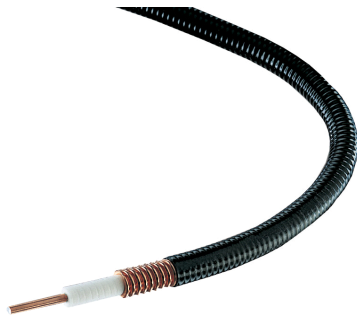


# LSF2-50



LSF2-50, HELIAX® Superflexible Foam Coaxial Cable, corrugated copper, 3/8 in, black PE jacket

## Product Classification

<b>Brand</b>	HELIAX®   SureFlex®
<b>Product Type</b>	Coaxial wireless cable

## Standards And Qualifications

<b>EN50575 CPR Cable EuroClass</b>	Fca
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## Construction Materials

<b>Jacket Material</b>	PE
<b>Outer Conductor Material</b>	Corrugated copper
<b>Dielectric Material</b>	Foam PE
<b>Flexibility</b>	Superflexible
<b>Inner Conductor Material</b>	Copper-clad aluminum wire
<b>Jacket Color</b>	Black

## Dimensions

<b>Nominal Size</b>	3/8 in
<b>Cable Weight</b>	0.08 lb/ft   0.11 kg/m
<b>Diameter Over Dielectric</b>	7.645 mm   0.301 in
<b>Diameter Over Jacket</b>	11.024 mm   0.434 in
<b>Inner Conductor OD</b>	3.0480 mm   0.1200 in
<b>Outer Conductor OD</b>	9.906 mm   0.390 in

## Electrical Specifications

<b>Cable Impedance</b>	50 ohm $\pm$ 1 ohm
<b>Capacitance</b>	24.6 pF/ft   80.7 pF/m
<b>dc Resistance, Inner Conductor</b>	1.110 ohms/kft   3.650 ohms/km
<b>dc Resistance, Outer Conductor</b>	1.410 ohms/kft   4.640 ohms/km
<b>dc Test Voltage</b>	2500 V
<b>Inductance</b>	0.062 $\mu$ H/ft   0.202 $\mu$ H/m

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<b>Insulation Resistance</b>	100000 Mohms•km
<b>Jacket Spark Test Voltage (rms)</b>	5000 V
<b>Operating Frequency Band</b>	1 – 10200 MHz
<b>Peak Power</b>	15.6 kW
<b>Velocity</b>	82%

## Environmental Specifications

<b>Installation Temperature</b>	-40 °C to +60 °C (-40 °F to +140 °F)
<b>Operating Temperature</b>	-55 °C to +85 °C (-67 °F to +185 °F)
<b>Storage Temperature</b>	-70 °C to +85 °C (-94 °F to +185 °F)

## General Specifications

<b>Ordering Note</b>	CommScope® standard product (Global)
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## Mechanical Specifications

<b>Bending Moment</b>	2.2 N-m   1.6 ft lb
<b>Flat Plate Crush Strength</b>	110.0 lb/in   2.0 kg/mm
<b>Minimum Bend Radius, Multiple Bends</b>	25.40 mm   1.00 in
<b>Minimum Bend Radius, Single Bend</b>	25.40 mm   1.00 in
<b>Number of Bends, minimum</b>	15
<b>Tensile Strength</b>	118 kg   260 lb

## Note

<b>Performance Note</b>	Values typical, unless otherwise stated
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## Standard Conditions

<b>Attenuation, Ambient Temperature</b>	20 °C   68 °F
<b>Average Power, Ambient Temperature</b>	40 °C   104 °F
<b>Average Power, Inner Conductor Temperature</b>	100 °C   212 °F

## Return Loss/VSWR

<b>Frequency Band</b>	<b>VSWR</b>	<b>Return Loss (dB)</b>
680–800 MHz	1.2	20.80
800–960 MHz	1.2	20.80
1700–2200 MHz	1.2	20.80
2300–2700 MHz	1.2	20.80
3400–3800 MHz	1.2	20.80

## Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
0.5	0.321	0.098	15.60
1	0.422	0.129	15.60
1.5	0.501	0.153	15.60
2	0.567	0.173	14.27
10	1.179	0.359	6.86
20	1.641	0.5	4.93
30	1.998	0.609	4.05
50	2.567	0.782	3.15
85	3.342	1.019	2.42
88	3.4	1.036	2.38
100	3.625	1.105	2.23
108	3.768	1.148	2.15
150	4.447	1.355	1.82
174	4.795	1.461	1.69
200	5.147	1.569	1.57
204	5.199	1.585	1.56
300	6.336	1.931	1.28
400	7.351	2.241	1.10
450	7.815	2.382	1.03
460	7.905	2.409	1.02
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500	8.257	2.517	0.98
512	8.36	2.548	0.97
600	9.084	2.769	0.89
700	9.851	3.003	0.82
800	10.572	3.222	0.77
824	10.739	3.273	0.75
894	11.214	3.418	0.72
960	11.648	3.55	0.69
1000	11.904	3.628	0.68
1218	13.231	4.033	0.61
1250	13.417	4.089	0.60
1500	14.806	4.512	0.55
1700	15.848	4.83	0.51
1794	16.32	4.974	0.50
1800	16.35	4.983	0.49
2000	17.321	5.279	0.47
2100	17.791	5.423	0.45
2200	18.253	5.563	0.44
2300	18.706	5.701	0.43
2500	19.589	5.97	0.41
2700	20.445	6.231	0.40
3000	21.682	6.608	0.37
3400	23.26	7.089	0.35
3700	24.396	7.436	0.33

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3800	24.767	7.549	0.33
4000	25.498	7.771	0.32
5000	28.965	8.828	0.28
6000	32.183	9.809	0.25
8000	38.096	11.611	0.21
8800	40.314	12.287	0.20
10000	43.516	13.263	0.19

\* Values typical, guaranteed within 5%

## Regulatory Compliance/Certifications

### Agency

RoHS 2011/65/EU  
China RoHS SJ/T 11364-2006  
ISO 9001:2015  
CENELEC

### Classification

Compliant  
Below Maximum Concentration Value (MCV)  
Designed, manufactured and/or distributed under this quality management system  
EN 50575 compliant, Declaration of Performance (DoP) available

