E20540JCA-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	QR 540
Total Fiber Count	24
Dimensions	
Height	24.638 mm 0.97 in
Width	17.018 mm 0.67 in
Outer Jacket Thickness, nominal	0.762 mm 0.03 in
Material Specifications	
Outer Jacket Material	Medium density polyethylene (MDPE)
Mechanical Specifications	
Minimum Bend Radius	101.6 mm 4 in
Pulling Tension, maximum	33.112 kg 73 lb

Environmental Specifications

Environmental Space

Aerial

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Packaging and Weights

Weight, gross

273.822 kg/km | 184 lb/kft

Regulatory Compliance/Certifications

Agency

Classification

ISO 9001:2015

Designed, manufactured and/or distributed under this quality management system



Included Products

550006392 QR® 540 JCA	-	75 Ohm QR® Trunk and Distribution Cable, black PE jacket
810008925/DB B-024-LN-8W-F12NS/16G	-	LightScope ZWP® Blown Micro Single Jacket All-Dielectric Outdoor Stranded Loose Tube Arid- Core® Construction Cable



550006392 | QR® 540 JCA

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

Coaxial hardline cable

QR®



Product Classification

Product Type

Product Brand

General Specifications

Cable Type	540 Series
Construction Type	Welded
Jacket Color	Black
Short Description	QR 540 JCA SM PR2171

Dimensions

Cable Length	1,127.76 m 3700 ft
Diameter Over Center Conductor, nominal	3.15 mm 0.124 in
Diameter Over Dielectric, nominal	13.056 mm 0.514 in
Diameter Over Jacket, nominal	15.494 mm 0.61 in
Diameter Over Outer Conductor, nominal	13.716 mm 0.54 in
Jacket Thickness, nominal	0.889 mm 0.035 in
Outer Conductor Thickness, nominal	0.343 mm 0.014 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)

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550006392 | QR® 540 JCA

dc Resistance, Inner Conductor, nominal	3.346 ohms/km 1.02 ohms/kft
dc Resistance, Loop, nominal	5.282 ohms/km 1.61 ohms/kft
dc Resistance, Outer Conductor, nominal	1.936 ohms/km 0.59 ohms/kft
Jacket Spark Test Voltage	5000 Vac
Nominal Velocity of Propagation (NVP)	88 %
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	0.46	0.14
55.0	1.54	0.47
85.0	1.94	0.59
204.0	3.05	0.93
211.0	3.12	0.95
250.0	3.38	1.03
300.0	3.71	1.13
350.0	4.04	1.23
400.0	4.33	1.32
450.0	4.59	1.4
500.0	4.89	1.49
550.0	5.12	1.56
600.0	5.38	1.64
750.0	6.07	1.85
865.0	6.56	2
1002.0	7.12	2.17
1218.0	7.89	2.41
1500.0	9.07	2.76
1794.0	10.11	3.08
1800.0	10.13	3.09
2000.0	10.81	3.29
2200.0	11.46	3.49

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550006392 | QR® 540 JCA

2500.0	12.41	3.78
2700.0	13.03	3.97
3000.0	13.93	4.24
Material Specifica	ations	
Center Conductor Materia	I	Copper-clad aluminum
Dielectric Material		Foam PE
Jacket Material		PE
Outer Conductor Material		Aluminum
Mechanical Spec	ifications	
Pulling Tension, maximun	n	99.79 kg 220 lb
Environmental Sp	pecifications	
Environmental Space		Aerial
Packaging and W	/eights	
Packaging Type		Reel
Weight, gross		178.58 kg/km 120 lb/kft
Regulatory Compliance/Certifications		
Agency	Classification	

ISO 9001:2015

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

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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

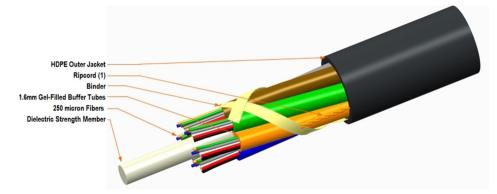
Regional Availability	Asia Australia/New Zealand EMEA Latin America North America
Portfolio	CommScope®
Product Type	Fiber OSP cable
Product Series	B-LN
General Specifications	
Cable Type	Stranded loose tube
Construction Type	Non-armored
Fiber Type, quantity	24
Fibers per Subunit, quantity	12
Filler, quantity	3
Jacket Color	Black
Jacket Marking	Feet
Subunit Type	Gel-filled
Subunit, quantity	2
Total Fiber Count	24
Dimensions	
Buffer Tube/Subunit Diameter	1.6 mm 0.063 in
Diameter Over Jacket	5.5 mm 0.217 in

Representative Image

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



Material Specifications

Jacket Material

High density polyethylene (HDPE)

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
Compression Test Method	FOTP-41 IEC 60794-1 E3
Flex	25 cycles
Flex Test Method	FOTP-104 IEC 60794-1 E6
Impact	0.3 N-m 2.655 in lb
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	C 652 D and C 657 A1 L C 652 D and C 657

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 °C to +70 °C (-22 °F to +158 °F)
Storage Temperature	-30 °C to +75 °C (-22 °F to +167 °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
Heat Age	-30 °C to +85 °C (-22 °F to +185 °F)
Heat Age Test Method	IEC 60794-1 F9
Low High Bend	-30 °C to +60 °C (-22 °F to +140 °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

Classification

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* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

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