

# Fire Detection and Alarm System Cables

## Stranded conductor, Four Core, Overall Screen, FPLR Type

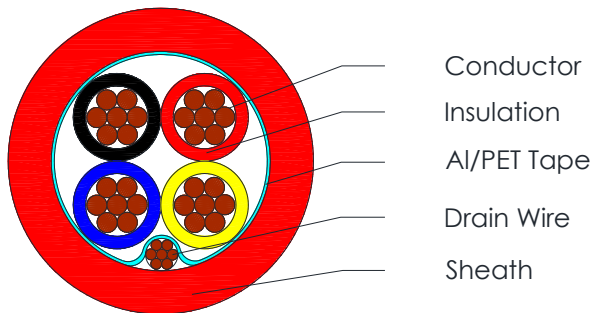


C4158, C4159, C4160, C4161

### Applications

Screened four cores cable suitable for Fire Detection and Alarm Systems.

### Cross Section Drawing



### Design

Unit	Properties
Conductor	4 x Stranded Bare Copper wire
Insulation	Polyvinyl Chloride Core 1: Black Core 2: Red Core 3: Yellow Core 4: Blue
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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**C4158, C4159, C4160, C4161**

### Physical Characteristics

Part Number	C4158	C4159	C4160	C4161
No of Cores x AWG Gauge	4 x 18AWG	4 x 16AWG	4 x 14AWG	4 x 12AWG
Construction of Conductor	7 x 26AWG	19 x 29AWG	19 x 27AWG	19 x 25AWG
Nom. Diameter Conductor (mm)	1.16	1.40	1.80	2.33
Nom. Radial Thickness Insulation (mm)	0.4	0.4	0.6	0.6
Nom. Diameter Drain Wire (mm)	0.75			
Nom. Diameter Insulation (mm)	2.05	2.20	3.00	3.50
Nom. Radial Thickness Sheath (mm)	0.9	1.0	1.1	1.2
Nom. Overall Diameter (mm)	6.8	7.4	9.6	10.9
Operating Temperature (°C)	-40 to +105			
Max. Recommended Pulling Tension (N)	440	694	877	1102
Min. Bend Radius (install) (mm)	68	74	96	109
Nominal Cable Weight (kg/km)	71.4	96.7	143.8	199.4
Fire Retardancy	FPLR	FPLR	FPLR	FPLR

### Electrical Characteristics at 20°C

Part Number	C4158	C4159	C4160	C4161
No of Cores x AWG Gauge	4 x 18AWG	4 x 16AWG	4 x 14AWG	4 x 12AWG
Max. DC Resistance Conductor ( $\Omega$ /km)	22.7	15.47	9.36	5.61
Max. DC Resistance Screen ( $\Omega$ /km)	52.7			
Capacitance conductor to conductor (pF/m)	141	174	145	190
Capacitance cond. To other cond.+screen (pF/m)	260	322	309	395
Nominal Inductance ( $\mu$ H/m)	0.56	0.56	0.6	0.6
Max. Recommended Current at 25°C(Amps)	3.2	11	18	24
Max. Operating Voltage (Vrms)	300			

### Reference Standards

UL 1666 – UL1424 FPLR

RoHS directives