



# SUHNER® COAXIAL CABLE DATA SHEET

## TYPE G 03333-60

*Single screened triaxial cable (UL AWM)*

### Cable Design



|                     | Material                               | Detail               | Diameter       |
|---------------------|----------------------------------------|----------------------|----------------|
| Centre conductor:   | Cu                                     | Strand-07 ( 0.16 mm) | 0.49 mm        |
| Dielectric:         | PE                                     |                      | 2.95 mm        |
| 1. Outer conductor: | Cu Braid                               | 95% coverage         | 3.6 mm         |
| Jacket:             | UL-PVC<br>(no print)                   | RAL 9005 - bk        | 5 mm           |
| Armour E:           | Cu Braid                               | 90% coverage         | 5.7 mm         |
| Jacket:             | UL-PVC                                 | RAL 9005 - bk        | 7.35 mm +/-0.1 |
| Print:              | SUHNER SWITZERLAND G 03333-60 (UR) AWM |                      |                |

### Electrical Data

|                                 |                                    |
|---------------------------------|------------------------------------|
| Impedance:                      | 75 $\Omega$ +/-3                   |
| Max. operating frequency:       | 1 GHz                              |
| Capacitance :                   | 67 pF / m                          |
| Velocity of signal propagation: | 66 %                               |
| Signal delay:                   | 5.02 ns / m                        |
| Min. screening effectiveness:   | > 40 dB (up to 1 GHz)              |
| Max. operating voltage:         | 1 kV <sub>rms</sub> (at sea level) |
| Test voltage:                   | 2 kV <sub>rms</sub> (50 Hz/ 1min)  |
| Insulation resistance:          | > 10 M $\Omega$ m                  |

### General Data

|                       |                                       |
|-----------------------|---------------------------------------|
| Temperature range:    | -20 °C...+ 85 °C                      |
| Weight:               | 8.4 kg / 100 m                        |
| Min. bending radius : | static 40 mm                          |
|                       | repeated (for max. 50 bendings) 75 mm |
|                       | dynamic 150 mm                        |

### Suitable Connectors

|                                                                                                             |          |
|-------------------------------------------------------------------------------------------------------------|----------|
| Cable group                                                                                                 | n/a / W3 |
| (for details refer to the "SUHNER coaxial connector catalogue" or contact you nearest HUBER+SUHNER partner) |          |

### Notes

Order as **G 03333-60** under article number **22511911**

#### WAIVER!

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**Matrix**      **Attenuation** [formula :  $(a \cdot f^{0.5} + b \cdot f)$ ] and **Power CW** [formula :  $(p \cdot f^{0.5})$ ]

Coefficients:

$a = 0.5058$

$b = 0.0419$

$f_{\max} = 1$

$p_{\text{at } 1\text{GHz}} = 82$

| Frequency<br>(GHz) | Nom. attenuation<br>(dB / m)<br>sea level<br>25° C ambient temperature | Nom. attenuation<br>(dB / ft)<br>sea level<br>25° C ambient temperature | Max. CW power<br>(watt)<br>sea level<br>40° C ambient temperature |
|--------------------|------------------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------|
| 0.05               | 0.115                                                                  | 0.0351                                                                  | 366.7                                                             |
| 0.10               | 0.164                                                                  | 0.0500                                                                  | 259.3                                                             |
| 0.15               | 0.202                                                                  | 0.0616                                                                  | 211.7                                                             |
| 0.20               | 0.235                                                                  | 0.0716                                                                  | 183.4                                                             |
| 0.25               | 0.263                                                                  | 0.0802                                                                  | 164.0                                                             |
| 0.30               | 0.290                                                                  | 0.0884                                                                  | 149.7                                                             |
| 0.35               | 0.314                                                                  | 0.0957                                                                  | 138.6                                                             |
| 0.40               | 0.337                                                                  | 0.1027                                                                  | 129.7                                                             |
| 0.45               | 0.358                                                                  | 0.1091                                                                  | 122.2                                                             |
| 0.50               | 0.379                                                                  | 0.1155                                                                  | 116.0                                                             |
| 0.55               | 0.398                                                                  | 0.1213                                                                  | 110.6                                                             |
| 0.60               | 0.417                                                                  | 0.1271                                                                  | 105.9                                                             |
| 0.65               | 0.435                                                                  | 0.1326                                                                  | 101.7                                                             |
| 0.70               | 0.453                                                                  | 0.1381                                                                  | 98.0                                                              |
| 0.75               | 0.469                                                                  | 0.1429                                                                  | 94.7                                                              |
| 0.80               | 0.486                                                                  | 0.1481                                                                  | 91.7                                                              |
| 0.85               | 0.502                                                                  | 0.1530                                                                  | 88.9                                                              |
| 0.90               | 0.518                                                                  | 0.1579                                                                  | 86.4                                                              |
| 0.95               | 0.533                                                                  | 0.1625                                                                  | 84.1                                                              |
| 1.00               | 0.548                                                                  | 0.1670                                                                  | 82.0                                                              |

Flame propagation:      *UL (horizontal flame test)*

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