

**RFA 1/2" HF Cca COAXIAL CABLE**

	Material code	Dop
RFA 1/2" -50 BHF Cca	60061635	1004112
RFA 1/2" -50 GHF Cca	60061636	1004112

**CONSTRUCTION**


Inner conductor	Copper Clad Aluminum wire	Ø 4.8 mm	(0.19 in)
Dielectric	Cellular polyethylene	Ø 12.1 mm	(0.48 in)
Outer conductor	Corrugated copper tube	Ø 13.9 mm	(0.55 in)
Jacket	See Jacketing Options table below	Ø 16.0 mm	(0.63 in)
Marking	Draka, cable type, CPR class, manufacture week/year, batch number and meter mark		

**ELECTRICAL CHARACTERISTICS at +20°C (+68°F)**

Characteristic impedance	50 ± 1 Ω	
Min. Return loss with delivery lengths		
790 – 960 MHz	20 dB	
1710 – 1880 MHz	20 dB	
1900 – 2170 MHz	20 dB	
2490 – 2700 MHz	20 dB	
3400 – 3800 MHz	20 dB	
Other bands also available on request		
RL typically 24 dB for 100 m cable with NKC connectors		
Attenuation	See table	
Velocity factor	0.86	
Capacitance	77.5 pF/m (24 pF/ft)	
Inductance	0.194 µH/m (0.549 µH/ft)	
Maximum frequency	9800 MHz	
Max power rating	See table	
Peak RF voltage rating	1.8 kV	
Peak power rating	32 kW	
DC-resistance		
Inner conductor	1.55 Ω/km (0.47 Ω/1000 ft)	
Outer conductor	2.66 Ω/km (0.81 Ω/1000 ft)	

**MECHANICAL CHARACTERISTICS**

Weight (BHF fire retardant jacket)	0.24 kg/m	(0.16 lb/ft)
Maximum pulling force	2000 N	(450 lb)
Minimum bending radius		
Single bending	70 mm	(3 in)
Repeated bending	120 mm	(5 in)
Operating temperature range	-55...+85°C	(-67...+185°F)
Crush resistance	1.80 kg/mm	(101 lb/in)
Bending moment	4 Nm	(3 lb-ft)
Recommended clamp spacing	1.0 m	(3.3 ft)

## JACKETING OPTIONS

TYPE	JACKET	IEC 60754 -1/-2 Halogen free, non corrosive	IEC 61034 low smoke emission	IEC 60332-3-24 fire retardant	CPR class	UV retardancy	Min. installation temperature
RFA 1/2"-50 BHF Cca	Black, halogen free fire retardant thermoplastic	yes	yes	yes	Cca-s1d1a1	yes	-20°C (-4°F)
RFA 1/2"-50 GHF Cca	Grey, halogen free fire retardant thermoplastic	yes	yes	yes	Cca-s1d1a1	no	-20°C (-4°F)

## CONNECTOR CODES

NKC1012300 N male  
 NKC1012400 N female  
 NKC1012100 7/16 male  
 NKC1012200 7/16 female  
 NKC1012500 7/16 male Right angle  
 NKC1012700 4.3/10 female  
 NKC1012P00 4.3/10 male (screw)

## ACCESSORIES & TOOLS & INSTALLATION

Knife and hacksaw can be used as connector installation tools.

Please contact your salesperson if any further questions.

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FREQUENCY MHz	ATTENUATION dB/100 m	POWER RATING kW	FREQUENCY MHz	ATTENUATION dB/100 m	POWER RATING kW
0.5	0.147	32	900	6.8	1.17
1.0	0.209	32	925	6.9	1.15
1.5	0.256	31	950	7.0	1.13
1.85	0.284	28	960	7.0	1.13
2.0	0.296	27	1000	7.2	1.10
3.7	0.403	20	1250	8.1	0.98
5.3	0.482	16.5	1400	8.6	0.91
7.1	0.559	14.3	1500	9.0	0.88
10	0.66	12.0	1575	9.2	0.86
14	0.79	10.1	1700	9.6	0.82
18	0.89	8.9	1800	9.9	0.79
20	0.94	8.5	1900	10.2	0.77
25	1.06	7.6	2000	10.5	0.75
28	1.12	7.1	2100	10.8	0.73
30	1.16	6.9	2200	11.1	0.71
50	1.50	5.3	2400	11.6	0.68
70	1.78	4.5	2500	11.9	0.66
75	1.85	4.3	2600	12.2	0.65
88	2.01	4.0	2700	12.4	0.63
100	2.14	3.7	2800	12.7	0.62
108	2.23	3.6	3000	13.2	0.60
144	2.58	3.1	3400	14.2	0.55
150	2.64	3.0	3500	14.4	0.55
174	2.85	2.8	3600	14.6	0.54
200	3.06	2.6	3700	14.9	0.53
220	3.22	2.5	3800	15.1	0.52
300	3.78	2.1	4000	16	0.50
380	4.28	1.9	4900	17	0.45
400	4.40	1.8	5000	18	0.44
432	4.58	1.7	5200	18	0.43
450	4.68	1.69	5800	19	0.41
500	4.95	1.60	6000	20	0.40
512	5.01	1.58	7000	22	0.36
600	5.45	1.45	8000	23	0.33
700	5.92	1.34	8800	25	0.32
750	6.15	1.29	9000	25	0.31
800	6.36	1.24	9800	27	0.29
824	6.46	1.22			
870	6.66	1.19			
890	6.74	1.17			
894	6.75	1.17			

Attenuation at imperial scale can be calculated: [dB / 100 m] \* 0.3048 = [dB / 100 ft].

Attenuation values are typical at ambient temperature +20°C (+68°F).

Power rating ambient temperature +40°C (+104°F), inner conductor +100°C (+212°F).

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