

# 5302203 | P3® 500 JCASS

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



## Product Classification

Product Type	Coaxial hardline cable
Product Brand	P3®
Warranty	One year

## General Specifications

Cable Type	500 series
Construction Type	Swaged
Jacket Color	Black
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
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)

# 5302203 | P3® 500 JCASS

<b>dc Resistance, Inner Conductor, nominal</b>	4.429 ohms/km   1.35 ohms/kft
<b>dc Resistance, Loop, nominal</b>	5.643 ohms/km   1.72 ohms/kft
<b>dc Resistance, Outer Conductor, nominal</b>	1.214 ohms/km   0.37 ohms/kft
<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>	26 dB @ 1002–1218 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
83.0	2.17	0.66
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	6.27	1.91
750.0	7.09	2.16
865.0	7.68	2.34
1000.0	8.27	2.52
1002.0	8.33	2.54
1300.0	2.95	2.81
1400.0	3.09	2.94
1500.0	10.55	3.22
1600.0	10.97	3.34
1700.0	11.38	3.47
1794.0	11.76	3.58
1800.0	11.78	3.59

# 5302203 | P3® 500 JCASS

2000.0	12.56	3.83
2200.0	13.32	4.06
2400.0	14.05	4.28
2600.0	14.77	4.5
2800.0	15.47	4.71
3000.0	16.15	4.92

## 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

Packaging Type	Reel
Weight, gross	183.044 kg/km   123 lb/kft

## Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant

