

# TECHNICAL DATA SHEET

**PRO-ELEC**

## Enhanced Fire Resistant Cable BS7629-1

**RoHS  
Compliant**

Construction	
<b>Conductor</b>	1.5mm <sup>2</sup> - 2.5mm <sup>2</sup> : Class 1 solid conductor 4mm <sup>2</sup> : Class 2 stranded conductor
<b>Insulation</b>	Mica/Glass fire resistant tape covered by high performance fire resistant silicone rubber
<b>Overall Screen</b>	Al/PET (Aluminium/Polyester Tape)
<b>Circuit Protective Conductor</b>	Tinned copper
<b>Outer Sheath</b>	LSZH (Low Smoke Zero Halogen)
<b>Core Identification</b>	2 cores: Blue, Brown + Bare Earth 3 cores: Brown, Black, Grey + Bare Earth 4 cores: Blue, Brown, Black, Grey
<b>Sheath Colour</b>	Red, White

Specification	
<b>Voltage Rating Uo/U</b>	300/500V
<b>Temperature Rating</b>	-40°C to +90°C
<b>Minimum Bend Radius</b>	6 x overall diameter



**Important Notice** : This data sheet and its contents (the "Information") belong to pro-ELEC. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but pro-ELEC assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where pro-ELEC was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict pro-ELEC's liability for death or personal injury resulting from its negligence.

**PRO-ELEC**

# TECHNICAL DATA SHEET

## DIMENSIONS

PART NO	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	EARTH WIRE CONSTRUCTION n° /mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
CB20999 CB21000	2	1.5	1/1.18	8.8	105
CB21003 CB21004	2	2.5	1/1.75	10.2	150
CB21007 CB21008	3	1.5	1/1.38	9.3	130
CB21011 CB21012	4	1.5	1/1.38	10.3	165

## ELECTRICAL CHARACTERISTICS

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

# TECHNICAL DATA SHEET

**PRO-ELEC**

## VOLTAGE DROP

### Clipped Direct

NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	CURRENT RATING Amps	
	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 <sup>2</sup>	CURRENT RATING Amps	
	2 Core	3 and 4 Core
1	45	39
1.5	30	26
2.5	18	15
4	11	10

## DERATING 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

**PRO-ELEC**