# FUSIONPOLYMERSINDUSTRIES

## FUSION POLYMERS®

FIRE RESISTANT CABLES
FIRE SURVIVAL CABLES
FIRE RATED CABLES

## MEANINGFUL EXISTENCE

With over 15 years of substantial manufacturing experience and excellent track record of customer satisfaction, Fusion Polymers has carved out a niche for itself in the Process Control & Instrumentation Cable industry.

Fusion Polymers has built its reputation on a commitment to providing quality products and services while rapidly responding to customer needs. We believe in the age-old values of sincerity, integrity, and perseverence, which refelcts in our business ethics and way of working. With a dynamic team of technocrats and industry stalwarts, Fusion Polymers is in the constant endeavour to remain relevant to the industry by striving to meet and even exceed customer expectations.

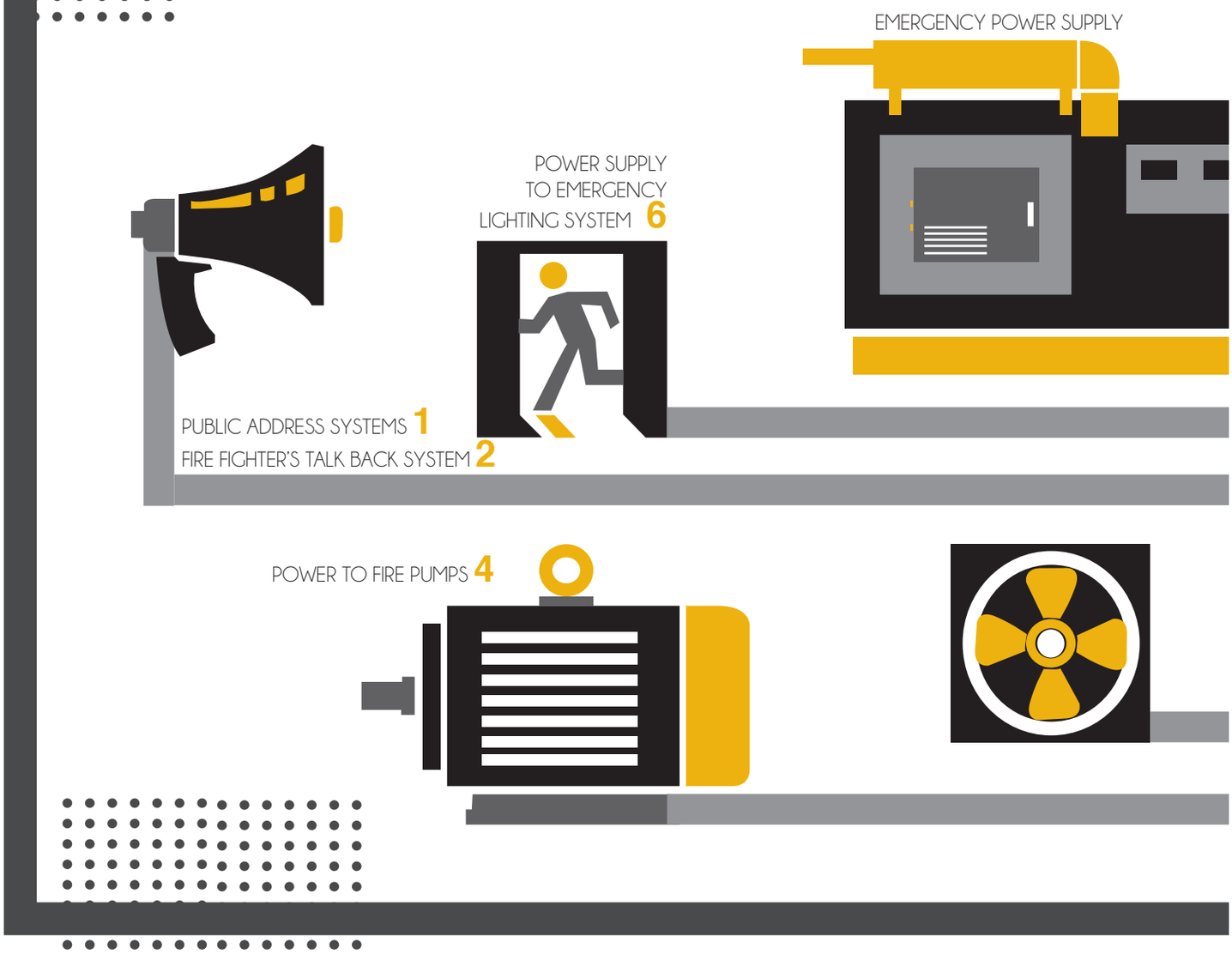
Not only are new advancements happening every day, but markets, distribution channels as well as the competition are constantly evolving. Our continuing success has come about through our ability to adapt, and this skill has never been more relevant than it is today.

## ADDING VALUE

Fusion Polymers, over the years since its inception has served almost all major industries ranging from railways, steel plants, cement plants, airports, hospitals, hotels, thermal, solar, and hydro power projects, and large infrastructure projects – commercial, residential, IT, etc.

