

Product Specifications

COMMSCOPE®



Broadband Solutions
5204003 | P3® 750 JCA
75 Ohm P3® Trunk and Distribution Cable, black PE jacket

Construction Materials

Jacket Material	PE
Center Conductor Material	Copper-clad aluminum
Construction Type	Swaged
Dielectric Material	PE
Outer Conductor Material	Aluminum

Dimensions

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	19.050 mm 0.750 in
Diameter Over Jacket, nominal	20.828 mm 0.820 in
Jacket Thickness, nominal	0.8890 mm 0.0350 in
Outer Conductor Thickness, nominal	0.8636 mm 0.0340 in
Cable Length	762 m 2500 ft
Shipping Weight	260.00 lb/kft

Electrical Specifications

dc Resistance, Inner Conductor, nominal	0.57 ohms/kft
dc Resistance, Outer Conductor, nominal	0.19 ohms/kft
dc Resistance, Loop, nominal	0.76 ohms/kft
dc Resistance Note	Nominal values based on a standard condition of 20 °C (68 °F)
Capacitance	50.2 pF/m 15.3 pF/ft
Capacitance Tolerance	±1.0 pF/ft
Characteristic Impedance	75 ohm
Characteristic Impedance Tolerance	±2 ohm
Jacket Spark Test Voltage	5000 Vac
Nominal Velocity of Propagation (NVP)	87 %
Operating Frequency Band	5-1000 MHz
Structural Return Loss	30 dB @ 5-1000 MHz

Environmental Specifications

Environmental Space	Aerial
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General Specifications

Brand	P3®
Cable Type	750 series
Jacket Color	Black
Packaging Type	Reel
Short Description	P3 750 JCA SM PR2171
Warranty	One year

Product Specifications



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Mechanical Specifications

Minimum Bend Radius, bonded	152.40 mm 6.00 in
Minimum Bend Radius, standard	203.20 mm 8.00 in
Pulling Tension, maximum	306 kg 675 lb

Electrical Performance

Frequency	Attenuation (dB/100 m)	Attenuation (dB/100 ft)
5 MHz	0.36	0.11
55 MHz	1.21	0.37
83 MHz	1.51	0.46
211 MHz	2.43	0.74
250 MHz	2.66	0.81
300 MHz	2.92	0.89
350 MHz	3.18	0.97
400 MHz	3.45	1.05
450 MHz	3.67	1.12
500 MHz	3.87	1.18
550 MHz	4.07	1.24
600 MHz	4.30	1.31
750 MHz	4.86	1.48
865 MHz	5.28	1.61
1000 MHz	5.71	1.74

* Attenuation listed represents maximum values at standard condition of 20 °C (68 °F)

Regulatory Compliance/Certifications

Agency	Classification
RoHS 2011/65/EU	Compliant
ISO 9001:2008	Designed, manufactured and/or distributed under this quality management system