



Feeder cable RFA 7/8"-50

Specifications

COAXIAL CABLE	
Type	Code
RFA 7/8"-50	NKRFA07800
RFA 7/8"-50 GHF	NKRFA07801
RFA 7/8"-50 BHF	NKRFA07802
RFA 7/8"-50 BHF (UL) CATVR	NKRFA07804

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	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 (330 ft) cable with NKC connectors for following frequency bands:	
• 380–500	MHz
• 806–960	MHz
• 1710–1880	MHz
• 1900–2170	MHz
• 3400–3600	MHz
Other bands also available on request	
Bands according to customer's specifications	
Attenuation	See attenuation 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)

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 (LPDE 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)

ATTENUATION			
Frequency	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).

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)

STANDARD DRUM							
Cable type	Drum	Standard length	Outer diam. (D)	Outer width (W)	Drum weight (empty)	Total weight	Drum freight volume
		m (ft)	cm (in)	cm (in)	kg (lb)	kg (lb)	m ³ (cu.ft)
RFA 7/8"	P13G	500 (1640)	134 (52)	74 (29)	68 (150)	342 (754)	1.33 (46.97)

CODES FOR NKC CONNECTORS	
Connector type	Code
7-16 male	NKC1078100
7-16 female	NKC1078200
7-16 Bulkhead female	NKC1078290
N male	NKC1078300
N female	NKC1078400
7-16 male Right angle	NKC1078500