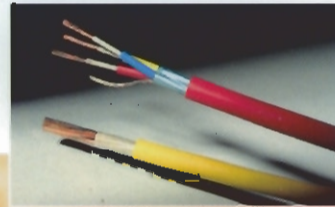


FIRE PERFORMANCE CABLES



FIRETEC™

**Firetec™ Multicore
& Singlecore**

Introduction

AEI Cables Ltd., a subsidiary of TT Group PLC, is probably the longest established cable manufacturer in the world, with innovations and experience dating back over 150 years.

As technology advances and installations such as airports, mass transit rail stations or even high rise buildings become increasingly complex, the consequences of fire increase. Such installations must have systems incorporated into their design that will allow for the efficient shutdown of plant as well as the safe and orderly evacuation of personnel. These systems require cable which will continue to operate under fire conditions.

AEI Cables has considerable experience in the design and manufacture of Fire Performance Cables. These products, however, have generally been treated as special requirements and in the past have only been supplied on a special order basis.

Due to the market increasingly demanding cables which are more resilient when encountering a fire, AEI Cables have developed a comprehensive standard range of fire performance cables which are designed to continue to operate and emit minimum quantities of smoke and toxic fumes in the hazardous conditions of a fire. The Firetec Multicore and Singlecore cables detailed in this brochure are part of the range offered by AEI Cables.

This standard range also includes:

- Firetec Mineral Insulated Cables
- Firetec Armoured Cables

details of which are available by using the Fax Back on the inside back cover.

Firetec Singlecore

This cable is available in conductor sizes 1.0 mm² up to 6.0 mm² with a choice of red, yellow, blue, black and green/yellow colours.

This range is rated at 300/500 Volt.

Larger sizes can be manufactured to customer specifications.

1 Stranded plain annealed copper conductors.

2 Mica/Glass tape.

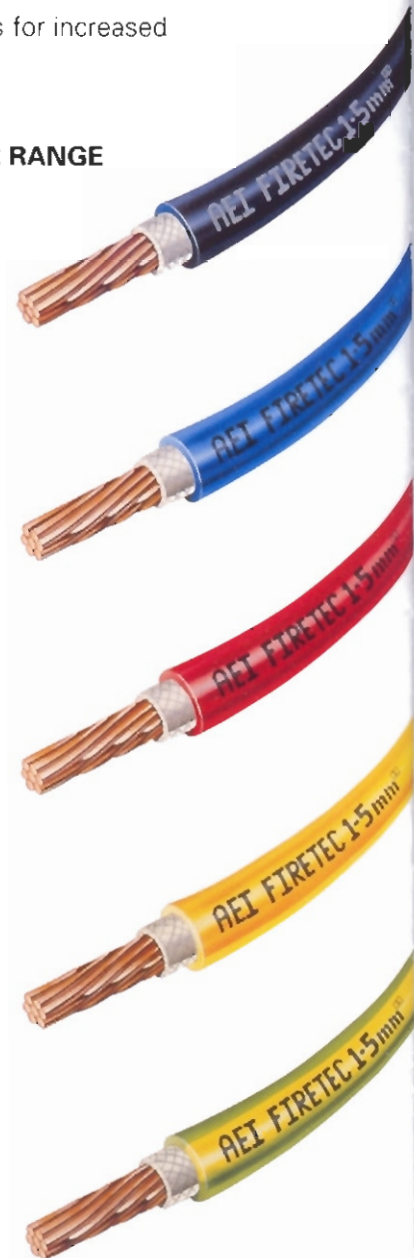
3 Elastomeric insulation.



Benefits

- Certificated by LPCB to IEC331 with additional testing carried out to prove that the same criteria were also met when installed in steel conduit.
- Easy strip Insulation.
- Low smoke, zero halogen construction.
- Designed and manufactured under an ISO 9001 quality management system (LPCB certificated).
- Elastomeric insulation gives high mechanical strength, excellent flexibility and resistance to abrasion.
- Stranded copper conductors for increased flexibility.

