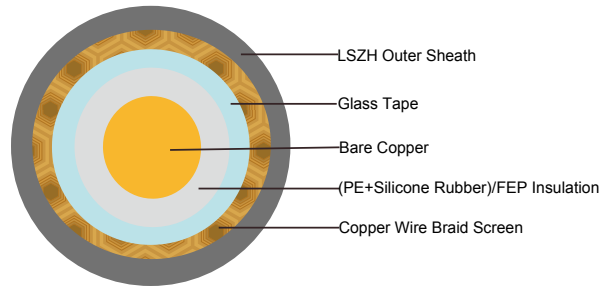


## Fire Resistant RG59 B/U Coaxial Cables

RG59 B/U 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Note: Asterisk \* denotes superseded standard.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:** 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:** Plain copper wire 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°C - +70°C

**Temperature range during installation (mobile state):** -5°C - +60°C

**Minimum bending radius:** 8 x Overall Diameter

### ELECTRICAL PROPERTIES

Impedance	75±5Ω
Capacitance	67 nF/km
Velocity ratio(%)	66
Insulation resistance	>2000 Mohm.Km
Shield coverage	95%
DC resistance	
Inner conductor	158 Ω/km
Outer conductor	9.0 Ω/km

### ATTENUATION

Frequency(MHz)	Attenuation (dB/100 m)	Attenuation (dB/100ft)
50	7.4	2.26
100	10.7	3.26
200	15.7	4.79
400	22.7	6.92
500	25.7	7.84
600	28.7	8.75
860	34.8	10.61
1000	38.0	11.59

### RETURN LOSS

Frequency(MHz)	Return Loss (dB)
30-300 MHz	>31dB
300-600 MHz	>28dB
600-900 MHz	>24dB

## CONSTRUCTION PARAMETERS

Cable Code	Conductor Diameter	Nominal Insulation Diameter	Nominal Screen No.x Diameter	Nominal Overall Diameter	Approx. Weight
	mm	mm	No. x mm	mm	kg/km
RG59 B/U FR	0.58 ± 0.03	3.70 ± 0.10 m	120 x 0.15	6.20 ± 0.10	60.3



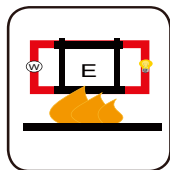
300/500V

Rated Voltage



MIL-C-17

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



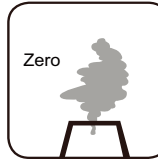
Low Toxicity  
NES 02-713/NF C 20-454



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

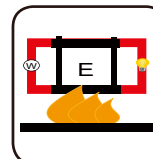


Low Smoke Emission  
IEC 61034-1&2  
EN 50268-1&2/NF C32-073



Zero

Halogen Free  
IEC60754-1  
EN50267-2-1



Functional Integrity  
DIN 4102-12