

75 Ω Broadcast, Video & CATV Coaxial Cables

RG-11

Video Coaxial Cable

SCTE / SMPTE / MIL-C-17 · 75 Ω $\pm$ 2 Ω · $\varnothing$ 10.30 mm · 14 AWG ($\varnothing$ 1.63) Cu/CCS · Foam PE (82

75 Ω Low-Loss Trunk14 AWG · $\varnothing$ 10.30 mm

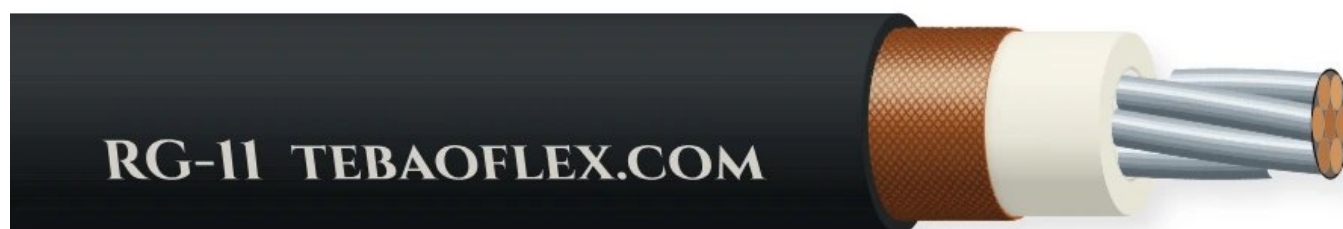
82–84 % VoP Foam PE

Application

RG-11 is a heavy-duty 75 Ω low-loss coaxial trunk cable ($\varnothing$ 10.30 mm / 0.405 in) engineered with a 14 AWG ($\varnothing$ 1.63 mm) solid bare copper or copper-clad steel center conductor and $\varnothing$ 7.11 mm gas-injected foam polyethylene dielectric (82–84 % VoP, 53 pF/m) to

Typical uses: Stadium & OB Broadcast SDI Backbones, CATV / DOCSIS 3.1 & 4.0 Broadband Trunks, Satellite Teleport L-Band IF Feeders, Highway, Tunnel & Perimeter CCTV, Airport & Campus MATV Distribution

Construction



Cross-section, not to scale

1	14 AWG center conductor (Bare Cu or CCS)	SCTE 74 / SMPTE
2	Gas-injected foam HDPE dielectric	SCTE 74 / SMPTE
3	100 % bonded tri-laminate foil screen	SCTE 74 / SMPTE
4	High-coverage outer wire braid	SCTE 74 / SMPTE
5	Protective trunk outer jacket	SCTE 74 / SMPTE

Technical data

Typical values

Characteristic impedance Z_0	75 $\Omega \pm 2 \Omega$ ($\pm 1.5 \Omega$ SDI grade)
Velocity of propagation (VoP)	82 % – 84 % (66 % on MIL RG-11A/U)
Shielding effectiveness	> 95 dB (Foil + 95 % braid / Quad)
Operating temperature range	-40 °C to +80 °C
Flame retardance	IEC 60332-1-2 / UL 1666 CMR
Cold-bend rating	-40 °C without cracking
Center conductor diameter	1.63 mm solid (14 AWG, 0.064 in)
Outer jacket diameter	10.30 mm $\pm$ 0.20 mm (0.405 in)
Nominal cable weight	138.0 kg/km (93 lb/1000 ft)
Moisture & underground water	Polybutene gel flooding option
LTE / 5G ingress immunity	100 % bonded foil + braid shield
Aerial messenger option	Figure-8 galvanized steel strand option
Standards	ANSI/SCTE 74 & EN 50117

Nominal capacitance	53.1 pF/m (16.2 pF/ft) Foam PE
Conductor DC resistance	$\leq 8.2 \Omega/\text{km}$ (14 AWG Cu) / $\leq 36 \Omega/\text{km}$ (CCS)
Return loss (5 MHz – 3 GHz)	$\geq 23 \text{ dB}$ (1–1.5 GHz) / $\geq 21 \text{ dB}$ (1.5–3 GHz)
Installation temperature range	-20 °C to +70 °C
LSZH tunnel/stadium option	IEC 60332-3-24 & EN 50575 Cca
Outdoor UV & burial rating	Carbon-black HDPE + flooding gel
Dielectric diameter	7.11 mm $\pm$ 0.15 mm (0.280 in)
Min. bend radius (fixed / pull)	75 mm (7.5×D) / 110 mm (11×D)
Connector compatibility	RG-11 75 Ω BNC, F-type, Type N (75 Ω)
Crush & soil pressure	Closed-cell gas-injected FHDPE core
UV & outdoor weather	UV-stabilised PVC, LSZH, or HDPE
RoHS / REACH status	RoHS 3 compliant

Sizes

4 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Order designation	Construction / Variant	Conductor	Outer $\varnothing \approx$ mm	Metal kg/km	Weight $\approx$ kg/km	Min. bend R fixed mm
Standard RG-11 variants 4 sizes						
☐ RG-11 Broadcast SDI (14 AWG Cu + Foil/95% Cu Braid)	75 Ω Foil + 95% Tinned Cu Braid	14 AWG ($\varnothing$ 1.63 Cu)	10.30	56.0	138.0	62
☐ RG-11 CATV Flooded Burial (14 AWG CCS + Gel + PE)	75 Ω Bonded Foil + Braid (HDPE)	14 AWG ($\varnothing$ 1.63 CCS)	10.30	22.0	118.0	62
☐ RG-11Q Quad-Shield CATV (2× Foil + 2× Braid)	75 Ω Quad Shield (PVC / LSZH)	14 AWG ($\varnothing$ 1.63 CCS)	10.50	28.0	132.0	63
☐ RG-11A/U MIL-C-17 (18 AWG Stranded Cu + Solid PE)	75 Ω 95% Bare Cu Braid (PVC)	18 AWG (7×0.40 TC)	10.30	58.0	146.0	62

– Dimensions and weights are nominal production values subject to manufacturing tolerances per MIL-C-17 / SCTE 74 / SMPTE ST 2082.

Attenuation & RF power handling

7 sizes

Frequency	Nominal attenuation dB / 100 m	Nominal attenuation dB / 100 ft	Max. CW RF power W (@ 40 °C)	Impedance $Z_0 \Omega$	Velocity VoP %
10 MHz (Baseband / HD-CCTV)	1.3	0.40	1,800	75	82.0
100 MHz	4.1	1.25	750	75	82.0
270 MHz (SD-SDI)	6.8	2.07	450	75	82.0
750 MHz (HD-SDI / CATV)	11.8	3.60	260	75	82.0
1000 MHz (1 GHz DOCSIS)	14.1	4.30	210	75	82.0
1500 MHz (3G-SDI / L-Band)	17.7	5.39	165	75	82.0
3000 MHz (3 GHz 6G-SDI)	26.2	7.99	110	75	82.0

– Attenuation values apply at +20 °C ambient into a matched 75 Ω load; CW power ratings assume VSWR 1.0:1 at +40 °C ambient.

Standards and approvals

- ✓ ANSI/SCTE 74 & EN 50117
- ✓ SMPTE ST 292 / ST 424
- ✓ RoHS 3 / CE

Certifications



Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone

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Email

info@tebaoflex.com

Web

tebaoflex.com/cables/rg-11-video-coaxial-cable



Typical values for this cable type, based on MIL-C-17 / SCTE 74 / SMPTE ST 2082. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.