

## COAXIAL CABLE

<b>TYPE</b>	<b>RFA 7/8"-50</b>	<b>NK code:</b>	<b>NKRFA07800</b>
	<b>RFA 7/8"-50 GHF</b>		<b>NKRFA07801</b>
	<b>RFA 7/8"-50 BHF</b>		<b>NKRFA07802</b>
	<b>RFA 7/8"-50 BHF (UL) CATVR</b>		<b>NKRFA07804</b>

## CONSTRUCTION



Inner conductor	Copper tube	Ø 9.3 mm	(0.37 in)
Dielectric	Cellular polyethylene	Ø 22.0 mm	(0.86 in)
Outer conductor	Corrugated copper tube	Ø 25.2 mm	(0.99 in)
Jacket	See Jacketing Options table below	Ø 27.8 mm	(1.09 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
- 806 - 960	"
- 1710 - 1880	"
- 1900 - 2170	"
Other bands also available on request	
Bands according to customer's specifications	
Attenuation	See table
Velocity factor	0.90
Capacitance	73.0 pF/m (22.3 pF/ft)
Maximum frequency	5100 MHz
Max power rating	See table
Peak RF voltage rating	3.2 kV
Peak power rating	92.0 kW
DC-resistance	
- Inner conductor	1.11 Ω/km (0.34 Ω/1000 ft)
- Outer conductor	1.11 Ω/km (0.34 Ω/1000 ft)

## MECHANICAL CHARACTERISTICS

Weight	0.49 kg/m (0.33 lb/ft)
Maximum pulling force	2800 N (617 lb)
Minimum bending radius	
- Single bending	120 mm (4.7 in)
- Repeated bending	240 mm (9.4 in)
Operating temperature range	-55...+80°C (-67...+176 °F)
Crush resistance	1.6 kg/mm (90 lb/in)
Bending moment	15.0 Nm (11 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 7/8"-50	Black, halogen free polyethylene (LDPE with HDPE skin)	yes	no	no	yes	no	-40°C (-40°F)
RFA 7/8"-50 GHF	Grey, halogen free fire retardant thermoplastic	yes	yes	yes	no	no	-20°C (-4°F)
RFA 7/8"-50 BHF	Black, halogen free fire retardant thermoplastic	yes	yes	yes	yes	no	-20°C (-4°F)
RFA 7/8"-50 BHF (UL) CATVR	Black, halogen free fire retardant UL Riser rated jacket	yes	yes	yes	yes	yes	-20°C (-4°F)

**RFA 7/8" COAXIAL CABLE**

FREQUENCY MHz	ATTENUATION dB/100 m	ATTENUATION dB/100 ft	POWER RATING kW
10	0.348	0.106	27
30	0.607	0.185	15
50	0.787	0.240	12
88	1.05	0.320	8.9
100	1.12	0.342	8.3
108	1.17	0.356	8.0
174	1.49	0.455	6.2
200	1.61	0.489	5.8
300	1.98	0.605	4.7
400	2.31	0.703	4.0
450	2.46	0.748	3.8
500	2.60	0.791	3.6
512	2.63	0.801	3.5
600	2.86	0.872	3.2
700	3.11	0.947	3.0
800	3.34	1.02	2.8
850	3.45	1.05	2.7
890	3.54	1.08	2.6
900	3.56	1.08	2.6
950	3.66	1.12	2.5
960	3.68	1.12	2.5
1000	3.77	1.15	2.5
1200	4.16	1.27	2.2
1400	4.53	1.38	2.0
1600	4.87	1.48	1.9
1800	5.20	1.58	1.8
1900	5.36	1.63	1.7
2000	5.51	1.68	1.7
2200	5.81	1.77	1.6
2400	6.11	1.86	1.5
2600	6.39	1.95	1.4
2800	6.66	2.03	1.4
3000	6.93	2.11	1.3
3400	7.44	2.27	1.2
4000	8.17	2.49	1.1
5000	9.30	2.84	1.0

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	NKC1078300
N female	NKC1078400
7-16 male	NKC1078100
7-16 female	NKC1078200
7-16 male Right angle	NKC1078500
7-16 Bulkhead female	NKC1078290