

RFA 1/2" COAXIAL CABLE

NK CODES

RFA 1/2"-50
RFA 1/2"-50 BHF
RFA 1/2"-50 BHF (UL) CATVR

NKRFA01200
NKRFA01202
NKRFA01204

CONSTRUCTION



Inner conductor	Copper-clad aluminium 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, manufacture week, year, batch number and meter mark		

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

Characteristic impedance	50 ± 1 Ω
Return loss 24 dB for 100 m cable with NKC connectors	
- 380 - 500	MHz
- 790 - 960	"
- 1710 - 1880	"
- 1900 - 2170	"
- 2490 - 2700	"
- 3400 - 3600	"
Other bands also available on request	
Bands according to customer's specifications	
Attenuation	See table
Velocity factor	0.87
Capacitance	76.1 pF/m (23.2 pF/ft)
Inductance	0.19 µH/m (0.058 µH/ft)
Maximum frequency	9500 MHz
Max power rating	See table
Peak RF voltage rating	1.80 kV
Peak power rating	31.8 kW
DC resistance	
- Inner conductor	1.46 Ω/km (0.45 Ω/1000 ft)
- Outer conductor	2.58 Ω/km (0.78 Ω/1000 ft)

MECHANICAL CHARACTERISTICS

Weight	0.21 kg/m	(0.14 lb/ft)
Maximum pulling force	1600 N	(360 lb)
Minimum bending radius		
- Single bending	70 mm	(2.8 in)
- Repeated bending	120 mm	(4.7 in)
Operating temperature range	-55...+85°C	(-67...+185 °F)
Crush resistance	1.6 kg/mm	(90 lb/in)
Bending moment	3.8 Nm	(2.8 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	UV retardancy	UL Rated	Min. installation temperature
RFA 1/2"-50	Black, halogen free polyethylene	yes	no	no	yes	no	-40°C (-40°F)
RFA 1/2"-50 BHF	Black, halogen free fire retardant thermoplastic	yes	yes	yes	yes	no	-20°C (-4°F)
RFA 1/2"-50 BHF (UL) CATVR	Black, halogen free fire retardant UL Riser rated jacket	yes	yes	yes	yes	yes	-20°C (-4°F)

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FREQUENCY MHz	ATTENUATION dB/100 m	ATTENUATION dB/100 ft	POWER RATING kW
10	0.664	0.202	12
30	1.16	0.353	6.9
50	1.50	0.458	5.3
88	2.00	0.611	4.0
100	2.14	0.652	3.7
108	2.23	0.679	3.6
150	2.64	0.804	3.0
174	2.85	0.868	2.8
200	3.06	0.933	2.6
300	3.78	1.15	2.1
400	4.40	1.34	1.8
450	4.68	1.43	1.7
500	4.95	1.51	1.6
512	5.01	1.53	1.6
600	5.45	1.66	1.5
700	5.92	1.81	1.3
800	6.36	1.94	1.2
850	6.57	2.00	1.2
890	6.74	2.05	1.2
900	6.78	2.07	1.2
950	6.98	2.13	1.1
960	7.02	2.14	1.1
1000	7.18	2.19	1.1
1200	7.92	2.41	0.98
1400	8.62	2.63	0.91
1600	9.28	2.83	0.85
1800	9.90	3.02	0.79
1900	10.2	3.11	0.77
2000	10.5	3.20	0.75
2200	11.1	3.37	0.71
2400	11.6	3.54	0.68
2600	12.2	3.71	0.65
2800	12.7	3.86	0.62
3000	13.2	4.02	0.59
3400	14.2	4.31	0.55
6000	19.7	6.00	0.40
8800	23.4	7.12	0.33

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).

CODES FOR NKC CONNECTORS

CONNECTOR TYPE	NK CODE
N male	NKC1012300
N female	NKC1012400
7-16 male	NKC1012100
7-16 female	NKC1012200
N male Right angle	NKC1012600
7-16 male Right angle	NKC1012500