

Fire Resistant Cables

2 to 4 cores, Overall Screen, LSZH/HFFR Sheath

BS6387 CWZ



C5459, C5460, C5461, C5462, C5463, C5464, C5465

Applications

Screened Fire Resistant cable for Building and Industrial Management Systems.

Cross Section Drawing



Design

Unit	Properties
Conductor	Solid Bare Copper wire
Insulation	Ceramifiable Silicon Rubber 2 Cores: Brown + Blue 3 Cores: Brown + Black + Grey 4 Cores: Blue + Brown + Black + Grey
Screen	Al/PET Tape (metal surface on the outer part)
Drain Wire	Solid Tinned Copper wire
Wrapping Tape	PET tape
Outer Sheath	Halogen Free Flame-Retardant (LSZH/HFFR) Standard Colour: Red
Standard Put Up Length	305 and 500 metres

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

Fire Resistant Cables

2 to 4 cores, Overall Screen, LSZH/HFFR Sheath

BS6387 CWZ



C5459, C5460, C5461, C5462, C5463, C5464, C5465

Physical Characteristics

Part Number	C5459	C5460	C5461	C5462	C5463	C5464	C5465
No of cores x cross section in sqmm (mm ²)	2 x 1.0	2 x 1.5	3 x 1.5	4 x 1.5	2 x 2.5	3 x 2.5	4 x 2.5
Nom. Cross Section Drain Wire (mm ²)	1.0	1.5	1.5	1.5	2.5	2.5	2.5
Nom. Overall Diameter (mm)	7.2	8.4	8.9	9.4	9.7	10.5	11.2
Cable weight (kg/km)	81.0	101.7	124.6	151.0	145.8	182.3	223.0
Bending Radius	10 x OD						
Operating Temperature (°C)	-20 to +90						
Max. Conductor Temperature (°C)	180						
Max. Short-circuit Temperature (°C)	250						
Fire Resistance to BS6387, Cat. C	Exposed to fire at 950°C for 3 hours						
Fire Resistance to BS6387, Cat. W	Exposed to fire at 650°C for 15 minutes, then exposed to fire at 650°C with water for 15 minutes						
Fire Resistance to BS6387, Cat. Z	Exposed to fire at 950°C for 15 minutes, then exposed to fire at 650°C with mechanical shock for 15 minutes						
Fire Resistance to BS 8434-2+A2:2009	Exposed to Fire at 930°C for 120min, 60min Flame & Impact followed by 60 min flame, impact & Waterspray.						
Fire Resistance to IEC 60331-21	Exposed to fire at 750°C for 90 minutes						
Flame Retardancy	IEC 60332-3-24						

Electrical Characteristics at 20°C

Part Number	C5459	C5460	C5461	C5462	C5463	C5464	C5465
Max. DC Resistance Conductor (Ω/km)	18.1	12.1	12.1	12.1	7.41	7.41	7.41
Operating Voltage (Vrms)	300/500						
Max. Voltage (Vrms)	550						
Test Voltage (Vrms)	2000						

Reference Standards

EN 50267-2-1,	IEC 61034-1&-2
BS 7655.6.1	EN 50200
IEC 60332-1-2	BS7629-1/2015
IEC 60228	BS 7671
BS 6387 Cat. CWZ	RoHS Directives
IEC 60332-3-24	BS 8434-2 + A2:2009
IEC 60331-1-21	IEC 60754