



4

FIRE RESISTANT SAFETY CABLES

**omerin**  
LES CABLES DE L'EXTREME

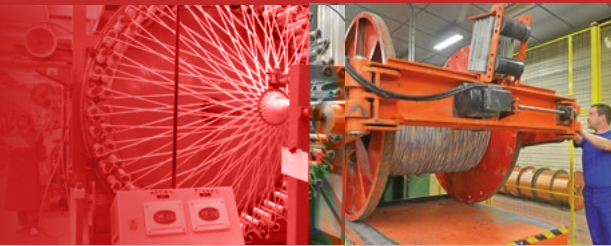


- The world's leading manufacturer of silicone-insulated wires and cables
- Europe's leading manufacturer of glass-yarn braids
- France's leading manufacturer of fire safety cables

**The Omerin group has been producing electrical cables for extreme conditions since 1959**

**At Omerin, we use our know-how and technology to develop increasingly high-performance products.**

**Our expertise is recognized in over 120 countries.**



Omerin offers a wide range of high-performance products covering a large number of applications in very diverse industries, including the electrothermal construction, electromechanical, chemical, nuclear energy, railway, automotive, naval, aerospace, heavy industry, power plant and other sectors. Our product range is further extended by varnished, impregnated and treated braided insulating sleeveings, door seals for ovens, fireproof sleeveings, thermocouple, extension and compensation cables as well as industrial braids.



### **Men and women at your service**

The technical expertise of our teams is at your disposal, providing responses and solutions to all your requirements.

Our Methods, Quality and Research and Development Departments work permanently together with the aim of constantly improving our products and processes.

All our staff subscribe to this approach with their involvement and constant self-checking at all stages of production.

#### **List of all the available catalogues:**

**HIGH TEMPERATURE WIRES AND CABLES FOR THE GENERAL MARKET**

1

**SECTION I: CROSS LINKED ELASTOMERS**

**HIGH TEMPERATURE WIRES AND CABLES FOR THE GENERAL MARKET**

2

**SECTION II: FLUOROPOLYMERS AND THERMOPLASTICS**

**HIGH TEMPERATURE WIRES AND CABLES FOR THE GENERAL MARKET**

3

**SECTION III: COMPOSITE INSULATIONS**

**FIRE RESISTANT SAFETY CABLES**

4

**CABLE SOLUTIONS FOR ROLLING STOCK**

5

**CABLES FOR POWER STATIONS AND HIGH-RISK SITES**

6

**MARINE CABLES**

7

**PYROMETRY CABLES**

8

**BRAIDED INSULATING SLEEVINGS**

9

**HIGH TEMPERATURE MEDIUM VOLTAGE POWER CABLES**

10

**CABLE SOLUTIONS FOR AUTOMOTIVE AND E-MOBILITY**

11

**PACKAGING AND TECHNICAL DATA**

Ultimately, this catalogue is the result of the passionate endeavours of an entire team, who have displayed great talent in writing it for you.

It is designed to be a simple and concise working tool for you, serving as a reference document that is able to meet the majority of your needs.

This catalogue, as well as ten others from our collection are available on line with real time updates and much more information at

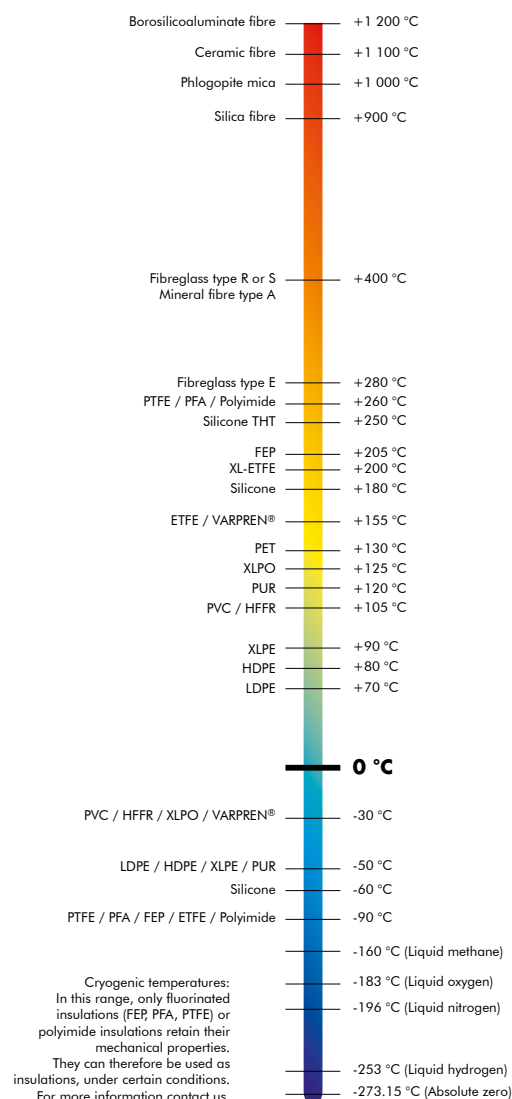
**[www.omerin.com](http://www.omerin.com)**

