

BT Firepro-Tec® – Fire Resistant Cables

Three core BT Firepro-Tec ENH (BS5839 – PH120 + BS 8434-2)

Manufactured in Accordance with BS 7629-1

BT Cables Part No: BTC1894 – BTC1895 – BTC1896 – C1897

Applications

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

Sector

BT Firepro-TEC®
Standard Fire Alarm Cables

Design

1. Conductor
3 x Plain Annealed Copper wire

2. Insulation
Silicon Rubber blend
Core 1: Brown,
Core 2: Black
Core 3: Grey

3. Cable Core lay-up
Two twisted wires 10 twists per metre

4. Drain Wire

Tinned Copper wire

5. Screen

Copper/Polyester 115% Coverage

6. Sheath Material

Halogen Free Flame-Retardant (HFFR)

Standard Put Up Length

100 and 500 metres



Physical Characteristics

BTCL Part Number	Unit	BTC1895	BTC1896	BTC1897	BTC1898
No of cores x cross section in sq. mm	mm ²	3 x 1.0	3 x 1.5	3 x 2.5	3 x 4.0
Nom. Diameter Conductor	mm	1 x 1.13	1 x 1.4	1 x 1.8	7 x 0.85 = 2.55
Nom. Radial Thickness Insulation	mm	0.7	0.7	0.8	0.9
Nom. Cross Section CPC	mm ²	1.0	1.5	2.5	4.0
Nom. Overall Diameter	mm	8.9	9.9	10.8	13.1
Cable weight	kg/km	98	132	194	280

Electrical Characteristics (at 20°C)

BTCL Part Number	Unit	BTC1895	BTC1896	BTC1897	BTC1898
No of cores x cross section in sq. mm	mm ²	3 x 1.0	3 x 1.5	3 x 2.5	3 x 4.0
Max. DC Resistance Conductor	Ω/km	18.1	12.1	7.41	4.61
Mutual Capacitance	pF/m	70	70	85	111
Min. Insulation Resistance	MΩ*km	200	200	200	200
Max. recommended current at 25°C	Amps	15	19.5	27	36
Max. Operating Voltage	Vrms	300/500	300/500	300/500	300/500

Miscellaneous

BTCL Part Number	Unit	BTC1895	BTC1896	BTC1897	BTC1898
No of cores x cross section in sq. mm	mm ²	3 x 1.0	3 x 1.5	3 x 2.5	3 x 4.0
Operating Temperature	°C	-40 to +90			
Installation Temperature	°C	0 to 70			
Minimum bending radius	mm	53.4	59.4	64.8	78.6
Max. recommended pulling tension	N	265	405	670	1250
Fire Resistance to BSEN 50200 (PH30, PH60 & PH120)		Exposed to fire at 834°C and mechanical shock for 30, 60 or 120 minutes			
Fire Resistance to BS8434-2		Exposed to fire at 934°C and mechanical shock for 60 minutes, then exposed to fire at 934°C, mechanical shock and water spray for 60 minutes.			
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			
Fire Retardancy		IEC 60332-1			
Other relevant standards		BS EN 50267-2-1, BS EN 61034-2, BS 6234, BS 6360, BS 7655.1.1 and BS7655.6.1			