We are one of the few players in India to have developed LAN UTP Cables at the time when IT industry had just opened its wings in India. We are one of the few early players who, after having studied the need of special cables for building automation, had developed Low-Capacitance Screened Cables to cater to the special requirement of BMS industry.

We also happen to be one of the first ones to have developed Fire Resistance Cables, finding their applications to keep the life safety devices operational even under fire conditions. The above type of cables have been commissioned at a host of industries including Airports, Metro rail Corporations, Steel Plants, Thermal & Hydro Power Projects, Hospitals, Hotels, Commercial Towers, IT Parks, etc.




# APPLICATIONS

Fire survival cables are typically used for the following critical areas:

PUBLIC ADDRESS SYSTEMS 1

FIRE FIGHTER'S TALK BACK SYSTEM 2

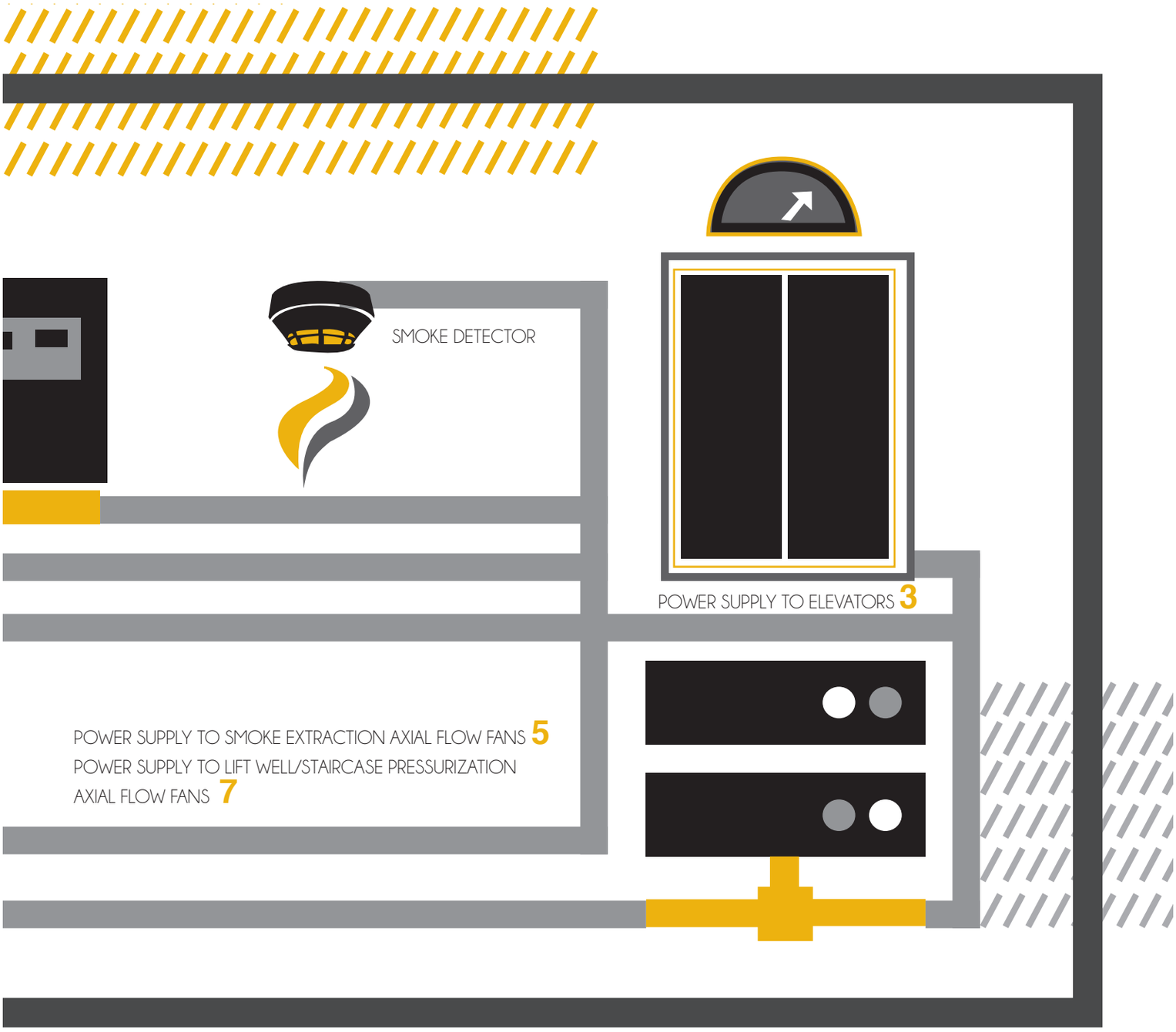
POWER SUPPLY TO ELEVATORS 3

POWER TO FIRE PUMPS 4

POWER SUPPLY TO SMOKE EXTRACTION AXIAL FLOW FANS 5

POWER SUPPLY TO EMERGENCY LIGHTING SYSTEM 6

POWER SUPPLY TO LIFT WELL/STAIRCASE PRESSURIZATION AXIAL FLOW FANS 7




# FUSION POLYMERS Fire Resistant Cables

In today's time due to rapid growth, urbanization, and industrialization, the dynamics and the concept of industrial, commercial, and residential sectors have undergone a sea of change. This magnitude of advancement inevitably leads to greater risks, the risk of fire undoubtedly being the most daunting, as it has the potential of putting human lives in danger, apart from causing huge infrastructural and financial losses.

