

# HUBER+SUHNER® DATA SHEET

## Coaxial Cable: GX\_03173-01



### Description

PE cross-linked - 75 Ohm - single screen

### Technical Data

#### Construction

|                  | Material                                 | Detail        | Diameter       |
|------------------|--|---------------|----------------|
| Centre conductor | Steel, Copper plated                     | Strand-07     | 0.42 mm        |
| Dielectric       | PEX (Polyethylene cross-linked)          |               | 2.45 mm        |
| Outer conductor  | Copper, Tin plated                       | Braid, 91 %   | 2.9 mm         |
| Jacket           | RADOX                                    | RAL 7000 - gr | 3.7 mm +/- 0.1 |
| Print            | HUBER+SUHNER GX 03173-01 75 Ohm (PA no.) |               |                |

#### Electrical Data

|                                |  |
|--------------------------------|--|
| Impedance                      | 75 $\Omega$ +/- 3                            |
| Max. operating frequency       | 1 GHz  |
| Capacitance                    | 67 pF/m                                      |
| Velocity of signal propagation | 66 %   |
| Signal delay                   | 5.03 ns/m                                    |
| Insulation resistance          | $\geq 1 \times 10^8 \text{ M}\Omega\text{m}$ |
| Min. screening effectiveness   | >40 dB (up to 1 GHz)                         |
| Max. operating voltage         | 2 kV <sub>rms</sub> (at sea level)           |
| Test voltage                   | 4 kV <sub>rms</sub> (50 Hz/1 min)            |

#### Mechanical Data

|                     |                                 |       |
|---------------------|---------------------------------|-------|
| Weight              | 2.1 kg/100 m                    |       |
| Min. bending radius | static                          | 18 mm |
|                     | repeated (for max. 50 bendings) | 37 mm |

#### Environmental Data

|                          |                    |
|--------------------------|--------------------|
| Temperature range        | -40 °C... + 105 °C |
| Installation temperature | -20 °C... + 60 °C  |
| Flammability             | IEC 60332-1        |
| Halogen free             | IEC 60754          |
| 2002/95/EC (RoHS)        | compliant          |

#### Ordering Information

Order as GX\_03173-01

#### Additional Information

##### Remarks

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

**Cable group** U6 3 mm / 75 Ohm

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Rev.: H

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

Coefficients:

|    |                  |    |   |                     |   |                           |   |
|----|------------------|----|---|---------------------|---|---------------------------|---|
| a= | 0.5995           | b= | 0.0993                                    | f <sub>max.</sub> = | 1   | p <sub>at</sub><br>1GHz = | 170                                       |
|    |                  |    |   |                     |   |                           |   |
|    | <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             |    | 0.14                                      |                     | 0.043                                     |                           | 760                                       |
|    | 0.10             |    | 0.20                                      |                     | 0.061                                     |                           | 538                                       |
|    | 0.15             |    | 0.25                                      |                     | 0.076                                     |                           | 439                                       |
|    | 0.20             |    | 0.29                                      |                     | 0.088                                     |                           | 380                                       |
|    | 0.25             |    | 0.32                                      |                     | 0.098                                     |                           | 340                                       |
|    | 0.30             |    | 0.36                                      |                     | 0.110                                     |                           | 310                                       |
|    | 0.35             |    | 0.39                                      |                     | 0.119                                     |                           | 287                                       |
|    | 0.40             |    | 0.42                                      |                     | 0.128                                     |                           | 269                                       |
|    | 0.45             |    | 0.45                                      |                     | 0.137                                     |                           | 253                                       |
|    | 0.50             |    | 0.47                                      |                     | 0.143                                     |                           | 240                                       |
|    | 0.55             |    | 0.50                                      |                     | 0.152                                     |                           | 229                                       |
|    | 0.60             |    | 0.52                                      |                     | 0.158                                     |                           | 219                                       |
|    | 0.65             |    | 0.55                                      |                     | 0.168                                     |                           | 211                                       |
|    | 0.70             |    | 0.57                                      |                     | 0.174                                     |                           | 203                                       |
|    | 0.75             |    | 0.59                                      |                     | 0.180                                     |                           | 196                                       |
|    | 0.80             |    | 0.62                                      |                     | 0.189                                     |                           | 190                                       |
|    | 0.85             |    | 0.64                                      |                     | 0.195                                     |                           | 184                                       |
|    | 0.90             |    | 0.66                                      |                     | 0.201                                     |                           | 179                                       |
|    | 0.95             |    | 0.68                                      |                     | 0.207                                     |                           | 174                                       |
|    | 1.00             |    | 0.70                                      |                     | 0.213                                     |                           | 170                                       |

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

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**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

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