SS (Spiral Strip) Coaxial Cable

Harbour's SS coaxial cables are flexible alternatives to semi-rigid coax, and the unique shielding configuration offers a cost effective, low attenuation option. The use of strip/round braid composite shields results in low transfer impedance levels. The 50 ohm constructions exhibit the same attenuation characteristics as the M17/130-RG402 and M17/133-RG405 cables. All SS cables have VSWR characteristics that meet or exceed similar size flexible constructions. SS402 and SS405 have been designed with diameters over the outer braids of .141" and 086" respectively, so standard SMA connectors may be used.

An overall FEP jacket is resistant to oil and chemicals. The cable is either unmarked or surface printed eliminating a marker tape that may cause problems in termination. Without the marker tape, an improved level of adhesion exists between the braided core and the jacket that allows ease of termination with short length assemblies.



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SS (Spiral Strip) Coaxial Cable

• Spiral strip shield • Same attenuation as semi-rigid coax



Construction:

Center conductor: Silver plated copper clad steel (SCCS) Dielectric: Solid PTFE Inner shield: Spiral strip of silver plated copper Outer braid: Round silver plated copper Jacket: Solid blue FEP

| Physical Characteristics: | | SS402 | SS405 | SS75086 |
|----------------------------------|-----|-------------|--------------|--------------|
| Center conductor diameter | | .037″ | .0201″ | .0113″ |
| Dielectric diameter | | .117″ | .064″ | .064″ |
| Diameter over inner shield | | .128″ | .071″ | .074″ |
| Diameter over outer braid | | .141″ | .086″ | .086″ |
| Overall diameter | | .163″ | .104″ | .100″ |
| Weight (lbs/mft) | | 32 | 14 | 14 |
| Operating temperature range (°C) | | -55 +200 | -55 +200 | -55 +200 |
| Min. recommended bend radius | | 0.8″ | 0.5″ | 0.5″ |
| Electrical Characteristics: | | | | |
| Impedance (ohms) | | 50 | 50 | 75 |
| Capacitance (pF/ft) | | 29.4 | 29.4 | 19.5 |
| Velocity of propagation | | 70 | 70 | 70 |
| Attenuation (dB/100 ft) @ | | Typ/Max | Typ/Max | Typ/Max |
| 400 | MHz | 7.1 / 8.0 | 13.5 / 14.0 | 13.5 / 14.0 |
| 1 | GHz | 11.2 / 13.0 | 21.7 / 30.0 | 22.0 / 24.0 |
| 2 | GHz | 16.5 / 18.5 | 29.0 / 32.0 | 31.0 / 34.0 |
| 2.4 | GHz | 18.0 / 20.0 | 33.0 / 35.0 | 34.0 / 37.0 |
| 3 | GHz | 21.0 / 23.0 | 37.0 / 39.0 | 38.0 / 41.0 |
| 5 | GHz | 27.0 / 30.0 | 47.0 / 52.0 | 50.0 / 55.5 |
| 10 | GHz | 41.0 / 45.0 | 69.0 / 80.0 | 71.0 / 84.0 |
| 18 | GHz | 58.0 / 64.0 | 95.0 / 110.0 | 98.0 / 115.0 |
| Cut-off frequency (GHz) | | 34.0 | 63.0 | 72.0 |
| Shielding effectiveness | | < -110 dB | < -110 dB | < -110 dB |