

DESIGN & CONSTRUCTION

Inner conductor	Copper tube	Ø 9.4 m m (0.37 in)
Dielectric	Cellular Polyethylene	Ø 22.5 m m (0.89 in)
Outer conductor	Corrugated copper tube	Ø 25.4 m m (1.00 in)
Jacket	Black HF Polyethylene	Ø 28.0 m m (1.10 in)
Marking	Prysmian, cable type, manufacture week/year, batch number and meter mark	



CABLE DESCRIPTION

50 Ω RF Feeder cable with black PE jacket for outdoor use.

STANDARDS AND CERTIFICATIONS

IEC 61196-1

Coaxial cables, as applicable

IEC 60754 -1/-2

Halogen Free



CONNECTORS

N male	NKC1078300
N female	NKC1078400
7/16 male	NKC1078100
7/16 female	NKC1078200
7/16 male Right angle	NKC1078500
4.3/10 female	NKC1078700
4.3/10 male (screw)	NKC1078P00
7/16 Bulkhead female	NKC1078290

ELECTRICAL CHARACTERISTICS

Characteristic impedance	50 ± 1 Ω	
Return Loss with delivery length		
Frequency band	Return Loss	
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 available on request.		
Attenuation	See table	
Velocity factor	0.90	
Capacitance	75 pF/m	22.9 pF/ft
Inductance	0.188 μH/m	0.057 μH/ft
Maximum frequency	5100 MHz	
Max power rating	See table	
Peak RF voltage rating	3.1 kV	
Peak power rating	92 kW	
DC-resistance		
Inner conductor	1.85 Ω/km	0.56 Ω/1000 ft
Outer conductor	1.25 Ω/km	0.38 Ω/1000 ft

ATTENUATION

Frequency MHz	Attenuation dB/100 m	Power rating kW	Frequency MHz	Attenuation dB/100 m	Power rating kW
0.5	0.077	92	800	3.32	2.78
1.0	0.109	86	824	3.37	2.73
1.5	0.133	70	870	3.47	2.65
1.85	0.148	63	890	3.52	2.62
2.0	0.154	61	894	3.52	2.61
3.7	0.209	45	900	3.5	2.60
5.3	0.251	37.3	925	3.6	2.57
71	0.291	32.2	950	3.6	2.53
10	0.35	27.1	960	3.7	2.51
14	0.41	22.9	1000	3.7	2.46
18	0.47	20.1	1250	4.2	2.17
20	0.49	19.1	1400	4.5	2.04
25	0.55	17.0	1500	4.7	1.96
28	0.58	16.1	1575	4.8	1.91
30	0.60	15.5	1700	5.0	1.83
50	0.78	12.0	1800	5.2	1.77
70	0.93	10.1	1900	5.3	1.71
75	0.96	9.7	2000	5.5	1.66
88	1.04	8.9	2100	5.6	1.62
100	1.12	8.4	2200	5.8	1.58
108	1.16	8.0	2400	6.1	1.50
144	1.35	6.9	2500	6.2	1.47
150	1.37	6.8	2600	6.4	1.43
174	1.48	6.3	2700	6.5	1.40
200	1.60	5.8	2800	6.6	1.37
220	1.68	5.6	3000	6.9	1.32
300	1.97	4.7	3400	7.4	1.23
380	2.23	4.1	3500	7.5	1.21
400	2.29	4.0	3600	7.7	1.19
432	2.39	3.9	3700	7.8	1.17
450	2.44	3.79	3800	7.9	1.15
500	2.58	3.58	4000	8	1.12
512	2.61	3.53	4900	9	0.99
600	2.84	3.25	5000	9	0.97
700	3.09	2.99	5100	9	0.95
750	3.21	2.88			

Calculation of Attenuation values at imperial scale: $[\text{dB} / 100 \text{ m}] \times 0.3048 = [\text{dB} / 100 \text{ ft}]$.

Attenuation values are typical at ambient temperature +20°C (+68°F).

Power rating ambient temperature +40°C (+104°F) and inner conductor +100°C (+212°F).

Mechanical Characteristics

Weight	0.42 kg/m	0.28 lb/ft
Maximum pulling force	1900 N	427 lb
Minimum bending radius		
Single bending	120 m m	5 in
Repeated bending	240 m m	9 in
UV retardancy	yes	
Crush resistance	1.45 kg/m m	81 lb/in
Bending moment	12 N m	9 lb-ft
Recommended clamp spacing	1.0 m	3.3 ft
Operating temperature range	-55...+85°C	-67...+185°F
Minimum installation temperature	-40°C	-40°F

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