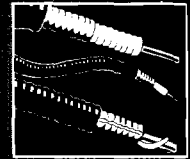


HELIAX® Coaxial Cables



FSJ4-75A

Cable Ordering Information

Description	Type No.
Standard Cable	
1/2" Standard superflexible	FSJ4-75A
Fire Retardant Cables	
1/2" Fire Retardant Jacket (CATVX)	FSJ4RN-75A
1/2" Fire Retardant Jacket (CATVR)	FSJ4RN-75A

Characteristics

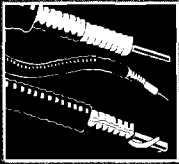
Electrical	
Impedance, ohms	75 ± 2
Maximum Frequency, GHz	11.5
Velocity, percent	81
Peak Power Rating, kW	10.0
dc Resistance, ohms/1000 ft (1000 m)	
Inner	1.50 (4.9)
Outer	1.00 (3.28)
dc Breakdown, volts	2500
Jacket Spark, volts RMS	5000
Capacitance, pF/ft (m)	16.7 (54.9)
Inductance, µH/ft (m)	0.094 (0.309)
Mechanical	
Outer Conductor	Copper
Inner Conductor	Copper
Diameter over Jacket, in (mm)	0.52 (13.2)
Diameter over Copper Outer Conductor in (mm)	0.48 (12.2)
Diameter Inner Conductor, in (mm)	0.118 (3.0)
Minimum Bending Radius, in (mm)	1.25 (32)
Number of Bends, minimum (typical)	20 (50)
Bending Moment, lb-ft (N•m)	2.0 (2.7)
Cable Weight, lb/ft (kg/m)	0.14 (0.21)
Tensile Strength, lb (kg)	140 (63.5)
Flat Plate Crush Strength, lb/in (kg/mm)	105 (1.9)

Attenuation and Average Power

Frequency MHz	Attenuation dB/100 ft	Attenuation dB/100m	Average Power kW
0.5	0.0651	0.214	10.00
1	0.0924	0.303	10.00
1.5	0.113	0.372	10.00
2	0.131	0.430	10.00
10	0.295	0.968	5.81
20	0.420	1.38	4.07
30	0.517	1.70	3.31
50	0.673	2.21	2.54
88	0.903	2.96	1.90
100	0.965	3.17	1.77
108	1.00	3.29	1.70
150	1.19	3.90	1.44
174	1.29	4.23	1.32
200	1.39	4.56	1.23
300	1.73	5.68	0.989
400	2.02	6.63	0.848
450	2.16	7.07	0.795
500	2.28	7.49	0.750
512	2.31	7.59	0.739
600	2.53	8.29	0.667
700	2.75	9.02	0.622
800	2.96	9.73	0.577
824	3.01	9.89	0.568
894	3.16	10.4	0.543
960	3.28	10.8	0.521
1000	3.36	11.0	0.509
1250	3.82	12.5	0.449
1500	4.24	13.9	0.407
1700	4.56	15.0	0.375
2000	5.02	16.5	0.342
2300	5.46	17.9	0.314
3000	6.41	21.0	0.267
4000	7.62	25.0	0.224
5000	8.76	28.7	0.196
6000	9.85	32.3	0.177
8000	11.9	38.9	0.145
10000	13.7	44.9	0.125
11500	15.1	49.5	0.114

Standard Conditions:

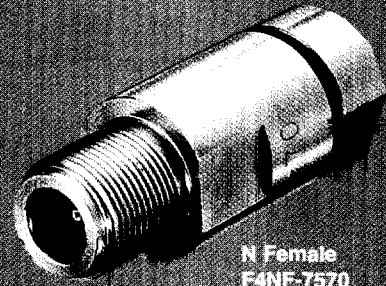
For Attenuation, VSWR 1.0, ambient temperature 24°C (75°F).
For average power, VSWR 1.0 ambient temperature 40°C (104°F), inner conductor temperature 100°C (212°F), no solar loading.



HELIAX® Coaxial Cables



**N Male
F4NM-7570**



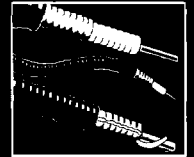
**N Female
F4NF-7570**

Connectors

Interface	Description	Type Number	Previous Type Number	Inner Contact Attachment	Outer Contact Attachment	Plating Code	Maximum Length in (mm)	Maximum Diameter in (mm)
Male	50 Ohm Mating Pin	F4NM-7550	44ASW-75	Solder	Tab Flare	BB	2.3 (58)	0.84 (21.3)
N Male	70 Ohm Mating Pin	F4NM-7570	44ASW-70	Solder	Tab Flare	BB	2.2 (56)	0.84 (21.3)
N Male	50 Ohm Mating Pin, Right Angle	F4NR-7550	49600-75	Solder	Tab Flare	BB	3.3/1.5 (84/38)	0.84 (21.3)
N Female	50 Ohm Mating Pin	F4NF-7550	44ASN-75	Solder	Tab Flare	BS	2.2 (56)	0.84 (21.3)
N Female	70 Ohm Mating Pin	F4NF-7570	44ASN-70	Solder	Tab Flare	BS	2.1 (53)	0.84 (21.3)
UHF Male	50 Ohm Mating Pin	44ASP-75	—	Solder	Tab Flare	BS	2.3 (58)	0.84 (21.3)
UHF Female	50 Ohm Mating Pin	44ASU-75	—	Solder	Tab Flare	BS	2.3 (58)	0.84 (21.3)
CATV Type F		44ASCM	—	Solder	Tab Flare	BB	2.5 (64)	0.84 (21.3)

Plating Codes: BB - Brass Body and Pin, BS - Brass Body and Silver Plated Pin

HELIX® Coaxial Cables



Accessories – Photos and descriptions on pages 544-572.

