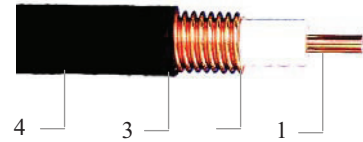


Product Specification

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1/2" S Superflexible physical foamed insulation coaxial cable RF 50 1/2" S

Description	TYPE No.	PART NO.
Standard cable	RF5012S	3110501
Fire retardant cable	RF5012S Z	3110502
Construction		
Inner Conductor	Material	Copper clad aluminum wire
	Diameter, mm	3.60±0.04
Insulation	Material	Physically foamed PE
	Diameter, mm	8.80±0.20
Outer conductor	Material	Helically corrugated copper
	Diameter, mm	12.20±0.20
Jacket	Material	PE or fire retardant PE
	Diameter, mm	13.40 ^{+0.20} _{-0.00}
Mechanical properties		
Bending radius, mm	Single	25
	Repeated	30
	Moving	200
Pulling strength, N		800
Crush resistance, kg/mm		1.9
Recommend temperature, °C	Store	-70~+85
	Installation	-40~+60
	Operation	-55~+85
Electrical properties		
Impedance, Ω		50 ± 1
Capacitance, PF/m		82
Propagation velocity, %		81
DC breakdown voltage, kV		2.5
Insulation resistance, M.Ω •km		>5 × 10 ³
Peak power, kW		15.6
Screening attenuation, dB		>>120
Cut-off frequency, GHz		10.2



1: Inner Conductor 2: Insulation
3: Outer conductor 4: Jacket

Figure 5: RF50 1/2" S coaxial cable

Attenuation and average power		
Frequency MHz	Nom. attenuation @20°C, dB/100m	Power rate @20°C, kW
10	1.04	10.1
100	3.41	3.08
200	4.91	2.14
450	7.59	1.38
800	10.4	1.01
900	11.2	0.943
1000	11.8	0.889
1500	14.9	0.705
1800	16.6	0.634
2000	17.6	0.597
2500	19.7	0.535
3000	22.4	0.469

● Maximum attenuation value shall be 105% of the nominal attenuation value

VSWR	
800~1000MHz	≤1.15
1700~2200MHz	≤1.15
5~3000MHz	≤1.25

Note:

- For fire retardant jacket, recommended temperatures are:

Store temperature -30~+80°C

Installation temperature -25~+60°C

Operation temperature -30~+80°C