

## HSR100

### Construction

Item	Material	Diameter (Inch/mm)	
Inner Conductor	Copper Clad Steel	<b>0.018</b>	<b>0.46</b>
Dielectric	Solid PE	<b>0.060</b>	<b>1.52</b>
First Shield	Aluminum Foil (Unbonded)	0.065	1.65
Second Shield	Tinned Copper wire Braid	0.083	2.11
Jacket	PVC or PE (Black)	<b>0.110</b>	<b>2.79</b>

### Electrical Characteristics

Impedance ( $\Omega$ )	50 $\pm$ 3
Capacitance (pF/m)	101.1
Velocity of Propagation (%)	66.0
Return Loss (dB)	$\geq$ 20
Screening Effectiveness (dB)	$\geq$ 90
Inner Conductor DCR ( $\Omega$ /km)	266.0
Outer Shield DCR ( $\Omega$ /km)	31.2
Voltage withstand (Volts DC)	500.0
Spark Test (VRMS)	2000.0
Installation Temp Range ( $^{\circ}$ C)	-40 to +85
Operating Temp Range( $^{\circ}$ C)	-40 to +85

### Attenuation ( @ 20 $^{\circ}$ C )

Frequency(MHz)	Max Attenuation (dB/100ft)	Max Attenuation (dB/100m)
30	3.9	12.9
50	5.1	16.7
150	9.0	29.4
220	10.9	35.8
450	15.8	51.9
900	22.8	74.9
1500	30.1	98.7
1800	33.2	109.0
2000	35.2	115.5
2500	39.8	130.6
5800	64.1	210.3