E20500JCA-24CT MICFIBR

E20® Coaxial/Fiber Hybrid Aerial Cable



- E20 is a solution that enables service providers the ability to bridge HFC networks to FTTx. The E20 composite coaxial/fiber product line combines fiber, microducts, and coaxial cable under one jacket
- Serves businesses in a new commercial serving area
- Mitigates future cost of fiber installation
- Saves on initial installation due to "single sheath" vs. multiple sheaths
- Ideal for commercial data customers that also require video
- All products tested to industry standards

OBSOLETE

Product Classification

Product Type Hybrid cable, coax and fiber

Product Brand E20®

General Specifications

Cable Series P3 500

Total Fiber Count 24

Dimensions

 Height
 23.622 mm | 0.93 in

 Width
 16.002 mm | 0.63 in

 Outer Jacket Thickness, nominal
 0.762 mm | 0.03 in

Material Specifications

Outer Jacket Material Medium density polyethylene (MDPE)

Mechanical Specifications

Minimum Bend Radius88.9 mm3.5 inPulling Tension, maximum33.112 kg73 lb

Environmental Specifications

Environmental Space Aerial

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E20500JCA-24CT MICFIBR

Packaging and Weights

Weight, gross 278.287 kg/km | 187 lb/kft

Regulatory Compliance/Certifications

Agency Classification

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



Included Products

530001893 – 75 Ohm P3® Trunk and Distribution Cable, black PE jacket P3® 500 JCA

810008925/DB – LightScope ZWP® Blown Micro Single Jacket All-Dielectric Outdoor Stranded Loose Tube Arid-B-024-LN-8W-F12NS/16G Core® Construction Cable

COMMSCOPE®

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530001893 | P3® 500 JCA

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



Product Classification

Product Type Coaxial hardline cable

Product Brand P3®

Warranty One year

General Specifications

Cable Type500 SeriesConstruction TypeSwagedJacket ColorBlack

Short Description P3 500 JCA SM PR2171

Dimensions

Cable Length731.52 m | 2400 ftDiameter Over Center Conductor, nominal2.769 mm | 0.109 inDiameter Over Dielectric, nominal11.481 mm | 0.452 inDiameter Over Jacket, nominal14.224 mm | 0.56 inDiameter Over Outer Conductor, nominal12.7 mm | 0.5 inJacket Thickness, nominal0.762 mm | 0.03 inOuter Conductor Thickness, nominal0.61 mm | 0.024 in

Electrical Specifications

Capacitance 50.197 pF/m | 15.3 pF/ft

Capacitance Tolerance±1.0 pF/ftCharacteristic Impedance75 ohmCharacteristic Impedance Tolerance±2 ohm



530001893 | P3® 500 JCA

dc Resistance Note Nominal values based on a standard condition of 20 °C (68 °F)

dc Resistance, Inner Conductor, nominal4.429 ohms/km | 1.35 ohms/kftdc Resistance, Loop, nominal5.643 ohms/km | 1.72 ohms/kft

 $\begin{tabular}{lll} \textbf{dc Resistance, Outer Conductor, nominal} & 1.214 \ ohms/km & | 0.37 \ ohms/kft \\ \end{tabular}$

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
1794.0	11.88	3.62
1800.0	11.91	3.63
2000.0	12.68	3.87



530001893 | P3® 500 JCA

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, bonded88.9 mm | 3.5 inPulling Tension, maximum136.078 kg | 300 lb

Environmental Specifications

Environmental Space Aerial

Packaging and Weights

Packaging Type Reel

Weight, gross 178.58 kg/km | 120 lb/kft

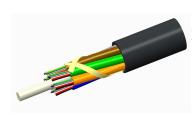
Regulatory Compliance/Certifications

Agency Classification

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810008925/DB | B-024-LN-8W-F12NS/16G



LightScope ZWP® Blown Micro Single Jacket All-Dielectric Outdoor Stranded Loose Tube Arid-Core® Construction Cable

