Draka

A brand of the Prysmian Group

RFF 1/2" HF CCa FLEXIBLE COAXIAL CABLE

	Material code	Dop
RFF 1/2"-50 BHF Cca	60061732	1004226
RFF 1/2"-50 GHF Cca	60061733	1004226

CONSTRUCTION

Inner conductor	Copper Clad Aluminum wire	Ø 3.6 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, CPR class, manufacture week/year, batch number and meter mark		

ELECTRICAL CHARACTERISTICS at +20°C (+68ºF)

Characteristic impedance	50 ± 1 Ω	
Min. Return loss with delivery lengths		
790 – 960 MHz	20 dB	
1710 – 1880 MHz	20 dB	
1900 – 2170 MHz	20 dB	
2490 – 2700 MHz	20 dB	
3400 – 3800 MHz	20 dB	
Other bands also available on request		
RL typically 24 dB for 100 m cable with NKC connectors		
Attenuation	See table	
Velocity factor	0.82	
Capacitance	81.4 pF/m	(25 pF/ft)
Inductance	0.204 µH/m	(0.421 µH/ft)
Maximum frequency	12500 MHz	
Max power rating	See table	
Peak RF voltage rating	1.4 kV	
Peak power rating	19 kW	
DC-resistance		
Inner conductor	2.65 Ω/km	(0.81 Ω/1000 ft)
Outer conductor	3.39 Ω/km	(1.03 Ω/1000 ft)

MECHANICAL CHARACTERISTICS

Weight (BHF fire retardant jacket)	0.20 kg/m	(0.14 lb/ft)
Maximum pulling force	900 N	(202 lb)
Minimum bending radius		
Single bending	15 mm	(1 in)
Repeated bending	30 mm	(1 in)
Operating temperature range	-55...+85°C	(-67...+185°F)
Crush resistance	3.40 kg/mm	(190 lb/in)
Bending moment	3 Nm	(2 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	CPR class	UV retardancy	Min. installation temperature
RFF 1/2"-50 BHF Cca	Black, halogen free fire retardant thermoplastic	yes	yes	yes	Cca-s1d1a1	yes	-20°C (-4°F)
RFF 1/2"-50 GHF Cca	Grey, halogen free fire retardant thermoplastic	yes	yes	yes	Cca-s1d1a1	no	-20°C (-4°F)

CONNECTOR CODES

NKC2012300 N male
NKC2012400 N female
NKC2012100 7/16 male
NKC2012200 7/16 female
NKC2012500 7/16 male Right angle
NKC2012700 4.3/10 female
NKC2012P00 4.3/10 male (screw)

ACCESSORIES & TOOLS & INSTALLATION

Knife and hacksaw can be used as connector installation tools.

Please contact your salesperson if any further questions.

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FREQUENCY MHz	ATTENUATION dB/100 m	POWER RATING kW	FREQUENCY MHz	ATTENUATION dB/100 m	POWER RATING kW
0.5	0.216	19	900	10.0	0.79
1.0	0.305	19	925	10.2	0.78
1.5	0.374	19	950	10.3	0.77
1.85	0.416	19	960	10.4	0.77
2.0	0.432	19	1000	10.6	0.75
3.7	0.589	14	1250	12.0	0.66
5.3	0.706	11	1400	12.7	0.62
7.1	0.818	9.9	1500	13.2	0.60
10	0.97	8.4	1575	13.6	0.58
14	1.15	7.1	1700	14.2	0.56
18	1.31	6.2	1800	14.7	0.54
20	1.38	5.9	1900	15.1	0.52
25	1.55	5.3	2000	15.5	0.51
28	1.64	5.0	2100	16.0	0.49
30	1.70	4.8	2200	16.4	0.48
50	2.20	3.7	2400	17.2	0.46
70	2.62	3.1	2500	17.6	0.45
75	2.71	3.0	2600	18.0	0.44
88	2.94	2.7	2700	18.4	0.43
100	3.14	2.6	2800	18.8	0.42
108	3.27	2.5	3000	19.6	0.40
144	3.79	2.1	3400	21.0	0.37
150	3.87	2.1	3500	21.4	0.37
174	4.18	1.9	3600	21.7	0.36
200	4.50	1.8	3700	22.1	0.35
220	4.73	1.7	3800	22.4	0.35
300	5.56	1.4	4000	23	0.34
380	6.30	1.3	4900	26	0.30
400	6.48	1.2	5000	26	0.30
432	6.74	1.2	5200	27	0.29
450	6.89	1.16	5800	29	0.27
500	7.29	1.10	6000	29	0.27
512	7.38	1.08	7000	32	0.24
600	8.04	0.99	8000	35	0.22
700	8.73	0.91	8800	37	0.21
750	9.06	0.88	9000	38	0.21
800	9.38	0.85	10000	40	0.19
824	9.53	0.84	12400	46	0.17
870	9.82	0.81			
890	9.94	0.80			
894	9.97	0.80			

Attenuation at imperial scale can be calculated: [dB / 100 m] * 0.3048 = [dB / 100 ft].
Attenuation values are typical at ambient temperature +20ºC (+68ºF).
Power rating ambient temperature +40ºC (+104ºF), inner conductor +100ºC (+212ºF).