

COAXIAL CABLE

TYPE	RFA 3/8"-50	NK code:	NKRFA03800
	RFA 3/8"-50 GHF		NKRFA03801
	RFA 3/8"-50 BHF		NKRFA03802
	RFA 3/8"-50 BHF (UL) CATVR		NKRFA03804

CONSTRUCTION



Inner conductor	Copper-clad aluminum wire	Ø 3.1 mm	(0.12 in)
Dielectric	Cellular polyethylene	Ø 8.0 mm	(0.32 in)
Outer conductor	Corrugated copper tube	Ø 9.5 mm	(0.37 in)
Jacket	See Jacketing Options table below	Ø 11.2 mm	(0.44 in)
Marking	NK Cables, 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
- 800 - 1000	"
- 1700 - 1900	"
- 1600 - 2000	"
- 1900 - 2200	"
Other bands also available on request	
Bands according to customer's specifications	
Attenuation	See table
Velocity factor	0.86
Capacitance	78 pF/m (24 pF/ft)
Maximum frequency	14 000 MHz
Max power rating	See table
Peak RF voltage rating	1.2 kV
Peak power rating	16.1 kW
DC-resistance	
- Inner conductor	3.6 Ω/km (1.10 Ω/1000 ft)
- Outer conductor	3.1 Ω/km (0.94 Ω/1000 ft)

MECHANICAL CHARACTERISTICS

Weight	0.13 kg/m (0.84 lb/ft)
Maximum pulling force	1650 N (363 lb)
Minimum bending radius	
- Single bending	50 mm (1.9 in)
- Repeated bending	95 mm (3.7 in)
Operating temperature range	-55...+80°C (-67...+176 °F)
Crush resistance	2.0 kg/mm (110 lb/in)
Bending moment	2.1 Nm (1.5 lb-ft)
Recommended clamp distance	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 3/8"-50	Black, halogen free polyethylene	yes	no	no	yes	no	-40°C (-40°F)
RFA 3/8"-50 GHF	Grey, halogen free fire retardant thermoplastic	yes	yes	yes	no	no	-20°C (-4°F)
RFA 3/8"-50 BHF	Black, halogen free fire retardant thermoplastic	yes	yes	yes	yes	no	-20°C (-4°F)
RFA 3/8"-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	1.02	0.31	6.8
30	1.78	0.54	3.9
50	2.31	0.70	3.0
88	3.08	0.94	2.2
100	3.29	1.00	2.1
108	3.42	1.04	2.0
174	4.37	1.33	1.6
200	4.70	1.43	1.5
300	5.79	1.77	1.2
400	6.73	2.05	1.0
450	7.16	2.18	0.97
500	7.57	2.31	0.92
512	7.67	2.34	0.90
600	8.34	2.54	0.83
700	9.04	2.76	0.77
800	9.71	2.96	0.71
850	10.0	3.06	0.69
890	10.3	3.13	0.67
900	10.3	3.15	0.67
950	10.6	3.24	0.65
960	10.7	3.26	0.65
1000	10.9	3.34	0.63
1200	12.1	3.68	0.57
1400	13.1	4.00	0.53
1600	14.1	4.30	0.49
1800	15.0	4.59	0.46
1900	15.5	4.72	0.45
2000	15.9	4.86	0.43
2200	16.8	5.12	0.41
2400	17.6	5.37	0.39
2600	18.4	5.62	0.38
2800	19.2	5.86	0.36
3000	20.0	6.09	0.35
3400	21.4	6.53	0.32
6000	29.6	9.04	0.24
13500	48.1	14.7	0.15

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	NKC1038300
N female	NKC1038400
7-16 male	NKC1038100
7-16 female	NKC1038200