



Superflexible cable RFF 1/2"-50

Specifications

CONSTRUCTION

Inner conductor	Copper-clad aluminium wire	Ø 3.55 mm	Ø 0.14 in
Dielectric	Cellular polyethylene	Ø 9.0 mm	Ø 0.35 in
Outer conductor	Corrugated copper tube	Ø 11.9 mm	Ø 0.47 in
Jacketing	See table below	Ø 13.5 mm	Ø 0.53 in
Marking	Ωhmax®, cable type, manufacture week, year and meter mark		

ELECTRICAL CHARACTERISTICS at +20°C

Characteristic impedance	50 ± 1Ω	
Return Loss (VSWR)	• Typical value 24 dB (1.13) for 100 m cable with NKC connector	
Attenuation	see table	
Velocity factor	0.82	25 pF/ft
Capacitance	82 pF/m	
Cut-off 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	2.73 Ω/km	0.83 Ω/1000 ft
DC-resistance outer conductor	4.11 Ω/km	1.25 Ω/1000 ft

MECHANICAL CHARACTERISTICS

Weight	190 kg/km	0.13 lb/ft
Maximum pulling force	500 N	110 lb
Minimum bending radius		
• single bending	15 mm	0.6 in
• repeated bending	30 mm	1.2 in
Operating temperature range	-40...+70°C	-40...+158°F

Frequency	Attenuation dB/100 m	Attenuation dB/100 ft	Power rating kW
10	0.99	0.302	7.8
30	1.74	0.530	4.5
50	2.26	0.689	3.5
100	3.24	0.988	2.4
200	4.66	1.42	1.7
300	5.79	1.76	1.4
400	6.76	2.06	1.2
450	7.21	2.20	1.1
500	7.64	2.33	1.0
600	8.44	2.57	0.94
700	9.19	2.80	0.86
800	9.90	3.02	0.80
850	10.2	3.11	0.78
900	10.6	3.23	0.75
950	10.9	3.32	0.73
1000	11.2	3.41	0.71
1200	12.4	3.78	0.64
1400	13.6	4.15	0.59
1600	14.7	4.48	0.55
1800	15.7	4.79	0.51
1900	16.2	4.94	0.50
2000	16.7	5.09	0.48
2200	17.7	5.39	0.46
2400	18.6	5.67	0.43
3000	21.3	6.49	0.38
3400	22.9	6.99	0.36
6000	32.6	9.94	0.25
10200	45.9	14.0	0.18

Attenuation values at ambient temperature +20°C/68°F.
Power rating ambient temperature +40°C/104°F, inner conductor +100°C/212°F.

JACKETING OPTIONS

TYPE	CODE	JACKET	IEC 60754-1/-2 halogen free, non corrosive	IEC 61034 low smoke emission	IEC 60332-3 C fire retardant	UV retardancy	Min. installation temperature	
RFF 1/2"-50	NKRFF01200	Black polyethylene	yes	no	no	yes	-40°C	-40°F
RFF 1/2"-50 GHF	NKRFF01201	Grey, halogen free fire retardant thermoplastic	yes	yes	yes	no	-5°C	+23°F
RFF 1/2"-50 BHF	NKRFF01202	Black, halogen free fire retardant thermoplastic	yes	yes	yes	yes	-5°C	+23°F
RFF 1/2"-50 BHF (UL) CATVR E205016	NKRFF01204	Black, halogen free fire retardant UL Riser Rated Jacket	yes	yes	yes	yes	-5°C	+23°F