

Enhanced Fire Alarm & Security Cable BS5839, BS7629 - 1.5mm² to 4mm²



Description

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.

The higher fire resistance this cable provides 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.

Key Features



Voltage Rating
300/500 Volts



Minimum Bending Radius
6 x overall diameter



Flame Retardancy
BS5839



Temperature Limits
Temperature Range: -40 to 90°C

Core Colours

- 2 core - Brown Blue
- 3 core - Brown Black Grey
- 4 core - Brown Black Grey Blue
- 7 core and above - Black with White numbers
- Outer sheath comes in a choice of: Red White

Standards

- BS 5839-1:2017 Enhanced 120
- BS8519:2020 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/IEC 61034-2, BS EN IEC 60228, BS6387 Cat CWZ

Construction

- **Conductor:** Up to 2.5mm: Class 1 solid copper, 4mm Class 2 stranded copper
- **Fire Protection:** MICA Glass Fibre Tape
- **Insulation:** Fire resistant silicone rubber
- **Overall Tape Screen:** Aluminium/Polyester Tape (AL/PET) with 0.5mm drain wire
- **Circuit Protective Conductor:** Tinned Copper
- **Outer Sheath:** Low Smoke Zero Halogen (LSZH)

QA Lab

Cleveland Cable Test & Training Lab

Our state-of-the-art cable testing facility ensures that every cable meets the highest standards of quality and compliance through continuous, rigorous testing. Where applicable, cables are independently tested and certified by BASEC to ensure full compliance.



CPR

Cleveland Cable Company is committed to compliance with the Construction Products Regulation (CPR). Where applicable, all cables manufactured after 1st July 2017 have been assessed in accordance with CPR requirements, with full supporting documentation available.



Our Sustainability Commitment

We are committed to the journey to Net Zero as a business partner, an employer and a community member.

By thinking and acting sustainably, we deliver excellent customer service while reducing carbon emissions in collaboration with our customers and suppliers.



ecovadis

Cleveland Cable Company has been independently assessed by EcoVadis, a globally recognised provider of business sustainability ratings. Our score places us among the top 35% of companies evaluated worldwide, reflecting our strong commitment to environmental, social, and ethical performance

ecovadis

Enhanced Fire Alarm & Security Cable BS5839, BS7629 - 1.5mm² to 4mm² - Dimensions

Reference	Conductor Size (mm ²)	No Of Cores	Stranding(mm)	Overall Diameter(mm)	Weight(Kg/Km)	Gland Ref	1 Hole Clip Ref	Gland Size
ENH2X1/5	1.5	2	1/1.38	8	110	251	32	20
ENH3X1/5	1.5	3	1/1.38	8.4	130	251	34	20
ENH4X1/5	1.5	4	1/1.38	9.5	160	251	37	20
ENH2X2/5	2.5	2	1/1.78	9	160	252	34	20
ENH3X2/5	2.5	3	1/1.78	10.5	200	252	40	20
ENH4X2/5	2.5	4	1/1.78	11.7	250	252	43	20
ENH2X4	4	2	7/0.85	11.3	260	252	43	20
ENH3X4	4	3	7/0.85	12.1	315	254	47	25
ENH4X4	4	4	7/0.85	13.3	380	254	51	25

FIRE ALARM & SECURITY CABLE

CURRENT-CARRYING CAPACITY (amperes)

Ambient temperature: 30°C
Conductor operating temperature: 90°C

Conductor cross sectional area	Reference Method A (enclosed in conduit in thermally insulating wall etc.)		Reference Method B (enclosed in conduit on a wall or in trunking etc.)		Reference Method C (clipped direct)		Reference Method E (free air or on a perforated cable tray etc, horizontal or vertical)	
	1 two-core cable*, single-phase AC or DC	1 three- or four-core cable*, three-phase AC	1 two-core cable*, single-phase AC or DC	1 three- or four-core cable*, three-phase AC	1 two-core cable*, single-phase AC or DC	1 three- or four-core cable*, three-phase AC	1 two-core cable*, single-phase AC or DC	1 three- or four-core cable*, three-phase AC
(mm ²)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)
1	14.5	13	17	15	19	17	21	18
1.5	18.5	16.5	22	19.5	24	22	26	23
2.5	25	22	30	26	33	30	36	32
4	33	30	40	35	45	40	49	42

FIRE ALARM & SECURITY CABLE

VOLTAGE DROP (per ampere per metre)

Conductor operating temperature:90°C

Conductor cross sectional area (mm ²)	Two-core cable DC (mV/A/m)	Two-core cable, single-phase AC (mV/A/m)	Three- or four-core cable, three-phase AC (mV/A/m)
1	46	46	40
1.5	31	31	27
2.5	19	19	16
4	12	12	10

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.