

## Flexible triaxial cable

**G\_02332-01** Item: 23023565

### Description

G: RF cables with PE dielectrics

Triax (RG174 alternative core), grey jacket, 50 Ohm, 2 GHz, 85°C, ø4.25 mm, PVC jacket



### Technical Data

#### Construction

|                        | Material                 | Detail        | Diameter         |
|------------------------|--------------------------|---------------|------------------|
| Centre conductor       | Copper                   | Strand-07     | 0.49 mm          |
| Dielectric             | PE (Polyethylene)        |               | 1.5 mm           |
| Outer conductor        | Copper                   | Braid, 96%    | 2 mm             |
| Jacket                 | PVC (Polyvinyl chloride) | RAL 7035 - gr | 2.55 mm +/- 0.13 |
| 2 <sup>nd</sup> Screen | Copper                   | Braid, 91 %   | 3.05 mm          |
| Outer Jacket           | PVC (Polyvinyl chloride) | RAL 7035 - gr | 4.25 mm +/- 0.13 |

Print: HUBER+SUHNER G 02332-01 50 Ohm (production order number)

#### Electrical Data

|                                |  |
|--------------------------------|--|
| Impedance                      | 50 Ω +/- 2                             |
| Operating Frequency            | 2 GHz                                  |
| Capacitance                    | 100.7 pF/m                             |
| Velocity of signal propagation | 66 %                                   |
| Signal delay                   | 5.03 ns/m                              |
| Screening effectiveness        | ≥ 75 dB (up to 2 GHz)                  |
| Operating voltage              | ≤ 1.5 kV <sub>rms</sub> (at sea level) |
| Test voltage                   | 3 kV <sub>rms</sub> (50 Hz/1 min)      |

#### Mechanical Data

|                     |         |            |
|---------------------|---------|------------|
| Weight              |         | 3 kg/100 m |
| Min. bending radius | static  | 20 mm      |
|                     | dynamic | 42 mm      |
|                     |         | 85 mm      |

#### Environmental Data

|  |                   |
|--|-------------------|
| Temperature range                                    | -25 °C ... +85 °C |
| Installation temperature                             | -20 °C... +60 °C  |
| Halogen free   | No                |
| 2011/65/EU (RoHS - including 2015/863 and 2017/2102) | compliant         |
| 1907/2006/EC (REACH)                                 | compliant         |

### 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 W1 2 mm / 50 Ohm

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

Coefficients:

a = 0.817

b = 0.1489

f<sub>max</sub> = 2

P at 1GHz = 38

| Frequency<br>(GHz) | Nom. attenuation<br>(dB / m)<br>sea level 25° C<br>ambient<br>temperature | Nom. attenuation<br>(dB / ft)<br>sea level 25° C<br>ambient<br>temperature | Max. CW power<br>(W)<br>sea level 40° C<br>ambient<br>temperature |
|--------------------|---|--|---|
| 0,1                | 0,27  | 0,083  | 120   |
| 0,2                | 0,4   | 0,120  | 85  |
| 0,3                | 0,49  | 0,150  | 69  |
| 0,4                | 0,58  | 0,176  | 60  |
| 0,5                | 0,65  | 0,199  | 54  |
| 0,6                | 0,72  | 0,220  | 49  |
| 0,7                | 0,79  | 0,240  | 45  |
| 0,8                | 0,85  | 0,259  | 42  |
| 0,9                | 0,91  | 0,277  | 40  |
| 1,0                | 0,97  | 0,294  | 38  |
| 1,1                | 1,02  | 0,311  | 36  |
| 1,2                | 1,07  | 0,327  | 35  |
| 1,3                | 1,13  | 0,343  | 33  |
| 1,4                | 1,18  | 0,358  | 32  |
| 1,5                | 1,22  | 0,373  | 31  |
| 1,6                | 1,27  | 0,388  | 30  |
| 1,7                | 1,32  | 0,402  | 29  |
| 1,8                | 1,36  | 0,416  | 28  |
| 1,9                | 1,41  | 0,429  | 28  |
| 2,0                | 1,45  | 0,443  | 27  |