

BS7629 Standard Fire Resistant Cable



Application

Standard fire resistant cable for use primarily in fire detection, fire alarm, voice alarm, and emergency lighting circuits. These cables are designed to continue to operate for a period of time in a fire situation. 'Standard' fire resistance is recommended for general use.

Standards

BS 7629-1, BS 5839-1, BS EN 50200-PH30-PH60-PH90-PH120

BS 6387, BS 5266-1, BS 8519, BS EN 60228

Low Smoke Zero Halogen to IEC/EN 60754-1/2, IEC/EN 61034-1/2

Characteristics

Voltage Rating U_o/U
300/500V

Temperature Rating
-40°C to +90°C

Minimum Bending Radius
6 x overall diameter



Construction

Conductor

Class 1 Solid copper
Class 2 Stranded copper

Insulation

XLPE (Cross-Linked Polyethylene)

Outer Sheath

LSZH (Low-smoke zero halogen)

Sheath Colour

Red



Dimensions

Class 1 Solid Plain Conductor

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	EARTH WIRE CONSTRUCTION n° /mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
2	1.5	1/1.38	8	95
2	2.5	1/1.75	9.4	130
2	4	7/0.85	11.5	200
3	1.5	1/1.38	8.5	115
3	2.5	1/1.75	10	170
3	4	7/0.85	12.2	260
4	1.5	1/1.38	9.4	140
4	2.5	1/1.75	11	210
4	4	7/0.85	13.5	330

Electrical Characteristics

NOMINAL CROSS SECTIONAL AREA mm ²	CONDUCTOR RESISTANCE AT 20°C Ω/km	INSULATION RESISTANCE AT 20°C MΩXkm	NOMINAL CAPACITANCE pF/m	
			Core / Core	Core / Screen
1	18.1	300	100	170
1.5	12.1	300	110	190
2.5	7.41	300	130	220
4	4.61	300	160	270

Current Carrying Capacity

Clipped Direct

NOMINAL CROSS SECTIONAL AREA mm ²	CURRENT RATING Amps	
	2 Core	3 and 4 Core
1	19	17
1.5	24	22
2.5	33	30
4	45	40

In Conduit or in Cable Tray

NOMINAL CROSS SECTIONAL AREA mm ²	CURRENT RATING Amps	
	2 Core	3 and 4 Core
1	17	15
1.5	22	19.5
2.5	30	26
4	40	35

Voltage Drop

Clipped Direct

NOMINAL CROSS SECTIONAL AREA mm ²	VOLTAGE DROP mV/A/m	
	2 Core	3 and 4 Core
1	45	39
1.5	30	26
2.5	18	15
4	11	10

In Conduit or in Cable Tray

NOMINAL CROSS SECTIONAL AREA mm ²	VOLTAGE DROP mV/A/m	
	2 Core	3 and 4 Core
1	45	39
1.5	30	26
2.5	18	15
4	11	10

De-Rating Factors

AMBIENT TEMPERATURE	25°C	30°C	35°C	40°C	45°C	50°C	55°C	60°C	65°C
DE-RATING FACTOR	1.04	1.00	0.95	0.90	0.85	0.80	0.74	0.67	0.60

The information contained within this datasheet is for guidance only and is subject to change without notice or liability. All the information is provided in good faith and is believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.