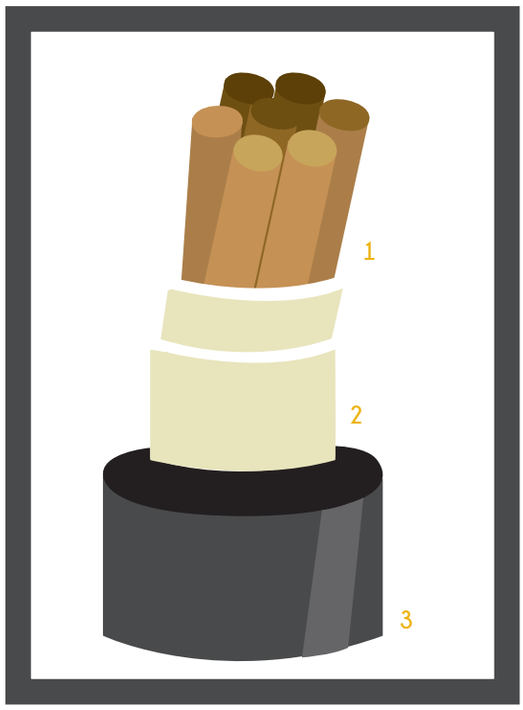
Hence, the safety aspect has assumed much more relevance in this modern age scenario than ever before.

Perhaps more so today than ever before, the issues of health, safety, and environmental impact are top priorities for manufacturers of all types. With the increasing demand for safe buildings – be it power plants, refineries, hotels, airports, hospitals, shopping malls, high rise residential and commercial complexes, more attention is being paid to the types of cables being installed, and the potential risks in the event of fire. The protection, and safe and timely evacuation of human beings assumes prime importance in case of a fire crisis situation.

Electrical cables play a significant role in any system and must stand up to conditions that were unthinkable in the past, and this is particularly true with respect to fire performance where cabling systems must continue to perform in extreme fire situations. Critical control systems require secure power supplies, perhaps for the duration of a major fire. These systems will be used for safety and security and often for building monitoring, providing intelligence on a range of subjects, with phased evacuation where relevant.

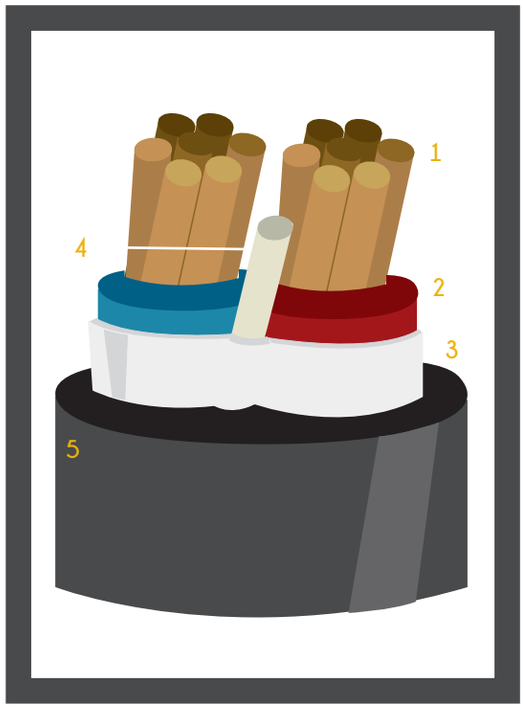
## SINGLE CORE

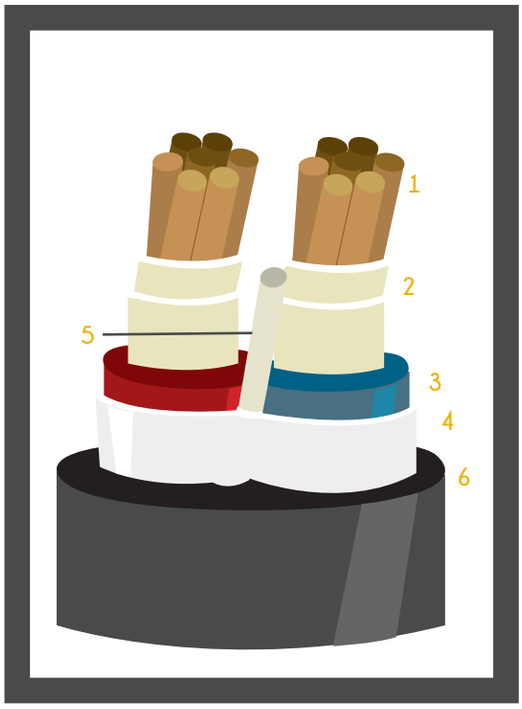
**Conductor** 1
Plain stranded copper
**Primary Insulation** 2
Two layers of fire rated glass mica tape
**Secondary Insulation** 3
Cross-linked halogen free type EI 5




