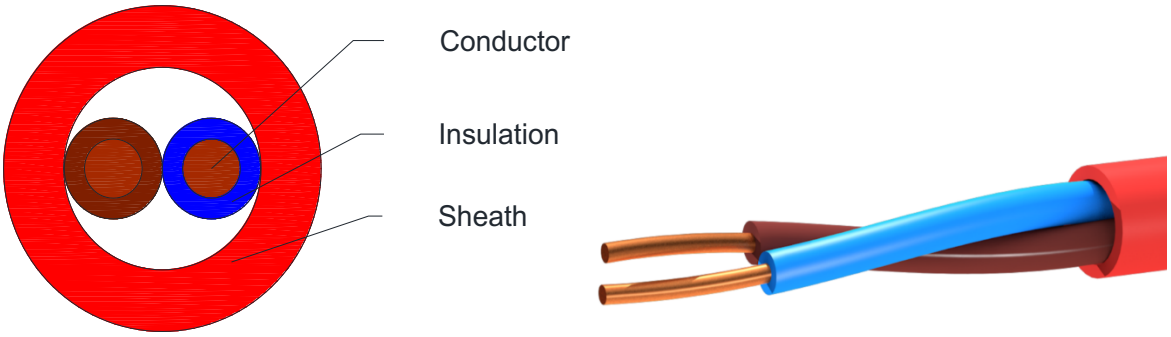
Fire Resistant Cables - Fireplus Two core, Unscreened, LSZH/HFFR Sheath BS 6387 CWZ, EN 50200 PH120,

C91139, C91140, C91141, C91142, C91143, C93050

Applications

Unscreened two core Fire Resistant cable for Building and Industrial Management Systems as well as alarm, security system, Audio/Speakers and other applications where circuit integrity is of need.

Cross Section Drawing



Design

Unit	Properties
Conductor	2 x Solid or Flexible Bare Copper wire
Insulation	Ceramifiable Silicon Rubber Core 1: Blue Core 2: Brown
Sheath Material	Halogen Free Flame-Retardant (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	C91139	C91140	C91141*	C91142*	C91143*	C93050
No of cores x cross section (mm2)	2 x 0.75	2 x 1.0	2 x 1.5	2 x 2.5	2 x 4.0	2 x 6.0
Nom. Diameter Conductor (mm)	1 x 0.98	1 x 1.13	1 x 1.39	1 x 1.78	7 x 0.85 =2.55	7 x 1.04 =3.12
Nom. Radial Thickness Insulation (mm)	0.7	0.7	0.7	0.8	0.9	1.0
Twist per meter	10					
Nom. Overall Diameter (mm)	6.9	7.2	8.0	9.2	11.7	12.6
Cable weight (kg/km)	42	49	68	102	173	259
Operating Temperature (°C)	-20 to +90					
Installation Temperature (°C)	-15 to +90					
Minimum bending radius (mm)	69	72	80	92	117	126
Max. recommended pulling tension (N)	205	265	405	670	1250	1875
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	C91139	C91140	C91141*	C91142*	C91143*	C93050
Max. DC Resistance Conductor (Ω/km)	24.5	18.1	12.1	7.41	4.61	3.08
Nom. Capacitance conductor to conductor (pF/m)	43	45	47	48	52	52
Min. Insulation Resistance (MΩ*km)	200					
Max. recommended current at 25°c (Amps)	12	18	21	30	40	48
Max. Operating Voltage (Vrms)	300/500					

Reference Standards

BS EN 50363-1	EN 50200 PH120*
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