

# HUBER+SUHNER® DATA SHEET

## Coaxial Cable: S\_06132\_D



### Description

High screened coaxial cable

### Technical Data

#### Construction

|                  | Material                                  | Detail                   | Diameter        |
|------------------|-------------------------------------------|--------------------------|-----------------|
| Centre conductor | Copper                                    | Wire                     | 2.17 mm         |
| Dielectric       | SPE (Foamed Polyethylene)                 |                          | 6.24 mm         |
| Outer conductor  | PETP                                      | longitudinal Foil, 100 % | 6.4 mm          |
| Outer conductor  | Copper, Tin plated                        | Braid, 69 %              | 7.2 mm          |
| Outer conductor  | Aluminum / PES                            | longitudinal Foil, 100 % | 7.4 mm          |
| Outer conductor  | Copper, Tin plated                        | Braid, 85 %              | 8.28 mm         |
| Jacket           | PVC                                       | RAL 1021 - ye            | 10.3 mm +/- 0.2 |
| Print            | HUBER+SUHNER ETHERNET IEEE 802.3 (PA no.) |                          |                 |

#### Electrical Data

|                                |                                              |
|--------------------------------|----------------------------------------------|
| Impedance                      | 50 $\Omega$ +/- 2                            |
| Max. operating frequency       | 1 GHz                                        |
| Capacitance                    | 84 pF/m                                      |
| Velocity of signal propagation | 79 %                                         |
| Signal delay                   | 4.2 ns/m                                     |
| Insulation resistance          | $\geq 1 \times 10^8 \text{ M}\Omega\text{m}$ |
| Min. screening effectiveness   | >75 dB (up to 6 GHz)                         |
| Max. operating voltage         | 0.75 kV <sub>rms</sub> (at sea level)        |
| Test voltage                   | 1.5 kV <sub>rms</sub> (50 Hz/1 min)          |

#### Mechanical Data

|                     |                |
|---------------------|----------------|
| Weight              | 15.1 kg/100 m  |
| Min. bending radius | static 150 mm  |
|                     | dynamic 300 mm |

#### Environmental Data

|                          |                   |
|--------------------------|-------------------|
| Temperature range        | -25 °C... + 85 °C |
| Installation temperature | -20 °C... + 60 °C |
| 2002/95/EC (RoHS)        | compliant         |

#### Ordering Information

|          |           |
|----------|-----------|
| Order as | S_06132_D |
|----------|-----------|

#### 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 (U25) |
|             | clamped —     |
|             | soldered —    |

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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= | 0.1524           | b= | 0.0303                                    | f <sub>max</sub> = | 1                                         | p <sub>at</sub><br>1GHz = | 230                                       |
|    |                  |    |                                           |                    |                                           |                           |                                           |
|    | <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             |    | 0.04                                      |                    | 0.012                                     |                           | 1029                                      |
|    | 0.10             |    | 0.05                                      |                    | 0.015                                     |                           | 727                                       |
|    | 0.15             |    | 0.06                                      |                    | 0.018                                     |                           | 594                                       |
|    | 0.20             |    | 0.07                                      |                    | 0.021                                     |                           | 514                                       |
|    | 0.25             |    | 0.08                                      |                    | 0.024                                     |                           | 460                                       |
|    | 0.30             |    | 0.09                                      |                    | 0.027                                     |                           | 420                                       |
|    | 0.35             |    | 0.10                                      |                    | 0.030                                     |                           | 389                                       |
|    | 0.40             |    | 0.11                                      |                    | 0.034                                     |                           | 364                                       |
|    | 0.45             |    | 0.12                                      |                    | 0.037                                     |                           | 343                                       |
|    | 0.50             |    | 0.12                                      |                    | 0.037                                     |                           | 325                                       |
|    | 0.55             |    | 0.13                                      |                    | 0.040                                     |                           | 310                                       |
|    | 0.60             |    | 0.14                                      |                    | 0.043                                     |                           | 297                                       |
|    | 0.65             |    | 0.14                                      |                    | 0.043                                     |                           | 285                                       |
|    | 0.70             |    | 0.15                                      |                    | 0.046                                     |                           | 275                                       |
|    | 0.75             |    | 0.15                                      |                    | 0.046                                     |                           | 266                                       |
|    | 0.80             |    | 0.16                                      |                    | 0.049                                     |                           | 257                                       |
|    | 0.85             |    | 0.17                                      |                    | 0.052                                     |                           | 249                                       |
|    | 0.90             |    | 0.17                                      |                    | 0.052                                     |                           | 242                                       |
|    | 0.95             |    | 0.18                                      |                    | 0.055                                     |                           | 236                                       |
|    | 1.00             |    | 0.18                                      |                    | 0.055                                     |                           | 230                                       |

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#### 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.



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