## STANDARD

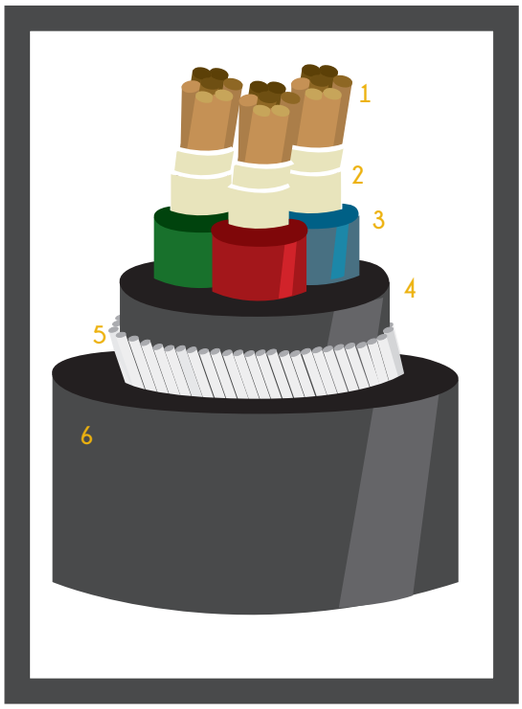
**Conductor** 1
Plain stranded copper
**Insulation** 2
Cross-linked halogen free type EI 5
**Screening** 3
Laminated aluminum tape
**Drain wire** 4
Annealed tinned copper
**Sheathing** 5
Low smoke zero halogen type LTS3






## ENHANCED

**1 Conductor**
Plain stranded copper
**2 Primary Insulation**
Two layers of Fire rated
glass mica tape
**3 Secondary Insulation**
Cross-linked halogen free type EI 5
**4 Screening**
Laminated aluminum tape
**5 Drain wire**
Annealed tinned copper
**6 Sheathing**
Low smoke zero halogen type LTS3




## ARMORED

**1 Conductor**
Plain stranded copper
**2 Primary Insulation**
Two layer of Fire rated glass mica tape
**3 Secondary Insulation**
Cross-linked halogen free type EI 5
**4 Inner Sheathing**
Low smoke zero halogen compound
**5 Armoring**
Galvanized steel round wire
**6 Outer Sheathing**
Low smoke zero halogen type LTS1

## SINGLE CORE

| Nominal cross-sectional Area | Mean overall diameter | Maximum conductor resistance at 20 °C | Short circuit rating | Current rating DC or single phase AC | Current rating three phase AC | Volt drop DC | Volt Drop Single phase AC | Volt drop three phase AC |
|---|---|---|---|---|---|---|---|---|
| Square mm | mm | Ohms/km | (One second) KA | Amps | Amps | mV/A/m | mV/A/m | mV/A/m |
| 1.5 | 3.9 | 12.1 | 0.15 | 22 | 19 | 31 | 31 | 27 |
| 2.5 | 4.7 | 7.41 | 0.25 | 30 | 26 | 19 | 19 | 16 |
| 4.0 | 5.3 | 4.61 | 0.4 | 40 | 35 | 12 | 12 | 10 |
| 6.0 | 5.9 | 3.08 | 0.6 | 51 | 45 | 7.9 | 7.9 | 6.8 |
| 10 | 7.3 | 1.83 | 1.0 | 71 | 63 | 4.7 | 4.7 | 4.0 |
| 16 | 8.5 | 1.15 | 1.6 | 95 | 85 | 2.9 | 2.9 | 2.5 |
| 25 | 11.3 | 0.727 | 2.5 | 126 | 111 | 1.85 | 1.9 | 1.65 |
| 35 | 12.5 | 0.524 | 3.5 | 156 | 138 | 1.35 | 1.35 | 1.15 |
| 50 | 14.5 | 0.387 | 5.0 | 189 | 168 | 0.99 | 1.05 | 0.9 |
| 70 | 16.5 | 0.268 | 7.0 | 240 | 214 | 0.68 | 0.75 | 0.65 |
| 95 | 18.5 | 0.193 | 9.5 | 290 | 259 | 0.49 | 0.58 | 0.5 |
| 120 | 20.5 | 0.153 | 12 | 336 | 299 | 0.39 | 0.48 | 0.42 |
| 150 | 22.5 | 0.124 | 15 | 375 | 328 | 0.32 | 0.43 | 0.37 |
| 185 | 25 | 0.0991 | 18 | 426 | 370 | 0.25 | 0.37 | 0.32 |
| 240 | 28 | 0.0754 | 24 | 500 | 433 | 0.19 | 0.33 | 0.29 |

