

# 5378803 | P3® 500 JCAT G SM MT

75 Ohm P3® Trunk and Distribution Cable, black PE jacket with co-extruded green stripe



- \*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

<b>Regional Availability</b>	North America
<b>Product Type</b>	Coaxial hardline cable
<b>Product Brand</b>	P3®
<b>Government Funding</b>	Build America Buy America (BABA) compliant*
<b>Warranty</b>	One year

## General Specifications

<b>Cable Type</b>	500 Series
<b>Construction Type</b>	Swaged
<b>Jacket Color</b>	Black with co-extruded green stripe
<b>Short Description</b>	P3 500 JCAT G SM MT PR7280

## Dimensions

<b>Cable Length</b>	2400 ft   731.52 m
<b>Diameter Over Center Conductor, nominal</b>	0.109 in   2.769 mm
<b>Diameter Over Dielectric, nominal</b>	0.452 in   11.481 mm
<b>Diameter Over Jacket, nominal</b>	0.56 in   14.224 mm
<b>Diameter Over Outer Conductor, nominal</b>	0.5 in   12.7 mm
<b>Jacket Thickness, nominal</b>	0.03 in   0.762 mm
<b>Outer Conductor Thickness, nominal</b>	0.024 in   0.61 mm

## Electrical Specifications

<b>Capacitance</b>	15.3 pF/ft   50.197 pF/m
<b>Capacitance Tolerance</b>	±1.0 pF/ft

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<b>Characteristic Impedance</b>	75 ohm
<b>Characteristic Impedance Tolerance</b>	±2 ohm
<b>dc Resistance Note</b>	Nominal values based on a standard condition of 20 °C (68 °F)
<b>dc Resistance, Inner Conductor, nominal</b>	1.35 ohms/kft   4.429 ohms/km
<b>dc Resistance, Loop, nominal</b>	1.72 ohms/kft   5.643 ohms/km
<b>dc Resistance, Outer Conductor, nominal</b>	0.37 ohms/kft   1.214 ohms/km
<b>Jacket Spark Test Voltage</b>	5000 Vac
<b>Nominal Velocity of Propagation (NVP)</b>	87 %
<b>Operating Frequency Band</b>	5–3000 MHz
<b>Structural Return Loss</b>	24 dB @ 1002–1218 MHz   24 dB @ 1003–1218 MHz   24 dB @ 1219–1794 MHz   30 dB @ 5–1002 MHz
<b>Structural Return Loss, Grade N</b>	≥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

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<b>1800.0</b>	11.91	3.63
<b>2000.0</b>	12.68	3.87
<b>2200.0</b>	13.44	4.1
<b>2500.0</b>	14.52	4.43
<b>2700.0</b>	15.22	4.64
<b>3000.0</b>	16.25	4.95

## Material Specifications

<b>Center Conductor Material</b>	Copper-clad aluminum
<b>Dielectric Material</b>	Foam PE
<b>Jacket Material</b>	PE
<b>Outer Conductor Material</b>	Aluminum

## Mechanical Specifications

<b>Minimum Bend Radius, bonded</b>	3.5 in   88.9 mm
<b>Pulling Tension, maximum</b>	300 lb   136.078 kg

## Environmental Specifications

<b>Environmental Space</b>	Aerial
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## Packaging and Weights

<b>Packaging Type</b>	Reel
<b>Weight, gross</b>	120 lb/kft   178.58 kg/km

## Regulatory Compliance/Certifications

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