

# Fire Resistant Cables – FirePremium

B3 Cables Italy

Two core, Overall Screen, LSZH/HFFR Sheath BS 6387

CWZ, EN 50200 PH120 + Annex E

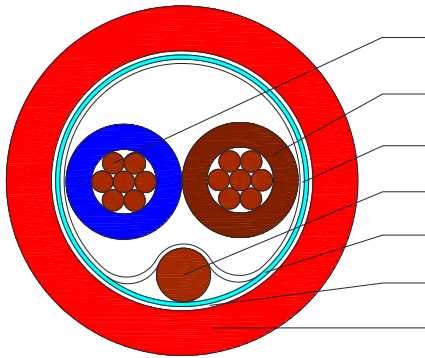


C5021, C5022, C5023, C5024

## Applications

Screened two core Fire Resistant cable for Building and Industrial Management Systems

## Cross Section Drawing



Conductor  
Insulation  
PET Tape  
Drain Wire  
Al/PET Tape  
PET Tape  
Sheath



Appendix to Cert/LPCB ref. No. 1809a-/01

## Design

Unit	Properties
Conductor	2 x Flexible Bare Copper wire
Insulation	Ceramifiable Silicon Rubber Core 1: Blue Core 2: Brown
Wrapping tape	PET tape
Drain Wire	Solid Tinned Copper wire
Screen	Aluminium/Polyester tape
Wrapping tape	PET tape
Sheath Material	Halogen Free Flame-Retardant (HFFR) Standard Colour: Red (-02) White (-09)
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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C5021, C5022, C5023, C5024

#### Physical Characteristics

Part Number	C5021	C5022	C5023*	C5024*
No of cores x cross section in sqmm (mm <sup>2</sup> )	2 x 0.75	2 x 1.0	2 x 1.5	2 x 2.5
Conductor Strand (mm)	7 x 0.37	7 x 0.43	7 x 0.52	7 x 0.67
Nom. Radial Thickness Insulation (mm)	0.7	0.6	0.7	0.8
Nom. Cross Section Drain Wire (mm <sup>2</sup> )	0.50	0.50	0.50	0.50
Drain Wire Stranding	1x0.8	1x0.8	1x0.8	1x0.8
Screen Coverage (%)	115			
Nom. Overall Diameter (mm)	7.5	8.0	8.5	10.5
Cable weight (kg/km)	67	75	100	143
Operating Temperature (°C)	-40 to +90 (3hrs 950°C)			
Installation Temperature (°C)	-15 to +90			
Minimum bending radius (mm)	75	78	87	99
Max. recommended pulling tension (N)	205	265	405	670
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 950°C with mechanical shock for 15 minutes			
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	C5021	C5022	C5023*	C5024*
Max. DC Resistance Conductor (Ω/km)	24.5	18.1	12.1	7.41
Min. Insulation Resistance (MΩ*km)	200			
Max. recommended current at 25°C (Amps)	12	18	21	30
Max. Operating Voltage (Vrms)	300/500			

#### Reference Standards

BS EN 50363-1	*EN 50200 PH120, *EN 50200 Annex E
EN 50290-2-27	*IEC 60754-1
IEC 60228/BS6360	IEC 60754-2
IEC 60332-3-24	*IEC 61034-2
IEC 61034-1	BS 7671
IEC 60331-21 FE180	BS 7655.6-1
*BS 6387 CWZ	RoHS Directives

\*Standards and constructions under LPCB certification