Product Classification

Regional Availability

Asia | Australia/New Zealand | EMEA | Latin America | North

America

Black

 Portfolio
 CommScope®

 Product Type
 Fiber OSP cable

Product Series B-LN

General Specifications

 Cable Type
 Stranded loose tube

Construction Type Non-armored

Fiber Type, quantity 24
Fibers per Subunit, quantity 12

Filler, quantity 3

Jacket Marking Feet

Subunit Type Gel-filled

Subunit, quantity 2

Total Fiber Count 24

Dimensions

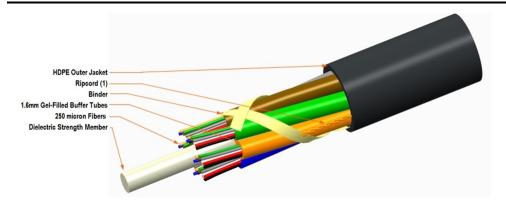
Jacket Color

Buffer Tube/Subunit Diameter1.6 mm0.063 inDiameter Over Jacket5.5 mm0.217 in

Representative Image



810008925/DB | B-024-LN-8W-F12NS/16G



Material Specifications

Compression Test Method

Jacket Material High density polyethylene (HDPE)

Mechanical Specifications

Minimum Bend Radius, loaded 83 mm | 3.268 in Minimum Bend Radius, unloaded 55 mm | 2.165 in Tensile Load, long term, maximum 97 N | 21.806 lbf Tensile Load, short term, maximum 324 N | 72.838 lbf

Compression 10 N/mm | 57.101 lb/in FOTP-41 | IEC 60794-1 E3

Flex 25 cycles

Flex Test Method FOTP-104 | IEC 60794-1 E6

0.3 N-m | 2.655 in lb **Impact**

Impact Test Method FOTP-25 | IEC 60794-1 E4

Strain See long and short term tensile loads

Strain Test Method FOTP-33 | IEC 60794-1 E1

Twist 10 cycles

Twist Test Method FOTP-85 | IEC 60794-1 E7

Vertical Rise, maximum 492 m | 1,614.173 ft

Optical Specifications

Fiber Type G.652.D and G.657.A1 | G.652.D and G.657.A1

Environmental Specifications

Installation temperature -30 °C to +70 °C (-22 °F to +158 °F)

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810008925/DB | B-024-LN-8W-F12NS/16G

Operating Temperature $-30 \, ^{\circ}\text{C to} + 70 \, ^{\circ}\text{C} (-22 \, ^{\circ}\text{F to} + 158 \, ^{\circ}\text{F})$

Storage Temperature $-30 \,^{\circ}\text{C} \text{ to } +75 \,^{\circ}\text{C} \, (-22 \,^{\circ}\text{F to } +167 \,^{\circ}\text{F})$

Cable Qualification Standards IEC 60794-5-10

Environmental Space Air-blown, microduct

Jacket UV Resistance UV stabilized

Water Penentration 24 h

Water Penentration Test Method FOTP-82 | IEC 60794-1 F5

Environmental Test Specifications

Cable Freeze -2 °C | 28.4 °F

Cable Freeze Test Method FOTP-98 | IEC 60794-1 F15

Drip 70 °C | 158 °F

Drip Test Method FOTP-81 | IEC 60794-1 E14

-30 °C to +85 °C (-22 °F to +185 °F)

Heat Age Test Method IEC 60794-1 F9

Low High Bend $-30 \,^{\circ}\text{C} \text{ to } +60 \,^{\circ}\text{C} \, (-22 \,^{\circ}\text{F to } +140 \,^{\circ}\text{F})$

Low High Bend Test Method FOTP-37 | IEC 60794-1 E11

Temperature Cycle -30 °C to +70 °C (-22 °F to +158 °F)

Temperature Cycle Test Method FOTP-3 | IEC 60794-1 F1

Packaging and Weights

Cable weight 20 kg/km | 13.439 lb/kft

Regulatory Compliance/Certifications

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* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

