

**Fire Resistant Data Cables**

**Enhanced BS 5389    Screened    Twisted Pairs    Standard IEC60331    Armoured**

**Fire Resistant Alarm Cables**

**Enhanced BS5389    Screened    Twisted Pairs    Armoured**



## ABOUT US

Fireshield Cables Ltd, formerly a part of Rigby Wire has been at the forefront of Fire Resistant Cable design and manufacture from the early 1990's, specialising in lightweight, small diameter "Circuit Integrity" cables for Oil platforms and Aerospace, leading to EU Patents.

Continuing product developments have taken Fireshield Cables into major Office buildings, Sports Stadia, Museums, Galleries, Hospitals, and Tunnels, where an armoured cable version is available if required.

Fireshield Enhanced performance Data Cables have been used extensively in major prestigious applications throughout the UK and many other parts of the world, benefitting the system providers with both enhanced multiple pairs, savings in space with cost effective enhanced performance.

Fireshield Cables have always been designed and manufactured in the UK, and mindful of the sometime urgent need for cables by the installer, Fireshield have a proven EX STOCK policy with the key sizes of Enhanced 2core Alarm and Enhanced 5pair Data Cable.

## CONTACT US

Visit [www.fireshieldcables.co.uk](http://www.fireshieldcables.co.uk)

Send your enquiry or order to [sales@fireshieldcables.co.uk](mailto:sales@fireshieldcables.co.uk)

Call us on 07718 782315 / 6

Or call your distributor and ask them for Fireshield Cables.



## Enhanced Fire Resistant Screened Alarm Cable

Screened cables for essential systems where circuit integrity must be maintained in case of fire and where the use of halogen free materials are advised to avoid dense smoke and corrosive gases.

Fireshield Alarm cables are all twisted pair construction with overall screen, providing enhanced Data Capability, making it ideal for BMS, addressable and networked systems, CCTV, and Fire Telephones.

### Standards

- Materials to BS 7655, type LTS 4
- Fire Resistant to BS 8434-2 Enhanced, as specified by BS5839
- Halogen free to IEC 60754-1, IEC 60754-2
- Low Smoke to ASTM E-662
- Plain annealed copper to IEC 60228

### Details

Conductor:	Plain annealed copper wire 1.5mm <sup>2</sup> (1/1.38mm) or 2.5mm <sup>2</sup>
Insulation:	Multi layered Mica tape, zero halogen low smoke copolymer
Screen:	Aluminium polyester laminate screen
Drainwire:	Bare tinned annealed copper wire, 1.5 mm <sup>2</sup> or 2.5mm <sup>2</sup>
Sheath:	Zero halogen low smoke copolymer
Colour:	Red

### Technical Details

Product Code	Size mm <sup>2</sup>	Cores mm <sup>2</sup>	Nominal OD	Yield kg/km	Conductor RDC Max
FSAL/1.5/2CG/RD	1.5	2	8.2	110	12.1
FSAL/2.5/2CG/RD	2.5	2	9.5	160	7.41
FSAL/1.5/4CG/RD	1.5	4	10.4	165	12.1
Temperature rating:	0°C to +90°C (installation) -40°C to +90°C (operation)				
Minimum bend radius:	8 x OD				
Operating voltage:	300V core to earth, 500V core to core				

### Installation

This product should be installed in accordance with BS 5839-1:2002, Part 1. The cable support system should be capable of withstanding similar temperatures and duration to that of the cable while maintaining adequate support. Clip spacing should be 300mm horizontal and 400mm vertical.



## Fire Resistant Screened Data Cable 5p 0.5mm<sup>2</sup> twisted pair

### Product Code FSDATA/0.5/05P/RD

Data/signal/control cables for essential systems where circuit integrity must be maintained in case of fire and where the use of halogen free materials are advised to avoid dense smoke and corrosive gases.

#### Standards

- Materials to BS 7655, type LTS 4
- Fire Resistant to BS 8434-1
- Plain annealed copper to IEC 60228
- Halogen free to IEC 60754-1, IEC 60754-2
- Low smoke to ASTM E-662

#### Details

Conductor:	Plain annealed copper wire 0.5mm <sup>2</sup> (1/0.8mm)
Insulation:	Mica tape, LSOH insulated
Screen:	Overall aluminium mylar screen
Drainwire:	16/0.2 tinned copper
Sheath:	LSOH, halogen free
Colour:	Red
Core colours:	Blue and white numbered pairs (or to customer request)
Overall diameter:	14.4mm nominal
Minimum bend radius:	12 x OD
Weight:	180 kg/km
Temperature rating:	0°C to +90°C (installation) -40°C to +90°C (operation)
Conductor RDC maximum at 20°C:	39 Ω/km (max)

#### Technical Data

Conductor resistance at 20°C:	35.7 Ω	
Mutual capacitance:	70pF/m	
Characteristic impedance:	Frequency	Ω Zo
	100 kHz	107
	1 MHz	106
Attenuation:	Frequency	dB/100m
	100 kHz	0.19
	1 MHz	1.93
Cross talk:	Frequency	dB/100m
	100 kHz	80
	1 MHz	65
Capacitance unbalance	Less than 100pF/100m	

#### Installation

Cable must be installed as per requirements of BS 5839-1:2002 Part 1. The cable support system should be capable of withstanding similar temperatures and duration to that of the cable while maintaining adequate support. Clip spacing should be 300mm horizontal and 400mm vertical



## Enhanced Fire Resistant Screened Data Cable

**5p 1.00mm<sup>2</sup> twisted pair**

**Product Code FSDATA/001/05P/RD**

Data/signal/control cables for essential systems where circuit integrity must be maintained in case of fire and where the use of halogen free materials are advised to avoid dense smoke and corrosive gases.