## TWO CORE

| Nominal Cross-sectional Area | Approx. overall diameter | Nominal diameter of armour wires | Maximum conductor resistance at 20°C | Current rating DC clipped direct | Current rating DC single phase AC free air | Volt drop DC / single phase AC | Volt Drop Single phase AC |
|---|---|---|---|---|---|---|---|
| Square mm | mm | mm | Ohms/Km | Amps | Amps | mV/A/m | mV/A/m |
| 1.5 | 12.9 | 0.9 | 12.1 | 27 | 29 | 31 | 31 |
| 2.5 | 14.1 | 0.9 | 7.41 | 36 | 39 | 19 | 19 |
| 4.0 | 15.2 | 0.9 | 4.61 | 49 | 52 | 12 | 12 |
| 6.0 | 16.4 | 0.9 | 3.08 | 62 | 66 | 7.9 | 7.9 |
| 10 | 18.6 | 0.9 | 1.83 | 85 | 90 | 4.7 | 4.7 |
| 16 | 21.4 | 0.9 | 1.15 | 110 | 115 | 2.9 | 2.9 |
| 25 | 22.0 | 1.25 | 0.727 | 146 | 152 | 1.85 | 1.9 |
| 35 | 24.8 | 1.6 | 0.524 | 180 | 188 | 1.35 | 1.35 |
| 50 | 28.0 | 1.6 | 0.387 | 219 | 228 | 0.98 | 1.0 |
| 70 | 30.7 | 1.6 | 0.268 | 279 | 291 | 0.67 | 0.69 |
| 95 | 25.3 | 2.0 | 0.193 | 338 | 354 | 0.49 | 0.52 |
| 120 | 26.6 | 2.0 | 0.153 | 392 | 410 | 0.39 | 0.42 |
| 150 | 39.3 | 2.0 | 0.124 | 451 | 472 | 0.31 | 0.35 |
| 185 | 44.2 | 2.5 | 0.0991 | 515 | 539 | 0.25 | 0.29 |
| 240 | 48.0 | 2.5 | 0.0754 | 637 | 636 | 0.195 | 0.24 |
| 300 | 51.8 | 2.5 | 0.0601 | 698 | 732 | 0.155 | 0.21 |
| 400 | 55.9 | 2.5 | 0.047 | 787 | 847 | 0.12 | 0.19 |

## THREE CORE

| Nominal Cross-sectional Area | Approx. overall diameter | Nominal diameter of armour wires | Maximum conductor resistance at 20°C | Short circuit rating 1 sec of conductor | Current rating three phase AC clipped direct | Volt drop DC / single phase AC free air | Volt Drop three phase AC |
|---|---|---|---|---|---|---|---|
| Square mm | mm | mm | Ohms/Km | KA | Amps | Amps | mV/A/m |
| 1.5 | 13.4 | 0.9 | 12.1 | 0.20 | 23 | 25 | 27 |
| 2.5 | 14.8 | 0.9 | 7.41 | 0.35 | 31 | 33 | 16 |
| 4.0 | 16.1 | 0.9 | 4.61 | 0.57 | 42 | 44 | 10 |
| 6.0 | 17.4 | 0.9 | 3.08 | 0.86 | 53 | 56 | 6.8 |
| 10 | 20.3 | 1.25 | 1.83 | 1.4 | 73 | 78 | 4.0 |
| 16 | 22.8 | 1.25 | 1.15 | 2.2 | 94 | 99 | 2.5 |
| 25 | 27.4 | 1.6 | 0.727 | 3.6 | 124 | 131 | 1.65 |
| 35 | 29.2 | 1.6 | 0.524 | 5.0 | 154 | 162 | 1.15 |
| 50 | 33.0 | 1.6 | 0.387 | 7.1 | 187 | 197 | 0.87 |
| 70 | 37.0 | 1.6 | 0.268 | 10.0 | 238 | 251 | 0.60 |
| 95 | 40.6 | 2.0 | 0.193 | 13.6 | 289 | 304 | 0.45 |
| 120 | 43.8 | 2.0 | 0.153 | 17.2 | 335 | 353 | 0.37 |
| 150 | 48.0 | 2.5 | 0.124 | 21.4 | 386 | 406 | 0.30 |
| 185 | 52.0 | 2.5 | 0.0991 | 26.5 | 441 | 463 | 0.26 |
| 240 | 57.1 | 2.5 | 0.0754 | 34.3 | 520 | 546 | 0.21 |
| 300 | 63.0 | 2.5 | 0.0601 | 42.9 | 599 | 628 | 0.185 |
| 400 | 69.5 | 2.5 | 0.047 | 57.2 | 673 | 728 | 0.165 |

