



FSJ2RK-50

FSJ2-50, HELIAX® Superflexible Foam Coaxial Cable, corrugated copper, 3/8 in, black non-halogenated, fire retardant polyolefin jacket

Construction Materials

Jacket Material Non-halogenated, fire retardant polyolefin

Outer Conductor Material Corrugated copper

Dielectric Material Foam PE
Flexibility Superflexible

Inner Conductor Material Copper-clad aluminum wire

Jacket Color Black

Dimensions

Nominal Size 3/8 in

 Cable Weight
 0.09 lb/ft | 0.13 kg/m

 Diameter Over Dielectric
 7.112 mm | 0.280 in

 Diameter Over Jacket
 10.922 mm | 0.430 in

 Inner Conductor OD
 2.7940 mm | 0.1100 in

 Outer Conductor OD
 9.652 mm | 0.380 in

Electrical Specifications

Cable Impedance 50 ohm ±1 ohm

Capacitance 24.0 pF/ft | 80.0 pF/m

dc Resistance, Inner Conductor1.290 ohms/kft4.232 ohms/kmdc Resistance, Outer Conductor1.520 ohms/kft4.987 ohms/km

dc Test Voltage 2300 V

Inductance 0.200 μ H/m | 0.061 μ H/ft

Insulation Resistance 100000 Mohms•km

Jacket Spark Test Voltage (rms) 4000 V

Operating Frequency Band 1 – 13400 MHz

Peak Power 13.2 kW Velocity 83%

Environmental Specifications

Installation Temperature $-40 \, ^{\circ}\text{C}$ to $+60 \, ^{\circ}\text{C}$ ($-40 \, ^{\circ}\text{F}$ to $+140 \, ^{\circ}\text{F}$)

Operating Temperature $-40 \, ^{\circ}\text{C}$ to $+60 \, ^{\circ}\text{C}$ ($-40 \, ^{\circ}\text{F}$ to $+140 \, ^{\circ}\text{F}$)

Storage Temperature $-40 \, ^{\circ}\text{C}$ to $+60 \, ^{\circ}\text{C}$ ($-40 \, ^{\circ}\text{F}$ to $+140 \, ^{\circ}\text{F}$)

General Specifications



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Brand HELIAX®

Mechanical Specifications

Bending Moment 2.3 N-m | 1.7 ft lb

Fire Retardancy Test Method NFPA 130-2010 | UL 1666/CATVR

Flat Plate Crush Strength 100.0 lb/in | 1.8 kg/mm Minimum Bend Radius, Multiple Bends 25.40 mm | 1.00 in

Minimum Bend Radius, Single Bend 25.40 mm | 1.00 in

Number of Bends, minimum 30 Number of Bends, typical 50

Smoke Index Test Method IEC 61034

Tensile Strength 95 kg | 210 lb

Toxicity Index Test Method IEC 60754-1 | IEC 60754-2

Note

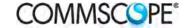
Performance Note Values typical, unless otherwise stated

Standard Conditions

Attenuation, Ambient Temperature 20 °C | 68 °F Average Power, Ambient Temperature 40 °C | 104 °F Average Power, Inner Conductor Temperature 100 °C | 212 °F

Return Loss/VSWR

Frequency Band	VSWR	Return Loss (dB)
680-960 MHz	1.2	20.80
1700-2200 MHz	1.2	20.80
2200-2700 MHz	1.43	15.00



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Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
0.5	0.27	0.082	13.20
1	0.383	0.117	13.20
1.5	0.469	0.143	13.20
2	0.542	0.165	13.20
10	1.219	0.372	6.97
20	1.732	0.528	4.91
30	2.128	0.649	3.99
50	2.762	0.842	3.08
85	3.626	1.105	2.34
88	3.691	1.125	2.30
100	3.943	1.202	2.16
108	4.103	1.25	2.07
150	4.864	1.482	1.75
174	5.254	1.601	1.62
200	5.65	1.722	1.50
204	5.709	1.74	1.49
300	6.99	2.13	1.22
400	8.139	2.481	1.04
450	8.665	2.641	0.98
500	9.166	2.794	0.93
512	9.283	2.829	0.92
600	10.107	3.081	0.84
700	10.983	3.347	0.77
800	11.807	3.599	0.72
824	11.998	3.657	0.71
894	12.542	3.823	0.68
960	13.04	3.974	0.65
1000	13.334	4.064	0.64
1218	14.861	4.529	0.57
1250	15.075	4.595	0.56
1500	16.68	5.084	0.51
1700	17.887	5.452	0.48
1800	18.47	5.629	0.46
2000	19.599	5.974	0.43
2100	20.147	6.141	0.43
2200	20.685	6.305	0.41
2300	21.214	6.466	0.40
2500	22.247	6.78	0.38
2700	23.249	7.086	0.37
3000	24.701	7.529	0.34
3400	26.558	8.094	0.32
3700	27.899	8.503	0.30
4000	29.201	8.9	0.29
5000	33.316	10.154	0.26
6000	37.158	11.325	0.23
8000	44.264	13.491	0.19
8800	46.943	14.308	0.18
10000	50.826	15.491	0.17
12000	57.001	17.373	0.15

^{*} Values typical, guaranteed within 5%

Regulatory Compliance/Certifications



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Agency Classification

ISO 9001:2008 Designed, manufactured and/or distributed under this quality management system