



Superflexible cable

RFF 1/2"-50

Specifications

COAXIAL CABLE	
Type	Code
RFF 1/2"-50	NKRFF01200
RFF 1/2"-50 GHF	NKRFF01201
RFF 1/2"-50 BHF	NKRFF01202
RFF 1/2"-50 BHF (UL) CATVR	NKRFF01204

CONSTRUCTION

Inner conductor	Copper-clad aluminium wire	Ø 3.55 mm	(0.14 in)
Dielectric	Cellular polyethylene	Ø 9.0 mm	(0.35 in)
Outer conductor	Corrugated copper tube	Ø 11.9 mm	(0.47 in)
Jacket	See Jacketing Options table below	Ø 13.5 mm	(0.53 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 (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	0.82
Capacitance	82 pF/m (25 pF/ft)
Maximum frequency	12 500 MHz
Max power rating	See table
Peak RF voltage rating	1.39 kV
Peak power rating	19.0 kW
DC-resistance	
• Inner conductor	2.57 Ω/km (0.78 Ω/1000 ft)
• Outer conductor	3.10 Ω/km (0.94 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
RFF 1/2"-50	Black, halogen free polyethylene	yes	no	no	yes	no	-40°C (-40°F)
RFF 1/2"-50 GHF	Grey, halogen free fire retardant thermoplastic	yes	yes	yes	no	no	-20°C (-4°F)
RFF 1/2"-50 BHF	Black, halogen free fire retardant thermoplastic	yes	yes	yes	yes	no	-20°C (-4°F)
RFF 1/2"-50 BHF (UL) CATVR	Black, halogen free fire retardant UL Riser rated jacket	yes	yes	yes	yes	yes	-20°C (-4°F)

ATTENUATION			
Frequency MHz	Attenuation dB/100 m	Attenuation dB/100 ft	Power rating kW
10	0.972	(0.296)	8.4
30	1.70	(0.517)	4.8
50	2.20	(0.671)	3.7
88	2.94	(0.896)	2.7
100	3.14	(0.957)	2.6
108	3.27	(0.996)	2.5
174	4.18	(1.28)	1.9
200	4.50	(1.37)	1.8
300	5.56	(1.70)	1.4
400	6.48	(1.97)	1.2
450	6.89	(2.10)	1.2
500	7.29	(2.22)	1.1
512	7.38	(2.25)	1.1
600	8.04	(2.45)	0.99
700	8.73	(2.66)	0.91
800	9.38	(2.86)	0.85
850	9.70	(2.96)	0.82
890	9.94	(3.03)	0.80
900	10.0	(3.05)	0.79
950	10.3	(3.14)	0.77
960	10.4	(3.16)	0.77
1000	10.6	(3.23)	0.75
1200	11.7	(3.57)	0.68
1400	12.7	(3.88)	0.62
1600	13.7	(4.18)	0.58
1800	14.7	(4.47)	0.54
1900	15.1	(4.60)	0.52
2000	15.5	(4.74)	0.51
2200	16.4	(5.00)	0.48
2400	17.2	(5.25)	0.46
2600	18.0	(5.50)	0.44
2800	18.8	(5.73)	0.42
3000	19.6	(5.97)	0.40
3400	21.0	(6.41)	0.37
4000	23.1	(7.05)	0.34
6000	29.4	(8.95)	0.27
8000	35.0	(10.7)	0.22
12400	45.9	(14.0)	0.17

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	0.19 kg/m	(0.13 lb/ft)
Maximum pulling force	900 N	(198 lb)
Minimum bending radius		
• Single bending	15 mm	(0.6 in)
• Repeated bending	30 mm	(1.2 in)
Operating temperature range	-55...+80°C	(-67...+176°F)
Crush resistance	3.4 kg/mm	(190 lb/in)
Bending moment	2.7 Nm	(2.0 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 ³ (cu.ft)	
		m	(ft)	cm	(in)	cm	(in)	kg	(lb)	kg	(lb)		
RFF 1/2"	P11D	500	(1640)	114	(45)	51	(20)	45	(99)	156	(346)	0.66	(23.31)

CODES FOR NKC CONNECTORS

Connector type	Code
7-16 male	NKC2012100
7-16 female	NKC2012200
N male	NKC2012300
N female	NKC2012400
7-16 male Right angle	NKC2012500
N male Right angle	NKC2012600