

## RGC58 RGFLEX™ Foam-Dielectric Coax Braided Cable

## Product Description

## • RGC series

DUAL SHIELDED (aluminium foil plus tinned copper braid shield),  
TRISHIELD (aluminium foil plus tinned copper braid shield plus aluminium foil) and  
QUADSHIELD (aluminium foil plus tinned copper braid shield plus aluminium foil plus tinned copper braid)  
coaxial cable in 50- and 75-ohm variants, for broadband, Internet service provider, rural telephony  
and satellite communication applications

Application: OEM jumpers, BTS inter-cabinet connections



RGC58 RGFLEX™ Foam-Dielectric Coax  
Braided Cable

## Features/Benefits

## Technical Features

## Structure

Inner conductor:	Copper Wire	[mm (in)]	1.06 (0.040)
Dielectric:		[mm (in)]	2.95 (0.117)
Outer conductor:	1st shield: Al/PET foil bonded to the core with 100% of coverage; 2nd shield: Tinned copper braid with 75% of coverage	[mm (in)]	3.60 (0.141)
Jacket:	Polyethylene, PE	[mm (in)]	5.0 (0.197)

## Mechanical Properties

Weight, approximately		[kg/m (lb/ft)]	0.030 (0.020)
Minimum bending radius, single bending		[mm (in)]	25.4 (1)
Minimum bending radius, repeated bending		[mm (in)]	100 (3.94)
Bending moment		[Nm (lb-ft)]	
Max. tensile force		[N (lb)]	
Recommended / maximum clamp spacing		[m (ft)]	

## Electrical Properties

Characteristic impedance		[Ω]	50 +/- 2
Relative propagation velocity		[%]	82
Capacitance		[pF/m (pF/ft)]	82 (25.0)
Inductance		[μH/m (μH/ft)]	0.205 (0.062)
Max. operating frequency		[GHz]	2.4
Jacket spark test RMS		[V]	
Peak power rating		[kW]	
RF Peak voltage rating		[V]	
DC-resistance inner conductor		[Ω/km (Ω/1000ft)]	21.5 (6.55)
DC-resistance outer conductor		[Ω/km (Ω/1000ft)]	19.1 (5.8)

## Recommended Temperature Range

Storage temperature		[°C (°F)]	-70 to +85 (-94 to +185)
Installation temperature		[°C (°F)]	-40 to +60 (-40 to +140)
Operation temperature		[°C (°F)]	-50 to +85 (-58 to +185)

## Other Characteristics

Fire Performance: Halogene Free

VSWR Performance: [dB (VSWR)]

Other Options:

Frequency [ MHz ]	Attenuation	
	[ dB/100m ]	[ dB/100ft ]
0.5	1.0	0.305
1.0	1.30	0.396
5.0	2.80	0.853
10	3.70	1.13
20	4.70	1.43
30	5.70	1.74
50	7.30	2.23
88	9.80	2.99
100	10.4	3.17
108	10.9	3.32
150	13.0	3.96
174	14.0	4.27
200	15.0	4.57
300	18.4	5.61
400	21.2	6.46
450	22.6	6.89
500	23.8	7.25
512	24.0	7.32
600	26.0	7.92
700	28.9	8.81
800	30.8	9.39
824	32.2	9.81
894	33.5	10.2
900	33.7	10.3
925	34.0	10.4
960	34.7	10.6
1000	35.4	10.8
1250	42.0	12.8
1500	46.0	14.0
1700	49.0	14.9
1800	51.0	15.5
2000	55.0	16.8
2400	62.0	18.9

Attenuation at 20°C (68°F) cable temperature