Typical applications include Voice Evacuation : Disabled Refuge : Audio Visual.

### Standards

- Materials to BS 7655, type LTS 4
- Fire Resistant to BS 8434-2 Enhanced as specified by BS 5839
- Plain annealed copper to IEC 60228
- Halogen free to IEC 60754-1, IEC 60754-2
- Low smoke to ASTM E-662

### Details

Conductor:	Plain annealed copper wire 1.0mm <sup>2</sup> (1/1.13mm)
Insulation:	Mica tape, zero halogen low smoke copolymer
Screen:	Overall aluminium mylar screen
Drainwire:	16/0.2 tinned copper
Sheath:	Thermoplastic low smoke halogen free (LSOH) copolymer
Colour:	Red
Core colours:	Blue and white numbered pairs (or to customer request)
Overall diameter:	18.6mm nominal
Minimum bend radius:	8 x OD
Weight:	287 kg/km
Temperature rating:	0°C to +90°C (installation) -40°C to +90°C (operation)
Conductor RDC maximum at 20°C:	18.1 Ω/km (max)

### Installation

Cable must be installed as per requirements of BS 5839-1:2002 Part 1. The cable support system should be capable of withstanding similar temperatures and duration to that of the cable while maintaining adequate support. Clip spacing should be 300mm horizontal and 400mm vertical.



## Fire Resistant Screened Data Cables

Screened cables for essential systems where circuit integrity must be maintained in case of fire and where the use of halogen free materials are advised to avoid dense smoke and corrosive gases.

8 core 0.5mm<sup>2</sup> screened

16 core 0.5mm<sup>2</sup> screened

6 pair 0.5mm<sup>2</sup> screened

### Standards

- Materials to BS 7655, type LTS 4
- Fire Resistant to IEC 60331-21
- Self extinguishing to IEC 60332-3C
- Halogen free to IEC 60754-1, IEC 60754-2
- Low smoke to IEC 61034

### Details

Conductor:	Plain annealed copper wire 0.5mm <sup>2</sup> plain
Insulation:	Mica tape, zero halogen low smoke copolymer
Screen:	Aluminium polyester laminate screen
Sheath:	Zero halogen low smoke copolymer
Colour:	Red ( or to customer request)

### Technical Data

Overall diameter:	9.15mm (8 core), 13.34mm (16 core), 13.57mm (6 pair)
Minimum bend radius:	12 x OD
Temperature rating:	0°C to +90°C (installation) -40°C to +90°C (operation)
Operating Voltage:	300V earth to core 500V core to core
Conductor RDC maximum at 20°C:	39 Ω/km (max)









### Installation

This product should be installed in accordance with BS 5839-1:2002, Part 1. The cable support system should be capable of withstanding similar temperatures and duration to that of the cable while maintaining adequate support. Clip spacing should be 300mm horizontal and 400mm vertical



## PROJECTS

**Fireshield** cables are the first choice in many prestigious and demanding applications. Those projects include theatre and entertainment complexes, sports stadiums, hospitals, airports, railway stations, shopping centres and universities. Here are some of our installations:

	<b>Location</b>	<b>Used in:</b>
	Home Office	Data cable
	Moscow Metro	Data cable
	Dublin Port Tunnel	Armoured data cable
	UBS Warburg	Fire, alarm and security system
	Tate Modern II	Fire, alarm and security system
	The Oval Cricket Ground	Data cable
	Wembley Stadium	Fire, alarm and security system
	Westminster Central Hall	Fire, alarm and security system



**Canary Wharf**

Fire, alarm and security system



**The Sage Gateshead International**

Fire, alarm and security system



**Cardiff Welsh Millennium Centre**

Fire, alarm and security system

**Waldorf Hilton, London**

Fire, alarm and security system

<b>Welsh Opera House</b>	CCTV data cabling	<b>Goldman Sachs Offices</b>	Fire, alarm and security system
<b>Edinburgh Airport</b>	Data cable	<b>Eagle Shopping Centre, Wrexham</b>	Data, fire alarm and emergency lighting cable
<b>Leith Docks, Edinburgh</b>	Fire, alarm and security system	<b>York University</b>	Voice alarm evacuation system
<b>RBS Headquarters, Edinburgh</b>	PA system	<b>John Howard Psychiatric Hospital</b>	Fire, alarm and security system
<b>Gatwick Airport Rail Link</b>	Voice, alarm and evacuation system	<b>Cardiff City Football Stadium</b>	Data cable
<b>Coventry City Football Stadium</b>	Fire, alarm and security system	<b>Addenbrookes Hospital</b>	Enhanced fire resistant cable
<b>RWE Chemical Works, Germany</b>	Heat extraction system	<b>Fulham Broadway Shopping Centre</b>	Fire, alarm and security system
<b>Middlesex University</b>	Addressable fire alarm system	<b>Paradise Street, Liverpool</b>	Various including data cable