCASS)



 *Product complies with the Build America, Buy America Act (BABAA) requirements of the Infrastructure Investment and Jobs Act of 2021 (Pub. L. 117- 58, §§ 70901-70953), or is the subject of a waiver approved by the Secretary of Commerce or designee. Compliance requirements and waiver applicability vary based on government funding program. Check the laws and regulations for your specific program.

Product Classification

Regional Availability North America

Product Type Coaxial cable-in-conduit

Product Brand ConQuest®
Product Series 500 Series

Government FundingBuild America Buy America (BABA) compliant*

General Specifications

Cable Type500 SeriesCable-In-Conduit TypeP3® in ductColorTerracottaConduit TypeNon-toneableWall TypeSmooth

Dimensions

Length 731.52 m | 2400 ft

Wall Thickness Designation SDR 13.5

Nominal Size 1 in

Packaging and Weights

Weight, net 395.852 kg/km | 266 lb/kft

Included Products

5302203 - 75 Ohm P3® Trunk and Distribution Cable, black PE jacket, flooded for underground

P3® 500 JCASS



CX3250004 | 100T135P3500JCASS COEX

CX3299999 100T135 EMPTY DUCT COEX ConQuest® Empty Conduit, 1 in, SDR 13.5, terracotta



5302203 | P3® 500 JCASS

75 Ohm P3® Trunk and Distribution Cable, black PE jacket, flooded for underground



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Product Classification

Regional Availability North America

Product Type Coaxial hardline cable

Product Brand P3®

Government FundingBuild America Buy America (BABA) compliant*

Warranty One year

General Specifications

Cable Type500 SeriesConstruction TypeSwagedJacket ColorBlack

Short Description P3 500 JCASS SM PR997

Dimensions

Cable Length731.52 m | 2400 ftDiameter Over Center Conductor, nominal2.769 mm | 0.109 inDiameter Over Dielectric, nominal11.481 mm | 0.452 inDiameter Over Jacket, nominal14.478 mm | 0.57 inDiameter Over Outer Conductor, nominal12.7 mm | 0.5 inJacket Thickness, nominal0.762 mm | 0.03 inOuter Conductor Thickness, nominal0.61 mm | 0.024 in

Electrical Specifications

Capacitance 50.197 pF/m | 15.3 pF/ft

Capacitance Tolerance ±1.0 pF/ft

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5302203 | P3® 500 JCASS

Characteristic Impedance75 ohmCharacteristic Impedance Tolerance±2 ohm

dc Resistance Note

Nominal values based on a standard condition of 20 °C (68 °F)

dc Resistance, Inner Conductor, nominal4.429 ohms/km | 1.35 ohms/kftdc Resistance, Loop, nominal5.643 ohms/km | 1.72 ohms/kftdc Resistance, Outer Conductor, nominal1.214 ohms/km | 0.37 ohms/kft

Jacket Spark Test Voltage5000 VacNominal Velocity of Propagation (NVP)87 %

Operating Frequency Band 5-3000 MHz

Structural Return Loss 24 dB @ 1003-1218 MHz | 24 dB @ 1219-1794 MHz | 30 dB @ 5-1002

MHz

Structural Return Loss, Grade N ≥24 dB @ 1003−1218 MHz | ≥24 dB @ 1219−1794 MHz | ≥30 dB @ 5−1002

MHz

Attenuation

| Frequency (MHz) | Attenuation (dB/100 m) | Attenuation (dB/100 ft) |
|-----------------|------------------------|-------------------------|
| 5.0 | 0.52 | 0.16 |
| 55.0 | 1.77 | 0.54 |
| 85.0 | 2.23 | 0.68 |
| 204.0 | 3.51 | 1.07 |
| 211.0 | 3.58 | 1.09 |
| 250.0 | 3.94 | 1.2 |
| 300.0 | 4.3 | 1.31 |
| 350.0 | 4.69 | 1.43 |
| 400.0 | 5.02 | 1.53 |
| 450.0 | 5.35 | 1.63 |
| 500.0 | 5.67 | 1.73 |
| 550.0 | 5.97 | 1.82 |
| 600.0 | 6.3 | 1.92 |
| 750.0 | 7.09 | 2.16 |
| 865.0 | 7.68 | 2.34 |
| 1002.0 | 8.32 | 2.54 |
| 1218.0 | 9.28 | 2.83 |
| 1500.0 | 10.68 | 3.26 |
| 1794.0 | 11.88 | 3.62 |
| | | |





5302203 | P3® 500 JCASS

| 1800.0 | 11.91 | 3.63 |
|--------|-------|------|
| 2000.0 | 12.68 | 3.87 |
| 2200.0 | 13.44 | 4.1 |
| 2500.0 | 14.52 | 4.43 |
| 2700.0 | 15.22 | 4.64 |
| 3000.0 | 16.25 | 4.95 |

Material Specifications

Center Conductor Material Copper-clad aluminum

Dielectric Material Foam PE

Jacket Material PE

Outer Conductor Material Aluminum

Mechanical Specifications

Minimum Bend Radius, bonded88.9 mm | 3.5 inPulling Tension, maximum136.078 kg | 300 lb

Environmental Specifications

Corrosion Protection Migraheal®

Environmental Space Buried

Packaging and Weights

Packaging Type Reel

Weight, gross 183.044 kg/km | 123 lb/kft

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.commscope.com/ProductCompliance ROHS Compliant UK-ROHS Compliant





CX3299999 | 100T135 EMPTY DUCT COEX



ConQuest® Empty Conduit, 1 in, SDR 13.5, terracotta

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Product Classification

Regional AvailabilityNorth AmericaProduct TypeEmpty conduitProduct BrandConQuest®

Government FundingBuild America Buy America (BABA) compliant*

General Specifications

ColorTerracottaConduit TypeNon-toneableDensity Test MethodASTM D792A

 Density, maximum
 0.955 g/cm³ | 0.035 lb/in³

 Density, minimum
 0.941 g/cm³ | 0.034 lb/in³

Design Standard ASTM D3350-05

Wall Type Smooth

Dimensions

Length 914.4 m | 3000 ft

 Inner Diameter, nominal
 27.965 mm | 1.101 in

 Outer Diameter, nominal
 33.401 mm | 1.315 in

Wall Thickness Designation SDR 13.5

Wall Thickness, minimum 2.464 mm | 0.097 in

Nominal Size 1 in

Material Specifications

Flexural Modulus, minimum 551.581 N/mm² | 80000 psi

Flexural Property Test Method ASTM D790

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CX3299999 | 100T135 EMPTY DUCT COEX

Hydrostatic Design BasisNot pressure rated

Hydrostatic Design Test Method ASTM D2837

Material Type High density polyethylene (HDPE)

Melt Flow Rate Test MethodASTM D1238Melt Flow Rate, maximum0.39 g/10 min

Mechanical Specifications

Minimum Bend Radius, unsupported 355.6 mm | 14 in

Tensile Property Test Method ASTM D638

Tensile Strength at yield, minimum 20.684 N/mm² | 3000 psi

Pulling Tension, maximum 358.338 kg | 790 lb

Environmental Specifications

Environmental Stress Crack Resistance Failure rate of 10% within 96 hours
Environmental Stress Test Method ASTM D1693, ESCR Condition B

Packaging and Weights

Weight, net 251.5 kg/km | 169 lb/kft

Regulatory Compliance/Certifications

Agency Classification

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



* Footnotes

Environmental Stress Crack Resistance ESCR—Environmental Stress Crack Resistence

