5204002 | P3® 750 CA

75 Ohm P3® Trunk and Distribution Cable, unjacketed

- *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 hardline cable
Product Brand	P3®
Government Requirements	Build America Buy America (BABA) compliant*
Warranty	One year

General Specifications

Cable Type	750 Series
Construction Type	Swaged
Jacket Color	Unjacketed
Location of Manufacturing	Catawba, North Carolina
Short Description	P3 750 CA

Dimensions

Cable Length	762 m | 2500 ft
Diameter Over Center Conductor, nominal	4.242 mm | 0.167 in
Diameter Over Dielectric, nominal	17.323 mm | 0.682 in
Diameter Over Outer Conductor, nominal	19.05 mm | 0.75 in
Outer Conductor Thickness, nominal	0.864 mm | 0.034 in

Electrical Specifications

Capacitance	50.197 pF/m | 15.3 pF/ft
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	1.87 ohms/km | 0.57 ohms/kft
dc Resistance, Loop, nominal	2.493 ohms/km | 0.76 ohms/kft
dc Resistance, Outer Conductor, nominal	0.623 ohms/km | 0.19 ohms/kft
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	0.36	0.11
55.0	1.21	0.37
85.0	1.51	0.46
204.0	2.36	0.72
211.0	2.43	0.74
250.0	2.66	0.81
300.0	2.92	0.89
350.0	3.18	0.97
400.0	3.44	1.05
450.0	3.67	1.12
500.0	3.87	1.18
550.0	4.07	1.24
600.0	4.3	1.31
750.0	4.86	1.48
865.0	5.28	1.61
1002.0	5.72	1.74
1218.0	6.41	1.95
1500.0	7.3	2.23
1794.0	8.07	2.46
1800.0	8.08	2.46
2000.0	8.57	2.61
2200.0	9.05	2.76

2500.0	9.73	2.96
2700.0	10.16	3.1
3000.0	10.8	3.29

Material Specifications

Center Conductor Material	Copper-clad aluminum
Dielectric Material	Foam PE
Jacket Material	Unjacketed
Outer Conductor Material	Aluminum

Mechanical Specifications

Minimum Bend Radius, standard	228.6 mm | 9 in
Pulling Tension, maximum	306.175 kg | 675 lb

Environmental Specifications

Environmental Space	Aerial

Packaging and Weights

Packaging Type	Reel
Weight, gross	333.349 kg/km | 224 lb/kft

Regulatory Compliance/Certifications

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