

## Flexible triaxial cable G\_03332

### Description

G: RF cables with PE dielectrics

Triax (RG58 alternative core), 50 Ohm, 2 GHz, 85°C, ø7.3 mm,  
PVC jacket



### Technical Data

#### Construction

|                        | Material                 | Detail        | Diameter       |
|------------------------|--------------------------|---------------|----------------|
| Centre conductor       | Copper                   | Strand-07     | 0.95 mm        |
| Dielectric             | PE (Polyethylene)        |               | 2.95 mm        |
| Outer conductor        | Copper                   | Braid, 95%    | 3.6 mm         |
| Jacket                 | PVC (Polyvinyl chloride) | RAL 9005 - bk | 5 mm +/- 0.15  |
| 2 <sup>nd</sup> Screen | Copper                   | Braid, 91 %   | 5.7 mm         |
| Outer Jacket           | PVC (Polyvinyl chloride) | RAL 9005 - bk | 7.3 mm +/- 0.3 |

Print: HUBER+SUHNER G 03332 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                   | 5.02 ns/m                              |
| Screening effectiveness        | ≥ 40 dB (up to 2 GHz)                  |
| 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      |
|                     | dynamic | 75 mm      |
|                     |         | 146 mm     |

#### Environmental Data

|                                                      |                           |
|------------------------------------------------------|---------------------------|
| Temperature range                                    | -25 °C ... +85 °C         |
| Installation temperature                             | -20 °C... +60 °C          |
| Halogen test                                         | n/a                       |
| Halogen free                                         | No                        |
| 2011/65/EU (RoHS - including 2015/863 and 2017/2102) | compliant                 |
| 1907/2006/EC (REACH)                                 | compliant                 |
| 2000/53/EC (ELV)                                     | compliant                 |
| 2012/19/EU (WEEE)                                    | no special marking needed |

### Additional Information

Extended temperature range -40°C to +85°C is feasible for static applications.

#### Ordering Information

Order as G\_03332

#### Remarks

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

#### Suitable Connectors

Cable group W2 3 mm / 50+75 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 = 0.4027

b = 0.08

$f_{max} = 2$

P at 1GHz = 75

| 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                | 0,14                                                                      | 0,041                                                                      | 237                                                               |
| 0,2                | 0,2                                                                       | 0,060                                                                      | 168                                                               |
| 0,3                | 0,24                                                                      | 0,075                                                                      | 137                                                               |
| 0,4                | 0,29                                                                      | 0,087                                                                      | 119                                                               |
| 0,5                | 0,32                                                                      | 0,099                                                                      | 106                                                               |
| 0,6                | 0,36                                                                      | 0,110                                                                      | 97                                                                |
| 0,7                | 0,39                                                                      | 0,120                                                                      | 90                                                                |
| 0,8                | 0,42                                                                      | 0,129                                                                      | 84                                                                |
| 0,9                | 0,45                                                                      | 0,138                                                                      | 79                                                                |
| 1,0                | 0,48                                                                      | 0,147                                                                      | 75                                                                |
| 1,1                | 0,51                                                                      | 0,156                                                                      | 72                                                                |
| 1,2                | 0,54                                                                      | 0,164                                                                      | 68                                                                |
| 1,3                | 0,56                                                                      | 0,172                                                                      | 66                                                                |
| 1,4                | 0,59                                                                      | 0,179                                                                      | 63                                                                |
| 1,5                | 0,61                                                                      | 0,187                                                                      | 61                                                                |
| 1,6                | 0,64                                                                      | 0,194                                                                      | 59                                                                |
| 1,7                | 0,66                                                                      | 0,201                                                                      | 58                                                                |
| 1,8                | 0,68                                                                      | 0,209                                                                      | 56                                                                |
| 1,9                | 0,71                                                                      | 0,216                                                                      | 54                                                                |
| 2,0                | 0,73                                                                      | 0,222                                                                      | 53                                                                |