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 Requirements	Build America Buy America (BABA) compliant*

General Specifications

Cable Type	500 Series
Cable-In-Conduit Type	P3® in duct
Color	Terracotta
Conduit Type	Non-toneable
Location of Manufacturing	Catawba, North Carolina
Wall Type	Smooth
Dimonsions	

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 P3® 500 JCASS 75 Ohm P3® Trunk and Distribution Cable, black PE jacket, flooded for underground

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CX3299999 100T135 EMPTY DUCT COEX

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

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COMMSCOPE°

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 Requirements	Build America Buy America (BABA) compliant*
Warranty	One year
General Specifications	
Cable Type	500 Series
Construction Type	Swaged
Jacket Color	Black
Location of Manufacturing	Catawba, North Carolina
Short Description	P3 500 JCASS SM PR997
Dimensions	
Cable Length	731.52 m 2400 ft
Diameter Over Center Conductor, nominal	2.769 mm 0.109 in
Diameter Over Dielectric, nominal	11.481 mm 0.452 in
Diameter Over Jacket, nominal	14.478 mm 0.57 in
Diameter Over Outer Conductor, nominal	12.7 mm 0.5 in
Jacket Thickness, nominal	0.762 mm 0.03 in
Outer Conductor Thickness, nominal	0.61 mm 0.024 in
Electrical Specifications	

Electrical Specifications

Capacitance

50.197 pF/m | 15.3 pF/ft

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5302203 | P3® 500 JCASS

Capacitance Tolerance	±1.0 pF/ft
Characteristic Impedance	75 ohm
Characteristic Impedance Tolerance	±2 ohm
dc Resistance Note	Nominal values based on a standard condition of 20 °C (68 °F)
dc Resistance, Inner Conductor, nominal	4.429 ohms/km 1.35 ohms/kft
dc Resistance, Loop, nominal	5.643 ohms/km 1.72 ohms/kft
dc Resistance, Outer Conductor, nominal	1.214 ohms/km 0.37 ohms/kft
Jacket Spark Test Voltage	5000 Vac
Nominal 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

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1794.0	11.88	3.62
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
Machanical Spacifications	

Mechanical Specifications Minimum Bend Radius, bonded 88.9 mm | 3.5 in **Pulling Tension, maximum** 136.078 kg | 300 lb

Environmental Specifications

Corrosion Protection	Migraheal®
Environmental Space	Buried
Packaging and Weights	
Packaging Type	Reel

Reel

Weight, gross

183.044 kg/km | 123 lb/kft

Regulatory Compliance/Certifications

Agency Classificat	ion
CHINA-ROHS Below max	imum 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	



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CX3299999 | 100T135 EMPTY DUCT COEX

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

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Product Classification

Regional Availability	North America
Product Type	Empty conduit
Product Brand	ConQuest®
Government Requirements	Build America Buy America (BABA) compliant*
General Specifications	
Color	Terracotta
Conduit Type	Non-toneable
Density Test Method	ASTM 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
Location of Manufacturing	Catawba, North Carolina
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

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Hydrostatic Design Basis Not pressure rated
Hydrostatic Design Test Method ASTM D2837
Material TypeHigh density polyethylene (HDPE)
Melt Flow Rate Test MethodASTM D1238
Melt 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 ISO 9001:2015

Classification Designed, manufactured and/or distributed under this quality management system

* Footnotes

Environmental Stress Crack Resistance ESCR-Environmental Stress Crack Resistence

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