

## Flexible triaxial cable G\_02312-03

### Description

G: RF cables with PE dielectrics

Triax (RG174 alternative core), 50 Ohm, 2 GHz, 85°C, ø4.25 mm,  
PUR 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	PUR (Polyurethane)	RAL 9005 - bk	4.25 mm +/- 0.1

Print: HUBER+SUHNER G 02312-03 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	Yes
2011/65/EU (RoHS - including 2015/863 and 2017/2102)	compliant
1907/2006/EC (REACH)	compliant

### Additional Information

#### Ordering Information

Order as G\_02312-03

#### 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

$f_{\max} = 2$

P at 1GHz = 38

Frequency (GHz)	Nom. attenuation (dB / m) sea level 25° C ambient temperature	Nom. attenuation (dB / ft) sea level 25° C ambient temperature	Max. CW power (W) sea level 40° C ambient 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