

## ENHANCED FIRE ALARM AND SECURITY CABLES



### APPLICATION

Enhanced fire alarm and security cable.  
Soft Skin enhanced Fire Resistant Cables for general use in fire detection, fire alarm, voice alarm, and emergency lighting circuits. Enhanced cables are designed to carry on working for 120 minutes in a fire.

Higher fire resistance is recommended for systems in which cables might need to operate correctly during a fire for multiple phase evacuation such as tower blocks and multi storey buildings.

### CONSTRUCTION

**Conductor:**

Class 1 solid conductor according to BS EN 60228

**Insulation:**

Fire resistant MICA tape or fire resistant silicone rubber

**Overall Screen:**

AL/PET (Aluminium/Polyester Tape), Circuit Protective Conductor, Tinned copper

**Outer Sheath:**

LSZH (Low Smoke Zero Halogen)

### CABLE STANDARDS

BS 5839-1:2017 Enhanced 120

BS 8519:2010 Category 2

BS 7629-1:2015 Enhanced 120

BS 8434-2:2003 +A2:2009 120 minutes (Fire, Mechanical Shock & Water 120 mins @930°C (water final 60 mins))

BS EN 50200:2015 PH30, PH60, PH120 (Fire, Mechanical Shock & Water 120 mins @930°C (water final 60 mins, MS every 5 minutes))

BS 6387:2013 CWZ

BS EN 60754-1:2014 Halogen Emission Standard

BE EN 61034-2:2005 + A1:2013 Low Smoke Standard

### CHARACTERISTICS

**Voltage Rating:** 300/500 Volts

**Temperature Limits:** -40°C to +90°C

**Minimum Bending Radius:** As per cable manufacturer datasheet

**Outer Sheath comes in a choice of:**

Red  White

**Core Identification:**

**2 Core:**  Brown  Blue

**3 Core:**  Brown  Black  Grey

**4 Core:**  Brown  Black  Grey  Blue

**7 Core and above:**  Black with white numbers

Should not be installed at temperatures below 0°C or above 40°C.

## ENHANCED FIRE ALARM AND SECURITY CABLES - DIMENSIONS

CCC CODE	CONDUCTOR SIZE (MM <sup>2</sup> )	STRANDING (MM)	NUMBER OF CORES	WEIGHT (KG/KM)	OUTSIDE DIAMETER (MM)	GLAND SIZE (MM)	1 HOLE CLIP REF	GLAND REF
ENH2X1/5	1.5	1/1.38	2+E	110	8.0	20	32	251
ENH3X1/5	1.5	1/1.38	3+E	130	8.4	20	34	251
ENH4X1/5	1.5	1/1.38	4+E	160	9.5	20	37	251
ENH2X2/5	2.5	1/1.78	2+E	160	9.0	20	34	252
ENH3X2/5	2.5	1/1.78	3+E	200	10.5	20	40	252
ENH4X2/5	2.5	1/1.78	4+E	250	11.7	20	43	252
ENH2X4	4.0	7/0.85	2+E	260	11.3	20	43	252
ENH3X4	4.0	7/0.85	3+E	315	12.1	25	47	254
ENH4X4	4.0	7/0.85	4+E	380	13.3	25	51	254

E = BARE EARTH CONDUCTOR

## ENHANCED FIRE ALARM & SECURITY CABLES – CARRYING CAPACITY (AMPERES)

NOMINAL CROSS SECTIONAL AREA (MM <sup>2</sup> )	CLIPPED DIRECT		IN CONDUIT OR CABLE TRAY	
	2 CORE	3 & 4 CORE	2 CORE	3 & 4 CORE
1	19	17	17	15
1.5	24	22	22	19.5
2.5	33	30	30	26
4.0	45	40	40	35

## ENHANCED FIRE ALARM & SECURITY CABLES – VOLTAGE DROP

NOMINAL CROSS SECTIONAL AREA (MM <sup>2</sup> )	CLIPPED DIRECT		IN CONDUIT OR CABLE TRAY	
	2 CORE	3 & 4 CORE	2 CORE	3 & 4 CORE
1	45	39	45	39
1.5	30	26	30	26
2.5	18	15	18	15
4.0	11	10	11	10

THE ABOVE TABLE IS IN ACCORDANCE WITH 18TH EDITION OF IET WIRING REGULATIONS

THE INFORMATION CONTAINED WITHIN THIS DATASHEET IS FOR GUIDANCE ONLY AND IS SUBJECT TO CHANGE WITHOUT NOTICE OR LIABILITY. WE BELIEVE THE INFORMATION IS CORRECT AT THE TIME OF PUBLICATION. PLEASE NOTE WHEN SELECTING CABLE ACCESSORIES THAT ACTUAL CABLE DIMENSIONS MAY VARY DUE TO MANUFACTURING TOLERANCES.