COLOUR RANGE



IEC 331
Certificate No 221c



Assessed to
ISO9001
Certificate No: 221

Approvals and Specifications

- The AEI Cables quality management systems are independently certificated by BSI, BASEC and LPCB as complying with the requirements of BSEN 9001.
- Firetec Singlecore is ideally suited for use on fire alarms and emergency lighting circuits and satisfies the requirements of the code of practice in each case (BS5839 Part 1, BS5266 Part 1).
- Firetec Singlecore is certificated by the LPCB (sizes 1.0mm² to 6.0mm²) to IEC331, with additional testing carried out to prove that the same criteria were also met when installed in steel conduit.
- Firetec Singlecore fully meets the requirements of the following:
 - BS4066 Part 1, (IEC 332-1).
 - Flame Retardancy for a single cable length. BS7622
 - Smoke Density BS6425 Part 1, (IEC 754-1).
 - Acid Gas Evolution IEC 331.
 - Maintenance of circuit integrity when subjected to a 750°C flare.



Assessed to
ISO9001
Certificate No: 221



IEC 331
Certificate No: 221c



Product Range and Technical Data

Voltage ratings

Firetec Singlecore cables are designed to operate at up to 300 volts between a single cable and earth or 500 volts between 2 Singlecore cables.

Temperature rating

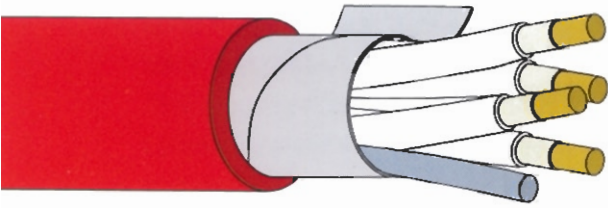
Firetec Singlecore cables have a continuous operating temperature rating of -10 C to 90 C.

FIRETEC SINGLECORE SIZE RANGE AND TECHNICAL DATA									
CABLE REFERENCE	CONDUCTORS		CURRENT RATING ⁰		VOLT DROP ⁰		MAXIMUM DC CONDUCTOR RESISTANCE at 20 C	NOMINAL OVERALL DIAMETER	NOMINAL WEIGHT
	NO	CROSS SECTIONAL AREA CORES	2 Cables	3 or 4	2 Cables	3 or 4			
			Single Phase a.c or d.c.	Cables Three Phase a.c	Single Phase a.c or d.c.	Cables Three Phase a.c			
	mm ²	Amps	Amps	mV/A/m	mV/A/m	ohms/km	mm	kg/km	
F1C1	1	1	17	15	46	40	18.1	3.3	25
F1C1.5	1	1.5	22	19	31	27	12.1	3.6	30
F1C2.5	1	2.5	30	26	19	16	7.41	4.2	40
F1C4	1	4	40	35	12	10	4.61	4.7	60
F1C6	1	6	51	45	7.9	6.8	3.08	5.2	80

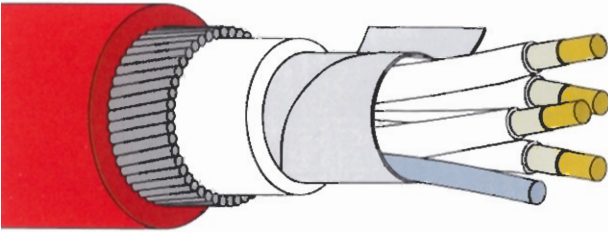
⁰ Current ratings and voltage drop factors are extracted from tables 4E1A and 4E1B of BS 7671 Requirements for Electrical Installations IEE Wiring Regulations Sixteenth Edition, for cables installed in accordance with Reference Method 3 - enclosed in metallic enclosures, ie. galvanised steel conduit or trunking. Where cables are to be installed in non-metallic enclosures, ie. pvc conduit or trunking, reference should be made to tables 4D1A and 4D1B.

The Firetec Range of Specials

Screened Multipairs



Unarmoured



Armoured

Firetec Instrumentation

A range of multi-paired individually and/or collectively screened, armoured or unarmoured instrumentation and control cables. This range is not available from stock but can be manufactured to your requirements by request.

Bespoke cables

In the unlikely event that AEI Cables' standard range of fire performance cables does not meet your exact requirements our highly skilled cable design engineers will, as ever, be on hand to offer free consultation in order that your exact requirements are satisfied. Any fire performance cable requirement not in our range, if commercially and technically viable, can be manufactured to your performance criteria.

Health and Safety

Our general statement to users covering the Health and Safety aspects of the use of Electric Cables is available upon request

For a number of reasons, for instance as a result of improvements in design, or in methods of manufacture or experience in the use or as permitted by the relevant British Standard specification, the products as supplied at any one time may differ from the descriptions given in this publication.