## FOUR CORE

| Nominal Cross-sectional Area | Approx. overall diameter | Nominal diameter of armour wires | Maximum conductor resistance at 20°C | Short circuit rating 1 sec of conductor | Current rating three phase AC clipped direct | Volt drop DC / single phase AC free air | Volt Drop three phase AC |
|---|---|---|---|---|---|---|---|
| Square mm | mm | mm | Ohms/Km | KA | Amps | Amps | mV/A/m |
| 1.5 | 14.3 | 0.9 | 12.1 | 0.20 | 23 | 25 | 27 |
| 2.5 | 16.0 | 0.9 | 7.41 | 0.35 | 31 | 33 | 16 |
| 4.0 | 17.3 | 0.9 | 4.61 | 0.57 | 42 | 44 | 10 |
| 6.0 | 19.6 | 1.25 | 3.08 | 0.86 | 53 | 56 | 6.8 |
| 10 | 21.8 | 1.25 | 1.83 | 1.4 | 73 | 78 | 4.0 |
| 16 | 24.6 | 1.25 | 1.15 | 2.2 | 94 | 99 | 2.5 |
| 25 | 29.1 | 1.6 | 0.727 | 3.6 | 124 | 131 | 1.65 |
| 35 | 32.2 | 1.6 | 0.524 | 5.0 | 154 | 162 | 1.15 |
| 50 | 35.0 | 1.6 | 0.387 | 7.1 | 187 | 197 | 0.87 |
| 70 | 40.2 | 2.0 | 0.268 | 10.0 | 238 | 251 | 0.60 |
| 95 | 44.0 | 2.0 | 0.193 | 13.6 | 289 | 304 | 0.45 |
| 120 | 48.4 | 2.5 | 0.153 | 17.2 | 335 | 353 | 0.37 |
| 150 | 52.5 | 2.5 | 0.124 | 21.4 | 386 | 406 | 0.30 |
| 185 | 57.1 | 2.5 | 0.0991 | 26.5 | 441 | 463 | 0.26 |
| 240 | 62.7 | 2.5 | 0.0754 | 34.3 | 520 | 546 | 0.21 |
| 300 | 69.6 | 2.5 | 0.0601 | 42.9 | 599 | 628 | 0.185 |
| 400 | 78.0 | 3.15 | 0.047 | 57.2 | 673 | 728 | 0.165 |

# APPLICABLE INTERNATIONAL STANDARDS

***BS 7629-1: 2008:*** Specification for thermosetting insulated unarmoured, screened fire-resistance cables of rated voltage 300/500V, having low emission of smoke and corrosive gases when affected by fire.

***BS 7846: 2009:*** Specification for thermosetting insulated, armoured, fire-resistant cables of rated voltage 600/1000 V, having low emission of smoke and corrosive gases when affected by fire.

***BS 8434-2: 2009:*** Fire performance "Enhanced Test" as per BS 5839 Part 1,8 & 9 (For conductor size upto and including 4 sq.mm) Method for assessment of fire integrity of small cables for use in emergency Circuits. Retain Circuit Integrity at 930°C. Duration of test is 120 mins. Initial 60 mins. with Fire and Impact followed by an additional 60 mins. with Fire, Impact and Water Phase.

***BS 8491: 2008:*** Method for assessment of fire integrity of power cables with diameter greater than 20mm (as per BS 8519:2010). Retain Circuit Integrity at 600/1000V under Simultaneous application of constant Flame at 850°C, Direct Mechanical Impacts & High Pressure Water Jet. The test duration is expressed in minutes depending on the required time duration of the application as follows: Category 1: 30 Minutes. Category 2: 60 Minutes. Category 3: 120 Minutes.

***BS 8519: 2010:*** Code of practice for Selection and installation of fire-resistant power and control cable systems for life safety and fire- fighting applications.

***BS: 5839-1: 2008:*** Code of practice for system design, installation, commissioning and maintenance – Fire Detection / Fire Alarm systems for buildings.

***BS 5839-8: 2008:*** Code of practice for the design, installation, commissioning and maintenance of Voice alarm systems.

***BS 5839-9: 2011:*** Code of practice for the design, installation, commissioning and maintenance of Emergency voice communication systems.

***BS 5266-1: 2005:*** Code of practice for the emergency lighting of premises.

***BSEN 50200 : 2006:*** Fire performance "Standard Test" as per BS 5839 Part 1 & 8 (For Cables with diameter less than 20 mm)

***BS EN 50200 : 2006 Class PH30:*** Fire with Mechanical Shock - 850 ° C.

***BS EN 50200 : 2006 Annex-E :*** Fire with Mechanical Shock plus Fire with Mechanical Shock with Water at 850 ° C.

***BS 6387 : 1994 :*** Performance requirements for cables required to maintain circuit integrity under fire conditions. Applicable to cables rated at voltages not exceeding 450/750 V.

***IEC 61034 :*** Test is carried out in a 3 m3 chamber under defined conditions and the light transmittance shall be greater than 70%.

***BS EN 50267 :*** Tests on gases evolved during combustion of materials from cables.

***BSEN 50267-2-1*** : Determination for amount of Halogen acid gas content which shall not be greater than 0.5%

***BSEN 50267-2-2 :*** Determination of degree of acidity of gases for materials by measuring pH and conductivity which shall be as within the specific limit mentioned in the relevant standard.

