

## AAF-12-ST

### 1/2" Standard Cable



Electrical Characteristics												
Impedance	50Ω											
Max Operating Frequency	8.8 GHz											
Cut-off Frequency	10 GHz											
Velocity	88%											
Capacitance (1 kHz)	76 nF/km (23.2 nF/1000ft)											
Passive Intermodulation	≤ -160 dBc											
RF Peak Power Rating	40 kW											
Test Voltage - Wire/Screen rms 50Hz 1 min	2000 V											
HF - Operating Voltage (peak)	≤ 1590 V											
Resistance	Inner Conductor	≤ 1.6 Ω/km (0.48 Ω/1000ft)										
	Outer Conductor	≤ 2.9 Ω/km (0.88 Ω/1000ft)										
	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	0.190 μH/m (0.058 μH/ft)											
Frequency (MHz)		100	450	800	900	1000	1800	1900	2200	2500	2700	3000
Attenuation (typical)	at 100 m	2.1 dB	4.6 dB	6.3 dB	6.7 dB	7.2 dB	9.9 dB	10.3 dB	11.2 dB	12 dB	12.6 dB	13.2 dB
	at 100 ft	0.6 dB	1.4 dB	1.9 dB	2.0 dB	2.2 dB	3.0 dB	3.1 dB	3.4 dB	3.7 dB	3.8 dB	4.0 dB
Mean Power at 40° C		3.92 kW	1.76 kW	1.28 kW	1.19 kW	1.12 kW	0.81 kW	0.78 kW	0.72 kW	0.66 kW	0.63 kW	0.59 kW
Mechanical and Environmental Characteristics												
Bend Radius (min)	Single	4.5 x Ø										
	Repeated	7.5 x Ø										
Number of Bends	minimum	15										
	typical	50										
Tensile Strength	≤ 1150 N											
Cable Weight (approx.)	230 kg/km (154.2 lb/1000 ft)											
Operating Temperature	-55° C to +85° C (-67° F to +185° 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 50290-2-24 (VDE 0819), table 1/2-L/MD (HD 624.4)										
	Corrosivity of fire gases	IEC 60754-2										
Construction	Material	Diameter										
Inner Conductor	Copper-Clad Aluminum Wire	4.8 mm										
Dielectric	Foamed Polyethylene (PE) with Skin	12.1 mm										
Outer Conductor	Copper-Tape, Longitudinal Welded Annular Corrugation	13.7 mm										
Jacket	Black Polyethylene, PE (wall thickness approx. 1 mm)	15.8 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.