

RFE 1 1/4" FLEXIBLE COAXIAL CABLE

RFE 1 1/4"-50	NKRFE11400
RFE 1 1/4"-50 GHF	NKRFE11401
RFE 1 1/4"-50 BHF	NKRFE11402

CONSTRUCTION



Inner conductor	Corrugated copper tube	Ø 13.6 mm	(0.53 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	(1.53 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	0.88	
Capacitance	74.6 pF/m	(22.7 pF/ft)
Maximum frequency	3700 MHz	
Max power rating	See table	
Peak RF voltage rating	4.5 kV	
Peak power rating	187.2 kW	
DC-resistance		
- Inner conductor	1.24 Ω/km	(0.38 Ω/1000 ft)
- Outer conductor	0.59 Ω/km	(0.18 Ω/1000 ft)

MECHANICAL CHARACTERISTICS

Weight	0.79 kg/m	(0.53 lb/ft)
Maximum pulling force	5100 N	(1124 lb)
Minimum bending radius		
- Single bending	120 mm	(4.7 in)
- Repeated bending	220 mm	(8.7 in)
Operating temperature range	-55...+80°C	(-67...+176 °F)
Crush resistance	2.3 kg/mm	(129 lb/in)
Bending moment	30.2 Nm	(22.3 lb-ft)
Recommended clamp distance	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
RFE 1 1/4"-50	Black, halogen free polyethylene (LDPE with HDPE skin)	yes	no	no	yes	-40°C (-40°F)
RFE 1 1/4"-50 GHF	Grey, halogen free fire retardant thermoplastic	yes	yes	yes	no	-5°C (23°F)
RFE 1 1/4"-50 BHF	Black, halogen free fire retardant thermoplastic	yes	yes	yes	yes	-5°C (23°F)

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FREQUENCY MHz	ATTENUATION dB/100 m	ATTENUATION dB/100 ft	POWER RATING kW
10	0.256	0.078	38
30	0.449	0.137	22
50	0.584	0.178	17
88	0.784	0.239	12
100	0.838	0.256	12
108	0.873	0.266	11
174	1.12	0.343	8.6
200	1.21	0.369	8.0
300	1.51	0.459	6.4
400	1.76	0.537	5.5
450	1.88	0.573	5.1
500	1.99	0.607	4.8
512	2.02	0.615	4.8
600	2.21	0.672	4.4
700	2.40	0.733	4.0
800	2.59	0.790	3.7
850	2.68	0.817	3.6
890	2.75	0.839	3.5
900	2.77	0.844	3.5
950	2.86	0.871	3.4
960	2.87	0.876	3.4
1000	2.94	0.897	3.3
1200	3.27	0.996	3.0
1400	3.57	1.09	2.7
1600	3.86	1.18	2.5
1800	4.14	1.26	2.3
1900	4.28	1.30	2.2
2000	4.41	1.34	2.2
2200	4.67	1.42	2.1
2400	4.92	1.50	2.0
2600	5.17	1.57	1.9
2800	5.40	1.65	1.8
3000	5.64	1.72	1.7
3300	5.98	1.82	1.6

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