***IEC 603331 :*** Procedures and requirements with respect to circuit integrity of cables.

## CENTRAL POWER RESEARCH INSTITUTE

CPRI

### TEST REPORT

**Test Report No. : DCCD-12836** **Date: 04.10.2012**

### TEST RESULTS

**FIRE SURVIVAL TEST (RESISTANCE TO FIRE ALONE )**

| | | |
|---|---|---|
| Reference Specification | : | BS 6387 / 1994, Category C |
| No. of specimen tested | : | One |
| **Test Details** | | |
| Sample length | : | 1.2 metres |
| Cable supporting system | : | The cable was supported, by metallic rings placed 300 mm apart and this assembly was supported by metallic stand, all rigidly earthed. |
| Source of heat | : | Tubular Type Gas Burner as per BS 6387, Regulated LPG & Air mixture to achieve a flame temperature of 950 °C ± 40 °C. |
| Continuity Checking Arrangement | : | During the test a current was passed through the cores of the cable and this was provided by a three phase star-connected transformer of sufficient capacity to maintain the test voltage up to the maximum leakage current allowable i.e 3 A.<br>At the opposite end of the cable, lamps were connected to the cores with a power rating such that each core carries a current of approximately 0.25 A at the rated voltage of the cable. |
| Test voltage between cores | : | The phase to phase voltage of 500 V AC applied between the cores and a load carrying a current of 0.25A was maintained. |
| Test Duration | : | 3 hours |

**Observation:**
The cable withstands both voltage and fire application for 3 hours.

**Result:**

**The cable complies with the requirement of the standard.**

(A.R Srinivasan)
**Test Engineer**


CABLES & CAPACITORS DIVISION
P.B.NO.8066, SADASHIVANAGAR P.O.
PROF SIR.C.V.RAMAN ROAD,BANGALORE - 560 080, INDIA
Tele/Fax: +91 (0) 80-2360 4415

## CENTRAL POWER RESEARCH INSTITUTE

CPRI

### TEST REPORT

| | | |
|---|---|---|
| **Test Report Number** | : | DCCD-12836 Dated: 04-10-2012 |
| **Name & Address of the Customer** | : | M/s, Fusion Polymers Industries, D-68, HSIDC, Phase VI, Udyog Vihar, Sector 37 Gurgaon-122 001, Haryana. |
| **Name & Address of the Manufacturer** | : | M/s, Fusion Polymers Industries , D-68, HSIDC, Phase VI, Udyog Vihar, Sector 37 Gurgaon-122 001, Haryana. |
| **Particulars of sample tested** | : | 2Core X 1.5 sq.mm, Unarmoured Fire Survival Cable |
| **Condition of the Sample on Receipt** | : | New |
| Type | : | Nil |
| Designation | : | 2Core X 1.5 sq.mm, Unarmoured Fire Survival Cable Embossing: FUSION 2C X 1.5 sq.mm FIRE SURVIVAL 300/500 V C.W.Z BS-6387 |
| Serial Number | : | Nil |
| Number of samples tested | : | One |
| Date(s) of Test(s) | : | 03.10.2012 |
| CPRI sample code no | : | DCCDFRLS12S0078 |
| **Particulars of tests conducted** | : | Fire Survival test (Resistance to Fire alone) |
| **Test in accordance with standard/specification** | : | As per BS 6387 / 1994 |
| | : | Not applicable |
| Sampling plan | : | Nil |
| Customer's requirement | : | Nil |
| Deviations if any | : | Nil |
| **Name of the witnessing persons** | | |
| Customer's representatives | : | None |
| Other than Customer's representatives | : | None |
| Test subcontracted with address of the laboratory | : | None |
| **Documents constituting this report (in words)** | | |
| Number of Sheets | : | Three |
| Number of oscillograms | : | Nil |
| Number of graphs | : | Nil |
| Number of photos | : | Nil |
| Number of Test Circuit Diagrams | : | Nil |
| Number of Drawings | : | Nil |

(A.R Srinivasan)
**Test Engineer**

(K.Mallikarjunappa)
**Joint Director**


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## ELECTRICAL RESEARCH AND DEVELOPMENT ASSOCIATION

(Accredited by the National Accreditation Board for Testing and Calibration Laboratories, Govt. of India)
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E-mail : erda@erda.org
Web : http://www.erda.org
Certificate No. : T-0071

### TEST REPORT

SHEET 1 of 3

| | | |
|---|---|---|
| **NAME & ADDRESS OF CUSTOMER** | **REPORT NO.** : | RP-1314-013852 |
| Fusion Polymers Industries<br>D-68, HSIDC,<br>Phase VI,<br>Udyog Vihar,<br>Sector-37, Gurgaon,<br>Haryana-122 001 | **DATE** : | 07-11-2013 |
| | **CUSTOMER REF NO.** : | Nil |
| | **DATED** : | 22-10-2013 |
| | **DATE OF SAMPLE RECEIPT** | **DATE OF TESTING** |
| | 24-10-2013 | 30-10-2013 |
| **SAMPLE DESCRIPTION** | **SAMPLE IDENTIFICATION** | |
| 2 core x 1.5 sq.mm copper conductor unarmored fire survival cable.<br>Category: C, W & Z | Printing : FUSION 2CX1.5 SQ. MM. FIRE SURVIVAL 300/500 V C.W.Z. BS-6387<br>Sample ID No. : ERDA-00022082 | |
| **TEST DETAILS** | **TEST SPECIFICATION** | |
| As per sheet 2 of 3 | BS 6387:1994 | |

