

RGC8 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, GPS lines, Microwave IF cabling



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Features/Benefits

Technical Features

Structure

| | | | |
|------------------|--|-----------|---------------|
| Inner conductor: | Copper Wire | [mm (in)] | 2.74 (0.108) |
| Dielectric: | | [mm (in)] | 7.37 (0.290) |
| Outer conductor: | 1st shield: Al/PET foil bonded to the core with 100% of coverage; 2nd shield: Tinned copper braid with 77% of coverage | [mm (in)] | 8.13 (0.320) |
| Jacket: | Polyethylene, PE | [mm (in)] | 10.24 (0.403) |

Mechanical Properties

| | | |
|--|----------------|---------------|
| Weight, approximately | [kg/m (lb/ft)] | 0.133 (0.089) |
| Minimum bending radius, single bending | [mm (in)] | 25.4 (1) |
| Minimum bending radius, repeated bending | [mm (in)] | 60 (2.36) |
| 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 | [%] | 85 |
| Capacitance | [pF/m (pF/ft)] | 78 (23.8) |
| Inductance | [μH/m (μH/ft)] | 0.195 (0.059) |
| Max. operating frequency | [GHz] | 16 |
| Jacket spark test RMS | [V] | |
| Peak power rating | [kW] | |
| RF Peak voltage rating | [V] | |
| DC-resistance inner conductor | [Ω/km (Ω/1000ft)] | 3.0 (0.92) |
| DC-resistance outer conductor | [Ω/km (Ω/1000ft)] | 5.3 (1.61) |

Recommended Temperature Range

| | | |
|--------------------------|-----------|--------------------------|
| Storage temperature | [°C (°F)] | -70 to +85 (-94 to +185) |
| Installation temperature | [°C (°F)] | -40 to +85 (-40 to +185) |
| 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 | 0.363 | 0.111 |
| 1.0 | 0.453 | 0.138 |
| 1.5 | 0.623 | 0.190 |
| 2.0 | 0.802 | 0.244 |
| 10 | 1.50 | 0.457 |
| 20 | 2.04 | 0.622 |
| 30 | 2.35 | 0.716 |
| 50 | 2.95 | 0.899 |
| 88 | 3.85 | 1.17 |
| 100 | 4.08 | 1.24 |
| 108 | 4.22 | 1.29 |
| 150 | 4.88 | 1.49 |
| 174 | 5.23 | 1.59 |
| 200 | 5.61 | 1.71 |
| 300 | 6.95 | 2.12 |
| 400 | 8.09 | 2.47 |
| 450 | 8.65 | 2.64 |
| 500 | 9.13 | 2.78 |
| 512 | 9.24 | 2.82 |
| 600 | 10.1 | 3.08 |
| 700 | 10.9 | 3.32 |
| 800 | 11.8 | 3.60 |
| 824 | 12.0 | 3.66 |
| 894 | 12.5 | 3.81 |
| 900 | 12.6 | 3.84 |
| 925 | 12.8 | 3.90 |
| 960 | 13.0 | 3.96 |
| 1000 | 13.2 | 4.02 |
| 1250 | 14.9 | 4.54 |
| 1500 | 16.5 | 5.03 |
| 1700 | 17.7 | 5.39 |
| 1800 | 18.2 | 5.55 |
| 2000 | 19.4 | 5.91 |
| 2200 | 21.3 | 6.49 |
| 2300 | 21.8 | 6.64 |
| 3000 | 24.3 | 7.41 |

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