

## HSR500

### Construction

Item	Material	Diameter (Inch/mm)	
Inner Conductor	Copper Clad Aluminum	<b>0.142</b>	<b>3.61</b>
Dielectric	Foam PE	<b>0.370</b>	<b>9.40</b>
First Shield	Bonded Aluminum Foil	0.376	9.55
Second Shield	Tinned Copper wire Braid	0.405	10.29
Jacket	PVC or PE (Black)	<b>0.500</b>	<b>12.70</b>

### Electrical Characteristics

Impedance ( $\Omega$ )	50 $\pm$ 3
Capacitance (pF/m)	77.5
Velocity of Propagation (%)	86.0
Return Loss (dB)	$\geq$ 20
Screening Effectiveness (dB)	$\geq$ 90
Inner Conductor DCR ( $\Omega$ /km)	2.7
Outer Shield DCR ( $\Omega$ /km)	4.2
Voltage withstand (Volts DC)	3000.0
Spark Test (VRMS)	8000.0
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	0.5	1.8
50	0.7	2.3
150	1.2	4.0
220	1.5	4.9
450	2.2	7.1
900	3.1	10.3
1500	4.1	13.6
1800	4.6	15.0
2000	4.8	15.9
2500	5.5	18.0
5800	8.9	29.1