**REMARK :** The sample conforms to the requirement for all the mentioned tests.

PREPARED BY CHECKED BY APPROVED BY

**NOTE:**
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Fax : +91 (0265) 2638382
E-mail : erda@erda.org
Web : http://www.erda.org
Certificate No. : T-0071

### TEST REPORT

SHEET 1 of 3

| | | |
|---|---|---|
| **NAME & ADDRESS OF CUSTOMER** | **REPORT NO.** : | RP-1314-002730 |
| Fusion Polymers Industries,<br>D-68, HSIDC, Phase-VI,<br>Udyog Vihar, Sector-37,<br>Gurgaon-122 001 (Haryana). | **DATE** : | 10-06-2013 |
| | **CUSTOMER REF NO.** : | Nil |
| | **DATED** : | 11-05-2013 |
| | **DATE OF SAMPLE RECEIPT** | **DATE OF TESTING** |
| | 30-05-2013 | 07-06-2013 |
| **SAMPLE DESCRIPTION** | **SAMPLE IDENTIFICATION** | |
| 2 Core x 1.5 sq.mm stranded copper conductor, orange colour outer sheathed, armoured fire survival cable.<br>Voltage grade : 1100 V | Printing: FUSION POLYMERS 2C X 1.5 SQ mm. FIRE SURVIVAL ARMOURED CABLE 1100 VOLTS CONFIRMING TO BS 7846-2009<br>ERDA ID No: ERDA-00009146 | |
| **TEST DETAILS** | **TEST SPECIFICATION** | |
| As per sheet 2 of 3 | BS 6387:1994 | |

**REMARK :** The sample conforms to the requirement for all the mentioned tests.

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E-mail : erda@erda.org
Web : http://www.erda.org
Certificate No. : T-0071

### TEST REPORT

SHEET 1 of 3

| | | |
|---|---|---|
| **NAME & ADDRESS OF CUSTOMER** | **REPORT NO.** : | RP-1314-013852-1 |
| Fusion Polymers Industries<br>D-68, HSIDC,<br>Phase VI,<br>Udyog Vihar,<br>Sector-37, Gurgaon,<br>Haryana-122 001 | **DATE** : | 28-11-2013 |
| | **CUSTOMER REF NO.** : | Nil |
| | **DATED** : | 22-10-2013 |
| | **DATE OF SAMPLE RECEIPT** | **DATE OF TESTING** |
| | 24-10-2013 | 11-11-2013 |
| **SAMPLE DESCRIPTION** | **SAMPLE IDENTIFICATION** | |
| 3 core x 16 sq.mm copper conductor armored fire survival cable.<br>Category: C, W & Z<br>Voltage Grade : 1100 Volts | Printing : FUSION POLYMERS 3CX16 SQ. mm. ARMOURED FIRE SURVIVAL CABLE CONFORMING TO BS 7846-2009, BS 6387 CWZ<br>Sample ID No. : ERDA-00022083 | |
| **TEST DETAILS** | **TEST SPECIFICATION** | |
| As per sheet 2 of 3 | BS 6387:1994 | |

**REMARK :** The sample conforms to the requirement for all the mentioned tests.

PREPARED BY CHECKED BY APPROVED BY

**NOTE:**
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TÜV TÜV Rheinland Group

# CERTIFICATE

**The Certification Body for Quality Management Systems of TÜV Rheinland India Pvt. Ltd.**

certifies in accordance with
TÜV Rheinland Group procedures that

## Fusion Polymers Industries

**D-68, HSIDC, Phase-VI, Udyog Vihar, Gurgaon – 122 001, Haryana, India**

has established and applies a quality management system for

**Manufacture of PVC Insulated Wire & Cables**

An audit was performed, Report No. 000585
Proof has been furnished that the requirements according to

**DIN EN ISO 9001: 2000**

are fulfilled.
The certificate is valid until 2009-08-01
Certificate Registration No. **01 100 000585**

SURRENDER

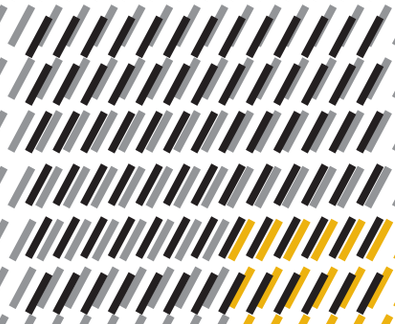
Bangalore, 2006-08-02

The validity of this certificate is subject to timely completion of Surveillance audits as agreed in the Contract. The Validity of the Certificate can be verified under WWW.tuv.com with the Identification No. 9105037189

The certification Body of TÜV Rheinland India Pvt. Ltd.

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