SFX 500 (1/2") Super Flexible Cable Specifications

Cable Type	
Standard PE jacket	SFX 500 PE
Fire Retardant, Riser Rated, CATVR	SFX 500 R
Fire Retardant, Premise Rated, Non-Halogen	SFX 500 NHR

Cable Characteristics

Electrical		
Impedance, Ohms	50 ± 1	
Cutoff Frequency, GHz	12	
Velocity %	87	
Peak Power Rating, kW	15.6	
DC Resistance, Ohms/1000 ft (1000m)		
Inner	0.82	(2.69)
Outer	0.85	(2.79)
DC Breakdown, Volts	2500	
Jacket Spark, Volts RMS	5000	
Capacitance, pFd/ft(m)	24.2	(78.9)
Inductance, μH/ft(m)	0.058	(0.19)

VSWR Specification		
30-2500 MHz	1.10:1	(26.4)

Distance to Fault (DTF)		
30-2500 MHz	1.006	(50.0)

Mechanical		
Jacket	PE or riser rated CMR/CATVR	
Outer Conductor	Aluminum	
Inner Conductor	Copper-Clad Al.	
Inner Conductor Dia., in. (mm)	.140	(3.56)
Dia. Over Outer Conductor, in. (mm)	.396	(10.1)
Dia. Over Outer Jacket, in. (mm)	.450	(11.4)
Minimum Bend Radius, in. (mm)	1.25	(31.75)
Number of Bends, min	20	
Bending Moment. ft-lbs. (Nm)	2	(2.7)
Cable Weight, lbs/ft (kg/m)	0.07	(0.10)
Tensile Strength, lbs. (N)	250	(113)
Flat Plate Crush Strength, lbs./in. (kg/mm)	95	(1.71)

Standard Conditions:
- For Attenuation, VSWR 1.0 ambient temperature 20° (68°F), atmospheric pressure, dry air.
- For Average Power, VSWR 1.0, inner temperature 100° (212°F), ambient temperature 40° (104°F), atmospheric pressure, dry air, no solar loading.
- Specifications subject to change without notice.

Nominal Attenuation and Average Power

Frequency Mhz	Attenuation dB/100 ft	Attenuation dB/100m	Average Power kW
100	0.955	3.13	2.89
108	1.01	3.31	2.78
150	1.20	3.94	2.34
174	1.31	4.30	2.16
200	1.42	4.66	2.01
300	1.72	5.64	1.62
400	2.00	6.56	1.39
450	2.13	6.99	1.30
500	2.26	7.41	1.23
512	2.29	7.51	1.21
600	2.47	8.10	1.11
700	2.67	8.76	1.02
800	2.83	9.28	0.949
824	2.89	9.48	0.932
894	3.04	9.97	0.890
960	3.12	10.2	0.855
1000	3.20	10.5	0.836
1700	4.25	13.9	0.616
1800	4.40	14.43	0.598
1900	4.51	14.8	0.580
2000	4.70	15.4	0.552
2200	4.86	15.90	0.512
2300	5.04	16.5	0.508
2400	5.16	16.9	0.495
2500	5.28	17.3	0.483
2600	5.42	17.8	0.471
3000	6.07	19.9	0.436
4000	7.00	23.0	0.366
5000	8.00	26.2	0.319
6000	9.00	29.5	0.284
7000	9.91	32.5	0.258
8000	10.7	35.1	0.236
9000	11.5	37.7	0.220
10000	12.3	40.4	0.202
11000	13.0	42.7	0.190
12000	13.7	44.9	0.179

SFX 500 (1/2") Connectors

All CommScope Wireless connectors are premium quality. The two piece construction is designed for quick and consistent termination while maintaining superior performance. Termination craftsmanship issues are reduced to a minimum by using a CommScope Wireless self gauging coring tool.

Brass is used as the connector body base material. Surfaces in the RF transmission path are silver plated. All other surfaces are nickel/tin coated. Insulators are made of polypropylene, polytetraflourethylene (PTFE), polycarbonate and Delrin. All O-rings are made of ethylene propylene rubber (EPDM) to ensure the tightest seal against moisture ingress.

N-Male

N-Female

N-Male- Rt. Angle

7/16 DIN-Male

7/16 DIN-Female

DIN Male- Rt. Angle

Insertion Loss, dB-Formula	Intermodulation-3rd Order Product-dBm (dBc)
Straight .05 √ F, GHz Right Angle .1√ F, GHz	>112 (155) (Two +43 dBm carriers, IM product between 1870-1910 MHz)

Product No.	Interface	Maximum Length inches	(mm)	Maximum Diameter inches	(mm)
SFX ADM	7/16 DIN-Male	2.01	(51.0)	.804	(20.4)
SFX DF	7/16 DIN-Female	3.00	(76.2)	.882	(22.4)
SFX ANM	N-Male	2.846	(72.3)	.804	(20.4)
SFX NF	N-Female	2.61	(66.3)	.882	(22.4)
SFX NMR	N-Male Right Angle	2.846	(72.3)	.882	(22.4)
SFX DMR	7/16 DIN-Male Right Angle	3.12	(79.2)	.882	(22.4)

Extremeflex Jumper Assemblies
Guaranteed Low VSWR Specifications, Type SFX-500 Super flexible

Frequency Code No.	Frequency MHz	VSWR (RL) 1-25 ft. (.5-7.5m)		26-100 ft. (7.6-30.5m)		101-200 ft. (61.2-152.4m)		Connectors
A	824-960	1.06	(30.7)	1.07	(29.4)	1.08	(28.3)	NF, NM, DF, DM
		1.20	(20.8)	1.20	(20.8)	1.18	(21.7)	NMR, DMR
B	824-960	1.12	(24.9)	1.12	(24.9)	1.13	(24.2)	NF, NM, DF, DM
	1700-1900	1.33	(17.0)	1.33	(17.0)	1.33	(17.0)	NMR, DMR
C	1700-2000	1.09	(27.3)	1.10	(26.4)	1.12	(24.9)	NF, NM, DF, DM
		1.25	(19.1)	1.25	(19.1)	1.23	(19.7)	NMR
		1.30	(17.7)	1.30	(17.7)	1.27	(18.5)	DMR
D	1900-2200	1.10	(26.4)	1.12	(24.9)	1.12	(24.9)	NF, NM, DF, DM
		1.33	(17.0)	1.33	(17.0)	1.33	(17.0)	NMR, DMR

Standard assembly lengths are 3', 6', 10' and 12'. (See pg. 12 for standard jumper lengths)
VSWR values are guaranteed for factory assemblies and are typical for cut lengths.