

Superflexible cable SPF-1/4



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Specifications

CONSTRUCTION

Inner conductor	Copper wire	Ø 1.9 mm	(0.07 in)
Dielectric	Cellular polyethylene	Ø 4.8 mm	(0.19 in)
Outer conductor	Corrugated copper tube	Ø 6.4 mm	(0.25 in)
Jacket	See Jacketing Options table below	Ø 7.4 mm	(0.29 in)
Marking	Draka, cable type, manufacture week, year, batch number and meter mark		

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

Characteristic impedance	50 ± 2 Ω	
Return loss 24 dB for 100 m cable with NKC connectors		
• 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 table	
Velocity factor	0.83	
Capacitance	78.2 pF/m	(22.8 pF/ft)
Maximum frequency	21000 MHz	
Max power rating	See table	
Peak RF voltage rating	0.74 kV	
Peak power rating	6.5 kW	
DC-resistance		
• Inner conductor	6.2 Ω/km	(1.89 Ω/1000 ft)
• Outer conductor	7.7 Ω/km	(2.34 Ω/1000 ft)

ATTENUATION			
Frequency MHz	Attenuation dB/100 m	Attenuation dB/100 ft	Power rating kW
10	1.79	0.547	3.6
30	3.12	0.950	2.0
50	4.04	1.230	1.6
88	5.38	1.64	1.2
100	5.74	1.75	1.1
108	5.97	1.82	1.1
174	7.61	2.32	0.84
200	8.17	2.49	0.79
300	10.1	3.07	0.64
400	11.7	3.56	0.55
450	12.4	3.78	0.52
500	13.1	3.99	0.49
512	13.3	4.04	0.49
600	14.4	4.39	0.45
700	15.6	4.75	0.41
800	16.7	5.10	0.39
850	17.3	5.26	0.37
890	17.7	5.39	0.36
900	17.8	5.42	0.36
950	18.3	5.58	0.35
960	18.4	5.61	0.35
1000	18.8	5.73	0.34
1200	20.7	6.30	0.31
1400	22.4	6.84	0.29
1600	24.1	7.34	0.27
1800	25.6	7.82	0.25
1900	26.4	8.05	0.25
2000	27.1	8.27	0.24
2200	28.6	8.70	0.23
2400	29.9	9.12	0.22
2600	31.2	9.52	0.21
2800	32.5	9.91	0.20
3000	33.8	10.3	0.19
3400	36.1	11.0	0.18
4000	39.5	12.0	0.17
6000	49.4	15.1	0.13
8000	58.1	17.7	0.12
20400	100.0	30.5	0.07

Attenuation values are typical at ambient temperature +20°C (+68°F). Power rating ambient temperature +10°C (+104°F), inner conductor +100°C (+212°F).

MECHANICAL CHARACTERISTICS

Weight	0.09 kg/m	(0.06 lb/ft)
Maximum pulling force	780 N	(172 lb)
Minimum bending radius		
• Single bending	12.5 mm	(0.5 in)
• Repeated bending	25 mm	(1.0 in)
Operating temperature range	-55...+80°C	(-67...+176°F)
Crush resistance	2.3 kg/mm	(129 lb/in)
Bending moment	1.1 Nm	(0.8 lb-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)
	P5C	250	(820)	53	(21)	50	(20)	9	(20)	37	(82)	0.14	(4.94)

CODES FOR NKC CONNECTORS

Connector type	Code
N male	NKC2014320
N female	NKC2014420
7-16 male	NKC2014120
7-16 female	NKC2014220
N male Right angle	NKC2014420