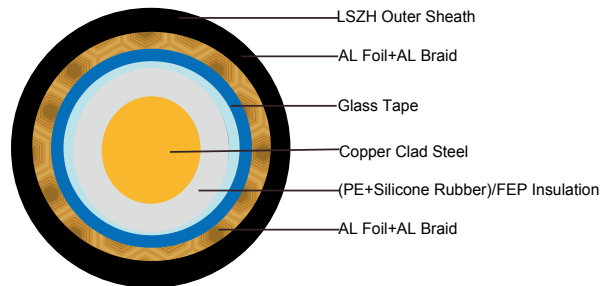
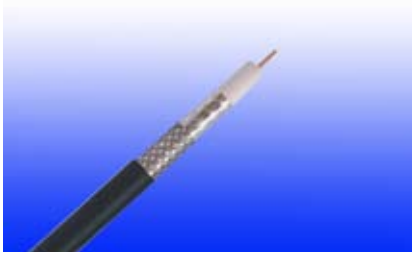


Fire Resistant RG6 QUAD Coaxial Cables

RG6 QUAD FR



APPLICATION

The cables are designed for CCTV, security, smoke detection and evacuation monitoring applications, where continued functionality is required during a fire situation. Due to the zero halogen low smoke construction, this cable is ideal for use in public, commercial and industrial environments.

STANDARDS

Basic design to MIL-C-17

FIRE PERFORMANCE

Circuit Integrity	IEC 60331-23; BS 6387 CWZ; DIN VDE 0472-814(FE180); CEI 20-36/2-1; SS229-1; NBN C 30-004 (cat. F3); NF C32-070-2.3(CR1)
System circuit integrity	DIN 4102-12, E30 depending on lay system
Flame Retardance (Single Vertical Wire Test)	EN 60332-1-2; IEC 60332-1-2; BS EN 60332-1-2; VDE 0482-332-1 ; NBN C 30-004 (cat. F1); NF C32-070-2.1(C2); CEI 20-35/1-2; EN 50265-2-1*; DIN VDE 0482-265-2-1*
Reduced Fire Propagation (Vertically-mounted bundled wires & cable test)	EN 60332-3-24 (cat. C); IEC 60332-3-24; BS EN 60332-3-24; VDE 0482-332-3; NBN C 30-004 (cat. F2); NF C32-070-2.2(C1); CEI 20-22/3-4; EN 50266-2-4*; DIN VDE 0482-266-2-4
Halogen Free	IEC 60754-1; EN 50267-2-1; DIN VDE 0482-267-2-1; CEI 20-37/2-1 ; BS 6425-1*
No Corrosive Gas Emission	IEC 60754-2; EN 50267-2-2; DIN VDE 0482-267-2-2; CEI 20-37/2-2 ; BS 6425-2*
Minimum Smoke Emission	IEC 61034-1&2; EN 61034 -1&2; DIN VDE 0482-1034-1&2; CEI 20-37/3-1&2; EN 50268-1&2*; BS 7622-1&2*
No Toxic gases	NES 02-713; NF C 20-454

Note: Asterisk * denotes superseded standard.



CABLE CONSTRUCTION

Conductors: Copper clad steel, solid according to IEC(EN) 60228 class 1.

Insulation: Foamed PE wrapped with fire resistant silicone rubber compound type EI2 as per BS 7655-1.1 or fluoropolymer(FEP) compound.

Binder: Glass tape

Overall Screen:

Screen1: Al-maylar Tape $\geq 25\%$

Screen2: Aluminium Braid

Screen3: Al-maylar Tape $\geq 25\%$

Screen4: Aluminium Braid

Outer Sheath: Thermoplastic LSZH compound type LTS3 as per BS 7655-6.1 (Thermosetting LSZH compound type SW2-SW4 as per BS 7655-2.6 can be offered.)

PHYSICAL AND THERMAL PROPERTIES

Temperature range during operation (fixed state): $-30^{\circ}\text{C} - +70^{\circ}\text{C}$

Temperature range during installation (mobile state): $-5^{\circ}\text{C} - +60^{\circ}\text{C}$

Minimum bending radius: 8 x Overall Diameter

ELECTRICAL PROPERTIES

Impedance	75 \pm 5 Ω
Capacitance	54 nF/km
Velocity ratio(%)	82
Insulation resistance	>5000 Mohm.Km
Shield coverage	$\geq 60\%$
Max.conductor resistance	24.1 Ω /km

ATTENUATION

Frequency(MHz)	Attenuation (dB/100 m)	Attenuation (dB/100ft)
50	4.8	1.5
100	6.7	2.0
200	9.3	2.8
500	15.0	4.6
600	16.9	5.1
800	19.4	5.9
1000	21.6	6.6
1350	24.2	7.4
1750	28.0	8.4
2150	31.5	9.6

2400	32.8	10.0
3000	37.9	11.5

RETURN LOSS

Frequency(MHz)	Return Loss (dB)
30-300	>28dB
300-600	>24dB
600-900	>22dB

CONSTRUCTION PARAMETERS

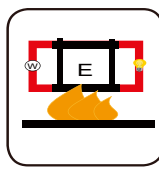
Cable Code	Conductor Diameter	Nominal Insulation Diameter	Nominal Screen2 No.x Diameter	Nominal Screen4 No.x Diameter	Nominal Overall Diameter	Approx. Weight
	mm	mm	No. x mm	No. x mm	mm	kg/km
RG6 QUAD FR	1.02	4.60 ± 0.20	80 x 0.12	64 x 0.12	7.55 ± 0.20	92.4



Rated Voltage



Standard



Circuit Integrity
IEC 60331/BS 6387
NF C32-070-2.3(CR1)



Reduced Fire Propagation
NF C32-070-2.2(C1)
IEC60332-3-24/EN50266-2-4



Flame Retardancy
NF C32-070-2.1(C2)
IEC60332-1-2/EN50265-2-1



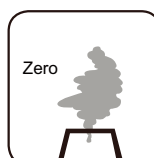
Low Toxicity
NES 02-713/NF C 20-454



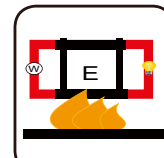
Low Corrosivity
IEC60754-2
EN50267-2-2/3
NF C 32-074



Low Smoke Emission
IEC 61034-1&2
EN 50268-1&2/NF C32-073



Halogen Free
IEC60754-1
EN50267-2-1



Functional Integrity
DIN 4102-12