

Coaxial Cable RG_214_/U-60

Description

PE-50 Ohm - double screen (UL AWM Style 1478 VW-1)



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Strand-07	2.25 mm
Dielectric	PE (Polyethylene)		7.28 mm
Outer conductor	Copper, Tin plated	Braid, 93%	8 mm
Outer conductor	Copper, Tin plated	Braid, 95 %	8.7 mm
Jacket	PVC (Polyvinyl chloride)	RAL 9005 - bk	10.8 mm +/- 0.15

Print: HUBER+SUHNER RG 214 U-60 50 Ohm (UL logo) AWM Style 1478 VW-1(PA no.)

Electrical Data

Impedance		50 Ω +/- 2
Operating Frequency		6 GHz
Capacitance		101 pF/m
Velocity of signal propagation		66 %
Signal delay		5.03 ns/m
Insulation resistance		≥ 1 x 10 ⁸ MΩm
Min. screening effectiveness		≥ 71 dB (up to 1 GHz)
Max. operating voltage		≤ 5 kV _{rms} (at sea level)
Test voltage		10 kV _{rms} (50 Hz/1 min)
Voltage Rating UL		30 V
Phase vs Temperature	-40°C... + 70°C	
Phase vs Bending		9 °/GHz

Mechanical Data

Weight		18.9 kg/100 m
Min. bending radius	static	55 mm
	repeated (for ≤ 50 bendings)	108 mm

Environmental Data

Temperature range	-25 °C... +85 °C
Temperature Rating UL	60 °C
Installation temperature	-20 °C... +60 °C
Flammability	UL (vertical flame test similar VW-1), ,
2011/95/EC (RoHS)	compliant

Additional Information

Ordering Information

Order as	RG_214_/U-60
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Remarks

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

Suitable Connectors

Cable group	U32 7 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 = 0.1884

b = 0.0646

f_{max} = 6

P at 1GHz = 324

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 (watt) sea level 40° C ambient temperature
0,3	0,12	0,037	592
0,6	0,18	0,056	418
0,9	0,24	0,072	342
1,2	0,28	0,087	296
1,5	0,33	0,100	265
1,8	0,37	0,112	241
2,1	0,41	0,125	224
2,4	0,45	0,136	209
2,7	0,48	0,148	197
3,0	0,52	0,159	187
3,3	0,56	0,169	178
3,6	0,59	0,180	171
3,9	0,62	0,190	164
4,2	0,66	0,200	158
4,5	0,69	0,210	153
4,8	0,72	0,220	148
5,1	0,75	0,230	143
5,4	0,79	0,240	139
5,7	0,82	0,249	136
6,0	0,85	0,259	132