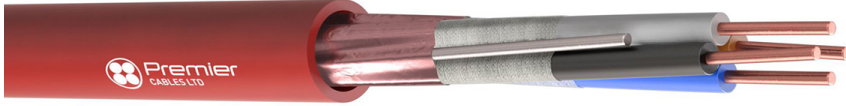


BS7629 Enhanced Fire Resistant Cable



Application

Enhanced fire Resistant cables 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. 'Enhanced grade' fire resistance is recommended for systems, in particular building types, in which cables might need to operate correctly during a fire for periods in excess of those normally required for single phase evacuation of a building.

Standards

BS 7629-1, BS 5839-1, IEC/EN 60754-1/2, IEC/EN 61034-2, EN 50200-PH30-PH60-PH90-PH120, BS 6387, BS 5266-1, BS 8519 Cat 3, BS 8434-2, EN 60228

Characteristics

Voltage Rating U_o/U
300/500V

Temperature Rating
-40°C to +90°C

Minimum Bending Radius
6 x overall diameter



Construction

Conductor

1.5mm² - 2.5mm² - class 1 solid conductor
4mm² - class 2 stranded conductor

Insulation

Mica/glass fire resistant tape covered by high performance fire resistant silicone rubber

Overall Screen

Al/PET (Aluminium/Polyester Tape)

Circuit Protective Conductor

Tinned copper

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	1/1.18	8.8	105
2	2.5	1/1.75	10.2	150
2	4	7/0.85	12.2	220
3	1.5	1/1.38	9.3	130
3	2.5	1/1.75	10.8	190
3	4	7/0.85	13	280
4	1.5	1/1.38	10.3	165
4	2.5	1/1.38	12	240
4	4	7/0.85	14.4	350

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	95	160
1.5	12.1	300	110	170
2.5	7.41	300	120	200
4	4.61	300	150	250

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.