CX3460006 | 150T135QR860JCASS COEX



ConQuest® Cable in Conduit, 1 1/2 in, SDR 13.5, terracotta, QR 860 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 860 Series

Government RequirementsBuild America Buy America (BABA) compliant*

Non-toneable

General Specifications

Cable Type860 SeriesCable-In-Conduit TypeQR® in ductColorTerracotta

Location of Manufacturing Catawba, North Carolina

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Wall Type Smooth

Dimensions

Conduit Type

Length 822.96 m | 2700 ft

Wall Thickness Designation SDR 13.5

Nominal Size 1-1/2 in

Packaging and Weights

Weight, net 831.884 kg/km | 559 lb/kft

Included Products

5543802 – 75 Ohm QR® Trunk and Distribution Cable, black PE jacket, flooded for underground

QR® 860 JCASS

COMMSCOPE®

CX3460006 | 150T135QR860JCASS COEX

CX3499999 150T135 EMPTY DUCT COEX ConQuest® Empty Conduit, 1 1/2 in, SDR 13.5, terracotta

5543802 | QR® 860 JCASS



Product Classification

Product Type Coaxial hardline cable

Product Brand QR®

General Specifications

Cable Type860 SeriesConstruction TypeWeldedJacket ColorBlack

Short Description QR 860 JCASS SM PR2171

Dimensions

Cable Length899.16 m | 2950 ftDiameter Over Center Conductor, nominal5.156 mm | 0.203 inDiameter Over Dielectric, nominal21.031 mm | 0.828 inDiameter Over Jacket, nominal24.384 mm | 0.96 inDiameter Over Outer Conductor, nominal21.844 mm | 0.86 inJacket Thickness, nominal1.143 mm | 0.045 inOuter Conductor Thickness, nominal0.406 mm | 0.016 in

Electrical Specifications

 $\textbf{Capacitance} \hspace{1.5cm} 50.197 \hspace{.1cm} pF/m \hspace{.1cm} | \hspace{.1cm} 15.3 \hspace{.1cm} pF/ft$

Capacitance Tolerance±1.0 pF/ftCharacteristic 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, nominal1.345 ohms/km | 0.41 ohms/kftdc Resistance, Loop, nominal2.395 ohms/km | 0.73 ohms/kftdc Resistance, Outer Conductor, nominal1.05 ohms/km | 0.32 ohms/kft

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5543802 | QR® 860 JCASS

Jacket Spark Test Voltage5000 VacNominal Velocity of Propagation (NVP)88 %

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	0.3	0.09
55.0	1.05	0.32
85.0	1.31	0.4
204.0	2.07	0.63
211.0	2.1	0.64
250.0	2.3	0.7
300.0	2.49	0.76
350.0	2.72	0.83
400.0	2.89	0.88
450.0	3.12	0.95
500.0	3.28	1
550.0	3.48	1.06
600.0	3.61	1.1
750.0	4.07	1.24
865.0	4.36	1.33
1000.0	4.72	1.44
1002.0	4.75	1.45
1218.0	5.28	1.61
1500.0	6.12	1.87
1794.0	6.86	2.09
1800.0	6.87	2.1
2000.0	7.36	2.24
2200.0	7.83	2.39
2500.0	8.51	2.59
2700.0	8.96	2.73
3000.0	9.61	2.93

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5543802 | QR® 860 JCASS

Material Specifications

Center Conductor Material Copper-clad aluminum

Dielectric Material Foam PE

Jacket Material PE

Outer Conductor Material Aluminum

Mechanical Specifications

Minimum Bend Radius, bonded177.8 mm7 inPulling Tension, maximum204.117 kg450 lb

Environmental Specifications

Corrosion Protection Migraheal®
Environmental Space Buried

Packaging and Weights

Packaging Type Reel

Weight, gross 434.544 kg/km | 292 lb/kft

Regulatory Compliance/Certifications

Agency Classification

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



CX3499999 | 150T135 EMPTY DUCT COEX



ConQuest® Empty Conduit, 1 1/2 in, SDR 13.5, terracotta

Product Classification

Product TypeEmpty conduitProduct BrandConQuest®

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
 40.589 mm | 1.598 in

Outer Diameter, nominal 48.26 mm | 1.9 in

Wall Thickness Designation SDR 13.5

Wall Thickness, minimum 3.581 mm | 0.141 in

Nominal Size 1-1/2 in

Material Specifications

Flexural Modulus, minimum 551.581 N/mm² | 80000 psi

Flexural Property Test Method ASTM D790

Hydrostatic Design BasisNot pressure rated

Hydrostatic Design Test MethodASTM D2837

Material Type High density polyethylene (HDPE)

Melt Flow Rate Test Method ASTM D1238

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CX3499999 | 150T135 EMPTY DUCT COEX

Melt Flow Rate, maximum 0.39 g/10 min

Mechanical Specifications

Minimum Bend Radius, unsupported 508 mm | 20 in

Tensile Property Test Method ASTM D638

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

Pulling Tension, maximum 659.977 kg | 1455 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 511.928 kg/km | 344 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

