

**Fire Resistant Cables-FireElite Enhanced**  
**Three core, Overall Screen, SWA, LSZH/HFFR Sheath**  
**BS6387 CWZ, EN 50200 PH I 20+Annex E,**  
**BS7629-1, BS8434-2**

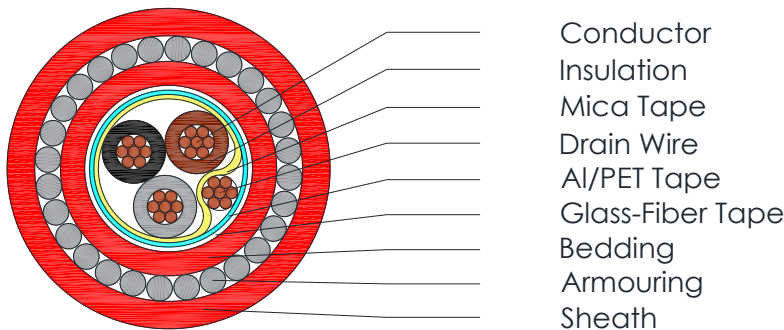


C16968, C16969, C16970, C16971, C16972

**Applications**

Screened three cores Fire Resistant cable for Building and Industrial Management Systems

**Cross Section Drawing**



**Design**

Unit	Properties
Conductor	Stranded Bare Copper wire, Class 2
Insulation	Ceramifiable Silicon Rubber Core 1: Brown Core 2: Black Core 3: Grey
Wrapping Tape	Mica Tape
Drain Wire	Flexible Tinned Copper wire
Screen	Al/PET Tape
Wrapping Tape	Glass-Fiber tape
Bedding	Halogen Free Flame-Retardant (LSZH/HFFR) Standard Colour: Red
Armouring	Galvanized Steel Wire
Sheath Material	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.

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**Physical Characteristics**

Part Number	C16968	C16969	C16970	C16971	C16972
No of cores x cross section (mm <sup>2</sup> )	3 x 0.75	3 x 1.0	3 x 1.5	3 x 2.5	3 x 4.0
Nom. Diameter Conductor (mm)	7 x 0.37	7 x 0.43	7 x 0.52	7 x 0.67	7 x 0.85
Nom. Radial Thickness Insulation (mm)	0.90				
Insulation Diameter (mm)	2.90	3.10	3.36	3.80	4.35
Nom. Cross Section Drain Wire (mm <sup>2</sup> )	0.75	1.0	1.5	2.5	4.0
Nom. Bedding thickness (mm)	1.20				
Nom. Bedding Diameter (mm)	9.7	10.0	10.6	11.6	12.8
Nom. Steel Wire Diameter (mm)	0.90				
Nom. Sheath thickness (mm)	1.0				
Nom. Overall Diameter (mm)	13.5	13.8	14.4	15.4	16.6
Cable weight (kg/km)	352	374	411	480	575
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 & Water spray.				
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	C16968	C16969	C16970	C16971	C16972
Max. DC Resistance Conductor (Ω/km)	24.5	18.1	12.1	7.41	4.61
Operating Voltage (Vrms)	300/500				
Max. Voltage (Vrms)	550				
Test Voltage (Vrms)	2000				

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**BS6387 CWZ, EN 50200 PH120+Annex E,**  
**BS7629-1, BS8434-2**



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**Reference Standards**

EN 50290-2-27	BS 5839-1
BS 7655.6-1	EN 50200 PH120 + Annex E
BS 8519-1	BS 7629-1
IEC 60228/BS6360	BS 7671
BS 8434—1&-2	IEC 61034-1&-2
BS 6387 Cat. CWZ	IEC 60754-1&-2
BS 5266-1	EN 50363-1
IEC 60331-1-21	RoHS Directives
IEC 60332-3-24	