5278203 | P3 500 JCASST 0 SM PR997



75 Ohm P3® Trunk and Distribution Cable, black PE jacket with coextruded orange stripe, flooded for underground

 *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

Designal Availability	North America
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

Capacitance

50.197 pF/m | 15.3 pF/ft

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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

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	

Reel

Weight, gross

Packaging Type

183.044 kg/km | 123 lb/kft

Regulatory Compliance/Certifications

Agency Classification	
CHINA-ROHS Below maximum	concentration value
ISO 9001:2015 Designed, manua	factured and/or distributed under this quality management system
REACH-SVHC Compliant as pe	r SVHC revision on www.commscope.com/ProductCompliance
ROHS Compliant	
UK-ROHS Compliant	



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