

## Product Specification

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### 1/2" S Super-flexible 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

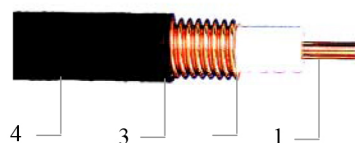
Inner Conductor	Material	Copper clad aluminum wire
	Diameter, mm	3.55±0.04
Insulation	Material	Physically foamed PE
	Diameter, mm	9.20±0.20
Outer conductor	Material	Helically corrugated copper
	Diameter, mm	12.00±0.20
Jacket	Material	PE or fire retardant PE
	Diameter, mm	13.60±0.20

#### Mechanical properties

Bending radius, mm	Single	25	
	Repeated	30	
	Moving	200	
Pulling strength, N		800	
Crush resistance, kg/mm		1.9	
Recommend temperature, °C	PE jacket	Store	-70~+85
		Installation	-40~+60
		Operation	-55~+85
	Fire retardant PE jacket	Store	-30~+80
		Installation	-25~+60
		Operation	-30~+80

#### Electrical properties

Impedance, Ω	50 ± 1
Capacitance, PF/m	82
Inductance, μH/m	0.205
Propagation velocity, %	81
DC breakdown voltage, kV	2.5
Insulation resistance, MΩ · km	>5 × 10 <sup>3</sup>
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

#### 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
450	7.59	1.38
690	9.58	1.158
800	10.40	1.01
900	11.20	0.943
1000	11.80	0.889
1800	16.60	0.634
2000	17.60	0.597
2200	18.61	0.566
2400	19.59	0.539
2500	20.07	0.529
2600	20.55	0.518
2700	21.02	0.507
3000	22.40	0.469

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

#### VSWR

820~960 MHz	≤1.15
1700~2200 MHz	≤1.15
2300~2400 MHz	≤1.15
2500~2700 MHz	≤1.15

#### Standards

2011/65/EU	Compliant
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