Data Sheet

Flexible RF cable
RG_316_/U

Description

RG: RG type RF cables

RG316, 50 Ohm, 3 GHz, 200°C, ø2.5 mm, FEP jacket

Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Steel, Copper+Silver plated	Strand-07	0.54 mm
Dielectric	PTFE (Polytetrafluoroethylene)		1.55 mm
Outer conductor	Copper, Silver plated	Braid, 95%	2 mm
Jacket	FEP (Fluorinated ethylene propylene)	RAL 8015 - br	2.5 mm +/- 0.1

Print: HUBER+SUHNER RG 316 U 50 Ohm (PA no.)

Electrical Data

Impedance		50 Ω +/- 2
Operating Frequency		3 GHz
Capacitance		97 pF/m
Velocity of signal propagation		69 %
Signal delay		4.86 ns/m
Screening effectiveness		≥ 38 dB (up to 1 GHz)
Operating voltage		≤ 1.5 kV_{rms} (at sea level)
Test voltage		3 kV_{rms} (50 Hz/1 min)

Mechanical Data

Weight		1.6 kg/100 m
Min. bending radius	static	15 mm
	repeated	25 mm
	dynamic	37.5 mm

Environmental Data

Temperature range	-65 °C ... +200 °C
Installation temperature	-20 °C... +60 °C
Flame propagation test	IEC 60332-3,
Halogen free	No
2011/65/EU (RoHS)	compliant
2006/1907/EC (REACH)	compliant

Additional Information

Ordering Information

Order as	RG_316_/U

Remarks

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

Suitable Connectors

Cable group	U2 2 mm / 50 Ohm

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Matrix typical Attenuation [formula: (a*f^0.5 + b*f)] and maximum Power CW [formula: (p/f^0.5)]
Coefficients:

a = 0.7727	b = 0.0972	f_{max} = 3	P at 1GHz = 135

Frequency	Nom. attenuation	Nom. attenuation	Max. CW power
(GHz)	(dB / m)	(dB / ft)	(W)
	sea level 25° C ambient temperature	sea level 25° C ambient temperature	sea level 40° C ambient temperature
0,15	0,31	0,096	349
0,3	0,45	0,138	246
0,45	0,56	0,171	201
0,6	0,66	0,200	174
0,75	0,74	0,226	156
0,9	0,82	0,250	142
1,05	0,89	0,272	132
1,2	0,96	0,294	123
1,35	1,03	0,314	116
1,5	1,09	0,333	110
1,65	1,15	0,351	105
1,8	1,21	0,369	101
1,95	1,27	0,387	97
2,1	1,32	0,403	93
2,25	1,38	0,420	90
2,4	1,43	0,436	87
2,55	1,48	0,452	85
2,7	1,53	0,467	82
2,85	1,58	0,482	80
3,0	1,63	0,497	78