

Fire Detection and Alarm System Cables

Two Core, Overall Screen, FPLR Type

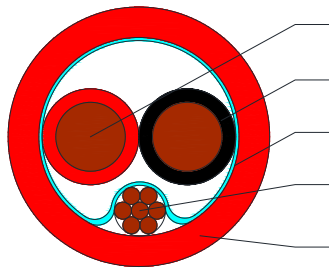


C4167, C4168, C4169, C4170, C4171

Applications

Screened two core cable suitable for Fire Detection and Alarm Systems.

Cross Section Drawing



Conductor
Insulation
Al/PET Tape
Drain Wire
Sheath



Design

Unit	Properties
Conductor	2 x Bare Copper wire
Insulation	Polyvinyl Chloride Core 1: Black Core 2: Red
Screen	Aluminium/Polyester 100% Coverage
Drain Wire	22 AWG (7 x 30) Tinned Copper wire
Sheath Material	Flame-Retardant Polyvinyl Chloride Colour: Red
Standard Put Up Length	305 metres

*Other Colors, Put Up Lengths and structures can be manufactured upon request, please contact your local B3 International sales representative.

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Physical Characteristics

Part Number	C4167	C4168	C4169	C4170	C4171
No of Cores x Conductor size (mm ²)	2 x 0.75	2 x 1.0	2 x 1.5	2 x 2.5	2 x 4.0
Nom. Diameter Conductor (mm)	1.0	1.13	1.39	1.80	7 x 0.85
Nom. Radial Thickness Insulation (mm)	0.25				
Nom. Diameter Insulation (mm)	1.50	1.63	1.90	2.30	3.05
Nom. Diameter Drain Wire (mm)	0.75				
Nom. Radial Thickness Sheath (mm)	0.40				
Nom. Overall Diameter (mm)	3.9	4.2	4.7	5.5	7.0
Operating Temperature (°C)	-40 to +105				
Max. Recommended Pulling Tension (N)	200	330	550	870	1200
Min. Bend Radius (install) (mm)	39	42	47	55	70
Nominal Cable Weight (kg/km)	30.1	34.8	45.6	66.5	98.7
Fire Retardancy	FPLR	FPLR	FPLR	FPLR	FPLR

Electrical Characteristics at 20°C

Part Number	C4167	C4168	C4169	C4170	C4171
No of Cores x Conductor size (mm ²)	2 x 0.75	2 x 1.0	2 x 1.5	2 x 2.5	2 x 4.0
Max. DC Resistance Conductor (Ω /km)	24.5	18.1	12.1	7.41	4.61
Max. DC Resistance Screen (Ω /km)	52.7				
Capacitance conductor to conductor (pF/m)	190	190	190	190	190
Capacitance cond. To other cond.+screen (pF/m)	395	395	395	395	395
Nominal Inductance (μ H/m)	0.3	0.5	0.6	0.6	0.6
Max. Recommended Current at 25°C(Amps)	5.3	11	18	24	32
Max. Operating Voltage (Vrms)	300				

Reference Standards

UL 1666 – UL1424 FPLR

RoHS directives