Description	Type No.	Description	Type No.
Hangers and Adapters - for more hangers and adapters see pages 547-557.		Crimping Tool to field attach lug to Grounding Kit	207270
Standard Hangers and Adapters Standard Hanger Kit of 10. <i>Standard tower configuration spacing is 3-4 feet (1-1.2 m).</i> Recommended maximum spacing for outdoor installation is 2.5 ft (0.76 m) at 125 mph (200 km/h) wind, 1/2" (13 mm) radial ice. For different wind and ice loading spacing recommendations, refer to Cable Hanger Spacing, page 547.	43211A	Weatherproofing - for more information, see page 565.	
Hardware Kit of 10, 3/8" bolts, lock washers, nuts 3/4" (19 mm) long 1" (25) mm long	31769-5 31769-1	Cold Shrink Weatherproofing Kit 1/2" Coax-Type N to 1/2" Coax-Type N 7/8" Coax-Type N to 1/2" Coax-Type N 1-1/4" or 1-5/8" Coax-Type N to 1/2" Coax-Type N 7/8" Coax-7-16 DIN to 1/2" FSJ4 - 7-16 DIN 1-1/4" or 1-5/8" Coax-7-16 DIN to FSJ4 -7-16 DIN 1/2" Coax -Type N to Antenna Output 1/2" FSJ4 -7-16 DIN to Antenna Output	241474-4 241475-1 241475-2 241475-6 241475-7 241548-4 241548-7
Angle Adapter , kit of 10. Stainless Steel Galvanized Galvanized, metric hardware	31768A 242774 242774-M	Connector/Splice Weatherproofing Kit	221213
Round Member Adapter Kit of 10. Stainless steel Member Diameter, in (mm) 1-2 (25-50) 2-3 (50-75) 3-4 (75-100) 4-5 (100-125) 5-6 (125-150) 6-8 (150-200)	31670-1 31670-2 31670-3 31670-4 31670-5 31670-6	Entry Systems - for more information, see pages 566-567.	
Snap-In Hangers and Adapters Snap-In Hanger Kit of 10. For prepunched 3/4 in (19 mm) holes on tower members or adapters below. <i>Standard tower configuration spacing is 3-4 feet (1-1.2 m).</i> Recommended maximum spacing for outdoor installation is 1.5 ft (0.46 m) at 125 mph (200 km/h) wind, 1/2" (13 mm) radial ice. For different wind and ice loading spacing recommendations, refer to Cable Hanger Spacing, page 547	206706-1	Wall/Roof Feed-Thru	40656A-3
Tower Hanger/Adapter , attaches to existing angle tower members 1 cable run, 1 connection required 4 cable runs, 2 connections required 8 cable runs, 3 connections required	206929-1 206929-4 206929-8	Feed-Thru Plates and Boots. Order separately, see pages 566-567.	
J-Bolt Hardware Kit of 10 for use with Tower/Hanger Adapter	206930	Plates Openings	Plates For 4 in Boots For 5 in Boots
Nylon Cable Tie Kit of 50. Recommended maximum spacing for outdoor installations is 3 ft (1 m)	40417	1	204673-1 48940-1
Nylon Cable Tie Kit in Plastic Box. 100 each, 4, 5.5, and 7.5 inch (101,140, and 190 mm) ties. Recommended maximum spacing for outdoor installations is 3 ft (1 m)	CT-K350	2	204673-2
Velcro Cable Ties. Black, 8 inch. For indoor use only Kit of 10 Kit of 50	VCT8-10 VCT8-50	3	48940-2
Hanger Blox™ and Insulated Hangers - please refer to pages 554-557.	43094	4	204673-4
Hoisting Grip	43094	6	48940-3
Grounding and Surge Protection - for more information, see pages 559-564.		8	204673-8
Grounding Kit factory attached, one-hole lug, 24 in (610 mm) lead factory attached, two-hole lug, 24 in (610 mm) lead field attachable crimp-on, one-hole lug, 36 in (915 mm) lead field attachable crimp-on, two-hole lug, 36 in (915 mm) lead	204989-1 241088-1 204989-21 241088-6	12	204673-12
			4 in Boots 5 in Boots
		One Hole:	204679-5 48939-6
		Three Hole:	204679-7 48939-8
		Tools - for more tools see page 569.	
		EASIX® Cutting Tool , FSJ4/FSJ1	207865
		EASIX Cutting Tool , FSJ4/FSJ2	241372
		Cutoff Guide , 7/32" (5.5 mm)	224361
		Installer Pax™. Bulk packs are available for some hangers, adapters, grounding kits and cold shrink weatherproofing kits. See page 570.	