

RFA 1 1/4" COAXIAL CABLE

NK CODES

RFA 1 1/4"-50
RFA 1 1/4"-50 GHF
RFA 1 1/4"-50 BHF

NKRFA11400
NKRFA11401
NKRFA11402

CONSTRUCTION



Inner conductor	Copper tube	Ø 13.0 mm	(0.51 in)
Dielectric	Cellular polyethylene	Ø 32.2 mm	(1.27 in)
Outer conductor	Corrugated copper tube	Ø 35.8 mm	(1.41 in)
Jacket	See Jacketing Options table below	Ø 39.0 mm	(1.54 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
- 806 - 960	"
- 1710 - 1880	"
- 1900 - 2170	"
Other bands also available on request	
Bands according to customer's specifications	
Attenuation	See table
Velocity factor	0.89
Capacitance	74.8 pF/m (23 pF/ft)
Inductance	0.189 µH/m (0.058 µH/ft)
Maximum frequency	3500 MHz
Max power rating	See table
Peak RF voltage rating	4.6 kV
Peak power rating	211 kW
DC-resistance	
- Inner conductor	0.74 Ω/km (0.22 Ω/1000 ft)
- Outer conductor	0.68 Ω/km (0.20 Ω/1000 ft)

MECHANICAL CHARACTERISTICS

Weight	0.85 kg/m (0.57 lb/ft)
Maximum pulling force	5400 N (1213 lb)
Minimum bending radius	
- Single bending	200 mm (8 in)
- Repeated bending	350 mm (14 in)
Operating temperature range	-55...+85°C (-67...+185 °F)
Crush resistance	2.6 kg/mm (146 lb/in)
Bending moment	44 Nm (32.4 lb-ft)
Recommended clamp spacing	1.5 m (5 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	Min. installation temperature
RFA 1 1/4"-50	Black, halogen free polyethylene (LDPE with HDPE skin)	yes	no	no	yes	-40°C (-40°F)
RFA 1 1/4"-50 GHF	Grey, halogen free fire retardant thermoplastic	yes	yes	yes	no	-5°C (23°F)
RFA 1 1/4"-50 BHF	Black, halogen free fire retardant thermoplastic	yes	yes	yes	yes	-5°C (23°F)

RFA 1 1/4" COAXIAL CABLE

FREQUENCY MHz	ATTENUATION dB/100 m	ATTENUATION dB/100 ft	POWER RATING kW
10	0.247	0.075	41
30	0.432	0.132	24
50	0.562	0.171	18
88	0.753	0.230	14
100	0.805	0.245	13
108	0.838	0.256	12
174	1.08	0.328	9.4
200	1.16	0.353	8.8
300	1.44	0.439	7.0
400	1.68	0.513	6.0
450	1.79	0.547	5.6
500	1.90	0.579	5.3
512	1.92	0.586	5.2
600	2.10	0.640	4.8
700	2.29	0.697	4.4
800	2.46	0.751	4.1
850	2.55	0.776	3.9
890	2.61	0.797	3.8
900	2.63	0.802	3.8
950	2.71	0.826	3.7
960	2.73	0.831	3.7
1000	2.79	0.851	3.6
1200	3.09	0.943	3.2
1400	3.38	1.03	3.0
1600	3.65	1.11	2.7
1800	3.91	1.19	2.6
1900	4.03	1.23	2.5
2000	4.16	1.27	2.4
2200	4.40	1.34	2.3
2400	4.63	1.41	2.1
2600	4.85	1.48	2.0
2800	5.07	1.55	2.0
3000	5.29	1.61	1.9
3300	5.60	1.71	1.8

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	NKC CODE
N male	NKC1114300
N female	NKC1114400
7-16 male	NKC1114100
7-16 female	NKC1114200
7-16 Bulkhead female	NKC1114290