



# Flam-Guard 300 Range

## Enhanced Fire Resistant Multi Core Cable

(Complies with BS 7629-1:2015)

Class 1 Solid Copper Conductor or Class 2 Stranded Copper Conductor/ Silicone Rubber Insulation / MICA Fire Barrier Tape / Aluminum Electrostatic Screen/ Tinned Copper Circuit Protective Conductor/ Low Smoke Zero Halogen Sheath

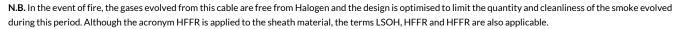
#### **Application**

Enhanced fire-resistant cables are designed for safety systems which need to operate during multiphase evacuations such as tower blocks, multi-story buildings or dense public buildings such as hospitals. Suitable for fire detection and fire alarm systems with 'enhanced' performance conforming to BS 5839-1 Code of Practice. Suitable for emergency lighting systems with 'enhanced' performance conforming to BS 5266-1 Code of Practice.

Manufactured with Low Smoke Zero Halogen (LSZH) insulation, making it suitable for installations in public buildings where, in the event of fire, smoke and acid gas evolution would pose a hazard to public life and equipment.

#### **Cable Description**

Class 1 Solid Copper Conductor to BS EN 60228 for 1.5mm<sup>2</sup>
Class 2 Stranded Copper Conductor to BS EN 60228 for 2.5mm<sup>2</sup> - 4.0mm<sup>2</sup>
Silicone Rubber Insulation Type EI2 to BS EN 50363
MICA (Fire Barrier) Overall Tape
Aluminum Electrostatic Screen
Tinned Copper circuit protective conductor
Low Smoke Zero Halogen Sheath



#### **Insulation Colours**

2 Core - Blue, Brown,

3 Core - Brown, Black, Grey

4 Core - Blue, Brown, Black, Grey

#### **Sheath Colours**

White / Red (Other Colours Available on Request)

## Third party Accreditation



Cables are tested and approved by BASEC (British Approvals Service for Cables)



Cables are tested and approved by LPCB (Loss Prevention Certification Board)





## **Physical Characteristics**

No of Conductors	Nominal Cross- Sectional Area (mm2)	Nominal Radial Thickness Insulation (mm)	Nominal Radial Thickness Sheath (mm)	Approximate Overall Diameter (mm)	Maximum Conductor Resistance at 20°C (ohms/km)	Nominal Weight (kg/km)
2	1.5	0.70	0.90	8.50	12.10	93.00
2	2.5	0.80	1.00	10.50	7.41	135.00
2	4.0	0.80	1.10	12.50	4.61	190.00
3	1.5	0.70	.090	9.50	12.10	130.00
3	2.5	0.80	1.00	11.50	7.41	180.00
3	4.0	0.80	1.10	13.50	4.61	250.00
4	1.5	0.70	1.00	10.50	12.10	150.00
4	2.5	0.80	1.10	12.00	7.41	210.00
4	4.0	0.80	1.20	15.00	4.61	330.00

#### **Mechanical Characteristics**

Characteristics	Unit	Value		
Max Conductor Temperature	°C	70		
Min Operating Temperature	°C	-25		
Min Installation Temperature	°C	0		
Max Installation Temperature	°C	60		
Minimum Bend Radius	Diameter	6D		

## **Electrical Characteristics - General**

Characteristics	Unit	Value	
Voltage Rating	V	300/500	
Current Rating Table	-	4D2	

## **Electrical Characteristics - Current Carrying Capacity**

CONDUCTOR		DD A (ENCLOSED IN Y INSULATING WALL C)	REFERENCE METHOD B (ENCLOSED IN CONDUIT ON A WALL OR IN TRUNKING ETC)		REFERENCE METHOD C (CLIPPED DIRECT		REFERENCE METHOD E (IN FREE AIR OR ON A PERFORATED CABLE TRAY ETC, HORIZONTAL OR VERTICAL)	
CROSS - SECTIONAL AREA	1 TWO CORE CABLE*, SINGLE PHASE AC OR DC	1 THREE CORE CABLE* OR 1 FOUR CORE CABLE, THREE-PHASE AC	1 TWO CORE CABLE*, SINGLE PHASE AC OR DC	1 THREE CORE CABLE* OR 1 FOUR CORE CABLE, THREE-PHASE AC	1 TWO CORE CABLE*, SINGLE PHASE AC OR DC	1 THREE CORE CABLE* OR 1 FOUR CORE CABLE, THREE-PHASE AC	1 TWO CORE CABLE", SINGLE PHASE AC OR DC	1 THREE CORE CABLE* OR 1 FOUR CORE CABLE, THREE- PHASE AC
1	2	3	4	5	6	7	8	9
(mm2)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)
1.5	14	13	16.50	15	19.50	17.50	22	18.50
2.5	18.50	17.50	23	20	27	24	30	25
4	25	23	30	27	36	32	40	34

The above is in accordance with 18th edition of the IET wiring regulations.

### Fire Performance

Test	Test Method	Comment	
Construction Standard	BS 7629-1	Compliant	
Circuit Integrity (PH120) – Flame & Shock 120 mins	BS EN 50200:2015	Compliant	
Circuit Integrity - Flame, Shock & Water 120 mins	BS 8434-2	Compliant	
Circuit Integrity Test	BS 6387 C,W,Z	Compliant	
Single Cable Vertical Burn Test	BS EN 60332-1: 2004	Compliant	
Acid Gas Emission	BS EN 60754-1:2014	Compliant	
Smoke Emission	BS EN 61034-2: 2005	Compliant	

