

# HUBER+SUHNER® DATA SHEET

## Coaxial Cable: G\_03332



### Description

Triax - PE - 50 Ohm

### Technical Data

#### Construction

|                        | Material                             | Detail        | Diameter       |
|------------------------|--------------------------------------|---------------|----------------|
| Centre conductor       | Copper                               | Strand-07     | 0.95 mm        |
| Dielectric             | PE                                   |               | 2.95 mm        |
| Outer conductor        | Copper                               | Braid, 95 %   | 3.6 mm         |
| Jacket                 | PVC                                  | RAL 9005 - bk | 5 mm +/- 0.15  |
| 2 <sup>nd</sup> Screen | Copper                               | Braid, 91 %   | 5.7 mm         |
| Outer Jacket           | PVC                                  | RAL 9005 - bk | 7.3 mm +/- 0.3 |
| Print                  | HUBER+SUHNER G 03332 50 Ohm (PA no.) |               |                |

#### Electrical Data

|                                |                                      |
|--------------------------------|--------------------------------------|
| Impedance                      | 50 $\Omega$ +/- 2                    |
| Max. operating frequency       | 1 GHz                                |
| Capacitance                    | 100.7 pF/m                           |
| Velocity of signal propagation | 66 %                                 |
| Signal delay                   | 5.02 ns/m                            |
| Insulation resistance          | $\geq 1 \times 10^8$ M $\Omega$ m    |
| Min. screening effectiveness   | >40 dB (up to 1 GHz)                 |
| Max. operating voltage         | 2.5 kV <sub>rms</sub> (at sea level) |
| Test voltage                   | 5 kV <sub>rms</sub> (50 Hz/1 min)    |

#### Mechanical Data

|                     |                                 |        |
|---------------------|---------------------------------|--------|
| Weight              | 9 kg/100 m                      |        |
| Min. bending radius | static                          | 36 mm  |
|                     | repeated (for max. 50 bendings) | 75 mm  |
|                     | dynamic                         | 146 mm |

#### Environmental Data

|                          |                   |
|--------------------------|-------------------|
| Temperature range        | -40 °C... + 85 °C |
| Installation temperature | -20 °C... + 60 °C |
| Halogen free             | n/a               |
| 2002/95/EC (RoHS)        | compliant         |

#### Ordering Information

Order as G\_03332

#### Additional Information

##### Remarks

(For details refer to the HUBER+SUHNER RF CABLES GENERAL CATALOGUE or contact your nearest HUBER+SUHNER partner)

#### Suitable Connectors

|             |              |
|-------------|--------------|
| Cable group | crimped —    |
|             | clamped (W2) |
|             | soldered —   |

# HUBER+SUHNER® DATA SHEET

## Coaxial Cable: G\_03332



Rev.: I

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

Coefficients:

|    |                  |    |   |                    |   |                           |   |
|----|------------------|----|---|--------------------|---|---------------------------|---|
| a= | 0.4027           | b= | 0.08                                      | f <sub>max</sub> = | 1   | p <sub>at</sub><br>1GHz = | 75  |
|    |                  |    |   |                    |   |                           |   |
|    | <b>Frequency</b> |    | <b>Nom. attenuation</b>                   |                    | <b>Nom. attenuation</b>                   |                           | <b>Max. CW power</b>                      |
|    | <b>(GHz)</b>     |    | <b>(dB / m)</b>                           |                    | <b>(dB / ft)</b>                          |                           | <b>(watt)</b>                             |
|    |                  |    | sea level<br>25° C ambient<br>temperature |                    | sea level<br>25° C ambient<br>temperature |                           | sea level<br>40° C ambient<br>temperature |
|    |                  |    |   |                    |   |                           |   |
|    | 0.05             |    | 0.09                                      |                    | 0.027                                     |                           | 335                                       |
|    | 0.10             |    | 0.14                                      |                    | 0.043                                     |                           | 237                                       |
|    | 0.15             |    | 0.17                                      |                    | 0.052                                     |                           | 194                                       |
|    | 0.20             |    | 0.20                                      |                    | 0.061                                     |                           | 168                                       |
|    | 0.25             |    | 0.22                                      |                    | 0.067                                     |                           | 150                                       |
|    | 0.30             |    | 0.24                                      |                    | 0.073                                     |                           | 137                                       |
|    | 0.35             |    | 0.27                                      |                    | 0.082                                     |                           | 127                                       |
|    | 0.40             |    | 0.29                                      |                    | 0.088                                     |                           | 119                                       |
|    | 0.45             |    | 0.31                                      |                    | 0.094                                     |                           | 112                                       |
|    | 0.50             |    | 0.32                                      |                    | 0.098                                     |                           | 106                                       |
|    | 0.55             |    | 0.34                                      |                    | 0.104                                     |                           | 101                                       |
|    | 0.60             |    | 0.36                                      |                    | 0.110                                     |                           | 97  |
|    | 0.65             |    | 0.38                                      |                    | 0.116                                     |                           | 93  |
|    | 0.70             |    | 0.39                                      |                    | 0.119                                     |                           | 90  |
|    | 0.75             |    | 0.41                                      |                    | 0.125                                     |                           | 87  |
|    | 0.80             |    | 0.42                                      |                    | 0.128                                     |                           | 84  |
|    | 0.85             |    | 0.44                                      |                    | 0.134                                     |                           | 81  |
|    | 0.90             |    | 0.45                                      |                    | 0.137                                     |                           | 79  |
|    | 0.95             |    | 0.47                                      |                    | 0.143                                     |                           | 77  |
|    | 1.00             |    | 0.48                                      |                    | 0.146                                     |                           | 75  |

HUBER+SUHNER is certified according to ISO 9001 and ISO 14001

**WAIVER!**

It is exclusively in written agreements that we provide our customers with warrants and representations as to the technical specifications and/or the fitness for any particular purpose. The facts and figures contained herein are carefully compiled to the best of our knowledge, but they are intended for general informational purposes only.



**HUBER+SUHNER AG**  
**RF Industrial**  
**9100 Herisau, Switzerland**  
 Phone +41 (0)71 353 41 11  
 Fax +41 (0)71 353 45 90  
 www.hubersuhner.com

**HUBER+SUHNER – Excellence in Connectivity Solutions**