



Feeder cable RFA 1 5/8"-50

Specifications

COAXIAL CABLE	
Type	Code
RFA 1 5/8"-50	NKRFA15800
RFA 1 5/8"-50 GHF	NKRFA15801
RFA 1 5/8"-50 BHF	NKRFA15802

CONSTRUCTION			
Inner conductor	Corrugated copper tube	Ø 17.6 mm	(0.69 in)
Dielectric	Cellular polyethylene	Ø 42.0 mm	(1.65 in)
Outer conductor	Corrugated copper tube	Ø 46.3 mm	(1.82 in)
Jacket	See Jacketing Options table below	Ø 50.0 mm	(1.97 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	
Other bands also available on request	Bands according to customer's specifications	
Attenuation	See attenuation table	
Velocity factor	0.89	
Capacitance	74 pF/m	(22.6 pF/ft)
Maximum frequency	2800 MHz	
Max power rating	See table	
Peak RF voltage rating	5.7 kV	
Peak power rating	314 kW	
DC-resistance		
• Inner conductor	1.16 Ω/km	(0.35 Ω/1000 ft)
• Outer conductor	0.43 Ω/km	(0.13 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	Min. installation temperature
RFA 1 5/8"-50	Black, halogen free polyethylene (LPDE with HDPE skin)	yes	no	no	yes	-40°C (-40°F)
RFA 1 5/8"-50 GHF	Grey, halogen free fire retardant thermoplastic	yes	yes	yes	no	-5°C (23°F)
RFA 1 5/8"-50 BHF	Black, halogen free fire retardant thermoplastic	yes	yes	yes	yes	-5°C (23°F)

ATTENUATION			
Frequency	Attenuation dB/100 m	Attenuation dB/100 ft	Power rating kW
10	0.196	(0.060)	55
30	0.343	(0.105)	31
50	0.447	(0.136)	24
88	0.601	(0.183)	18
100	0.643	(0.196)	17
108	0.669	(0.204)	16
174	0.863	(0.263)	12
200	0.929	(0.283)	11
300	1.16	(0.353)	9.1
400	1.36	(0.413)	7.8
450	1.45	(0.441)	7.3
500	1.54	(0.468)	6.9
512	1.56	(0.474)	6.8
600	1.70	(0.518)	6.2
700	1.85	(0.565)	5.7
800	2.00	(0.610)	5.3
850	2.07	(0.631)	5.1
890	2.13	(0.648)	5.0
900	2.14	(0.652)	4.9
950	2.21	(0.673)	4.8
960	2.22	(0.677)	4.7
1000	2.27	(0.693)	4.6
1200	2.53	(0.770)	4.2
1400	2.77	(0.843)	3.8
1600	2.99	(0.913)	3.5
1800	3.21	(0.979)	3.3
1900	3.32	(1.01)	3.2
2000	3.42	(1.04)	3.1
2200	3.63	(1.11)	2.9
2400	3.82	(1.17)	2.7
2600	4.02	(1.22)	2.6
2800	4.20	(1.28)	2.5

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	1.16 kg/m	(0.78 lb/ft)
Maximum pulling force	3900 N	(860 lb)
Minimum bending radius		
• Single bending	200 mm	(7.9 in)
• Repeated bending	400 mm	(15.7 in)
Operating temperature range	-55...+80°C	(-67...+176°F)
Crush resistance	3.1 kg/mm	(173 lb/in)
Bending moment	45 Nm	(33)
Recommended clamp spacing	1.5 m	(5 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 1 5/8"	P20G	400 (1312)	204 (80)	74 (29)	157 (346)	667 (1471)	3.08 (108.77)

CODES FOR NKC CONNECTORS	
Connector type	Code
7-16 male	NKC1158100
7-16 female	NKC1158200
7-16 Bulkhead female	NKC1158290
N male	NKC1158300
N female	NKC1158400