

# FSJ4-75A



FSJ4-75A, HELIAX® Superflexible Foam Coaxial Cable, corrugated copper, 1/2 in, black PE jacket

## Product Classification

<b>Brand</b>	HELIAX®   SureFlex®
<b>Product Series</b>	FSJ4-75A
<b>Product Type</b>	Coaxial wireless cable

## 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 steel wire
<b>Jacket Color</b>	Black

## Dimensions

<b>Nominal Size</b>	1/2 in
<b>Cable Weight</b>	0.15 lb/ft   0.22 kg/m
<b>Diameter Over Dielectric</b>	9.398 mm   0.370 in
<b>Diameter Over Jacket</b>	13.462 mm   0.530 in
<b>Inner Conductor OD</b>	2.0320 mm   0.0800 in
<b>Outer Conductor OD</b>	12.192 mm   0.480 in

## Electrical Specifications

<b>Cable Impedance</b>	75 ohm $\pm$ 2 ohm
<b>Capacitance</b>	16.7 pF/ft   54.8 pF/m
<b>dc Resistance, Inner Conductor</b>	1.500 ohms/kft   4.922 ohms/km
<b>dc Resistance, Outer Conductor</b>	1.000 ohms/kft   3.281 ohms/km
<b>dc Test Voltage</b>	2500 V
<b>Inductance</b>	0.308 $\mu$ H/m   0.094 $\mu$ H/ft
<b>Insulation Resistance</b>	100000 Mohms•km

# FSJ4-75A

---

<b>Jacket Spark Test Voltage (rms)</b>	4000 V
<b>Operating Frequency Band</b>	1 – 1000 MHz
<b>Peak Power</b>	10.0 kW
<b>Velocity</b>	81 %

## Environmental Specifications

<b>Installation Temperature</b>	-25 °C to +60 °C (-13 °F to +140 °F)
<b>Operating Temperature</b>	-30 °C to +80 °C (-22 °F to +176 °F)
<b>Storage Temperature</b>	-30 °C to +80 °C (-22 °F to +176 °F)

## Mechanical Specifications

<b>Bending Moment</b>	2.7 N-m   2.0 ft lb
<b>Flat Plate Crush Strength</b>	105.0 lb/in   1.9 kg/mm
<b>Minimum Bend Radius, Multiple Bends</b>	31.75 mm   1.25 in
<b>Number of Bends, minimum</b>	20
<b>Number of Bends, typical</b>	50
<b>Tensile Strength</b>	64 kg   140 lb

## Note

<b>Performance Note</b>	Values typical, unless otherwise stated
-------------------------	---

## 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

## Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
0.5	0.213	0.065	10.00
1	0.301	0.092	10.00
1.5	0.369	0.112	10.00
2	0.427	0.13	10.00
10	0.962	0.293	5.83
20	1.369	0.417	4.10
30	1.685	0.514	3.33
50	2.192	0.668	2.56
85	2.887	0.88	1.94
88	2.94	0.896	1.91
100	3.143	0.958	1.79
108	3.272	0.997	1.71
150	3.89	1.186	1.44
174	4.208	1.283	1.33
200	4.532	1.381	1.24
204	4.58	1.396	1.23
300	5.632	1.716	1.00
400	6.582	2.006	0.85
450	7.019	2.139	0.80
460	7.104	2.165	0.79
460	7.104	2.165	0.79
500	7.437	2.267	0.75
512	7.535	2.296	0.74
600	8.224	2.507	0.68
700	8.96	2.731	0.63
800	9.655	2.943	0.58
824	9.817	2.992	0.57
894	10.278	3.133	0.55
960	10.701	3.261	0.52
1000	10.951	3.338	0.51

\* Values typical, guaranteed within 5%