

AAF-12-HF

1/2" Superflexible Cable



Electrical Characteristics												
Impedance		50Ω ± 1Ω										
Max Operating Frequency		10.2 GHz										
Cut-off Frequency		13 GHz										
Velocity		82%										
Capacitance (1 kHz)		82 nF/km (24.4 nF/1000ft)										
Passive Intermodulation		≤ -160 dBc										
RF Peak Power Rating		19 kW										
Test Voltage - Wire/Screen rms 50Hz 1 min		2500 V										
HF - Operating Voltage (peak)		≤ 1000 V										
Resistance	Insulation	≥ 10 GΩ·km (32.8 GΩ·1000ft)										
Return Loss / VSWR (typical)	700-1000 MHz	23 dB / 1.15										
	1700-2700 MHz	23 dB / 1.15										
Screening attenuation		≥ 120 dB										
Inductance		0.195 μH/m (0.059 μH/ft)										
Frequency (MHz)		100	450	800	900	1000	1800	1900	2200	2500	2700	3000
Attenuation (typical)	at 100 m	3 dB	7 dB	9.5 dB	10.3 dB	11.2 dB	15 dB	15.4 dB	16.9 dB	18.1 dB	18.9 dB	20 dB
Mean Power at 40° C		2.6 kW	1.2 kW	0.87 kW	0.81 kW	0.77 kW	0.55 kW	0.54 kW	0.49 kW	0.46 kW	0.44 kW	0.41 kW
Mechanical and Environmental Characteristics												
Bend Radius (min)	Single	2.5 x Ø										
	Repeated	3.5 x Ø										
Number of Bends	minimum	20										
	typical	50										
Tensile Strength		650 N										
Cable Weight (approx.)		156 kg/km (104.6 lb/1000 ft)										
Operating Temperature		-55° C to +85° C (-67° F to +85° F)										
Installation Temperature		-40° C to +60° C (-40° F to +140° F)										
Standards	Screen Material	DIN EN 13602 CU-ETP-R										
	Jacket Material	DIN EN 50290-2-27 (HD 624.4)										
	Corrosivity of fire gases	IEC 60754-2										
Construction		Material							Diameter			
Inner Conductor		Copper-Clad Aluminum Wire							3.5 mm			
Dielectric		Foamed Polyethylene (PE) with Skin							9.5 mm			
Outer Conductor		Copper-Tape, Longitudinal Welded Spiral Corrugation							11.9 mm			
Jacket		Black Polyethylene, PE (wall thickness approx. 0.5 mm)							3.2 mm ± 0.2 mm			

Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to products may be made without notice.