**All the trademarks listed below are registered trademarks of the OMERIN Group.**

|                       |   |
|-----------------------|---|
| <b>BIO-HABITAT®</b>   | Wires and cables for a home without electromagnetic interference  |
| <b>CERAFIL®</b>       | Miniature ceramic insulated wires for very high temperatures      |
| <b>COAXRAIL®</b>      | Coaxial cables for railway industry                               |
| <b>COAXTHERM®</b>     | High temperature coaxial cables                                   |
| <b>COUPLIX®</b>       | Pyrometry cables (thermocouples, extension, compensation cables)  |
| <b>DATARAIL®</b>      | Data cables for the railway industry                              |
| <b>ELECTROAIR®</b>    | Aerospace & Defence wires and cables                              |
| <b>ENERSYL®</b>       | Electrical cables for power station and high risk sites           |
| <b>FLEXBAT®</b>       | Extra flexible battery cables                                     |
| <b>LUMIPLAST®</b>     | Wires and cables for lighting systems                             |
| <b>METALTRESSE®</b>   | High performance metallic braids                                  |
| <b>MINOROC®</b>       | Very high tensile strength synthetic cables                       |
| <b>MULTIMAX®</b>      | Power, control and instrumentation cables for the marine industry |
| <b>MULTI-VX®</b>      | Hybrid data and power cables                                      |
| <b>ODIOSIS®</b>       | Sound, amplification and loudspeaker cables                       |
| <b>OILPLAST®</b>      | Cables for industrial environments and intrinsically safe system  |
| <b>OMBILIFLEX®</b>    | High performance special multi-function cables                    |
| <b>PLASTHERM®</b>     | Special thermoplastic insulated wires and cables                  |
| <b>POWER CONNECT®</b> | High performance power cords                                      |
| <b>PROFIPLAST®</b>    | Thermoplastic insulated wires and cables                          |
| <b>PYRISOL®</b>       | Fire resistant power cables for safety circuits                   |
| <b>PYRITEL®</b>       | Fire resistant communication cables for safety circuits           |
| <b>SILIBOX®</b>       | Wire and cables cardboard box packaging system                    |
| <b>SILICABLE®</b>     | Special high temperature wires and cables                         |
| <b>SILICOUL®</b>      | Low and medium voltage class H (180°C) power cables               |
| <b>SILIFLAM®</b>      | Very high safety cables for extreme temperatures                  |
| <b>SILIFLON®</b>      | Fluoropolymer insulated high temperature wires and cables         |
| <b>SILIGAIN®</b>      | Braided insulating sleeveings                                     |
| <b>SILIRAD®</b>       | Electron beam cross-linked cables                                 |
| <b>SILITUBE®</b>      | Braided or extruded tubes   |
| <b>SOLARPLAST®</b>    | Power cables for photovoltaic solar panels                        |
| <b>SONDIX®</b>        | Platinum resistance temperature sensors connection cables         |
| <b>SPIRFLEX®</b>      | High performance spiral cables                                    |
| <b>TEXALARM®</b>      | Cables for safety systems and fire alarms                         |
| <b>TS CABLES®</b>     | Coaxial and data cables   |
| <b>TS COM 900®</b>    | Telephonic cables for very speed reception                        |
| <b>TS LAN®</b>        | Copper LAN cables   |
| <b>TWINLINK®</b>      | High temperature controlled impedance twisted pair cables         |
| <b>TWINPLAST®</b>     | Extra flexible cables for battery chargers or jump starters       |
| <b>VARPREN®</b>       | Wires and cables with special cross-linked Varpren® insulation    |
| <b>VEROX®</b>         | Fiberglass braided seals  |
| <b>VIDEOCOAX®</b>     | Analog and digital video cables                                   |



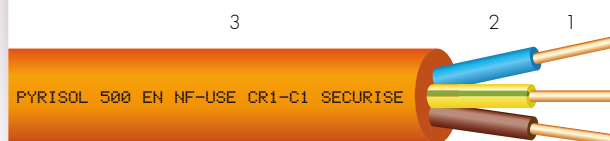
## Thermal classification of insulations



# Contents

## FIRE RESISTANT SAFETY CABLES

| FT No.      | PRODUCT REFERENCE             | PAGE |
|-------------|-------------------------------|------|
| <b>4101</b> | PYRISOL 500 EN CR1-C1         | 4    |
| <b>4102</b> | PYRITEL 100 EN CR1-C1         | 5    |
| <b>4103</b> | PYRISOL 500 ENA CR1-C1        | 6    |
| <b>4104</b> | PYRISOL 500 BEL               | 7    |
| <b>4105</b> | PYRITEL 100 BEL               | 8    |
| <b>4106</b> | SILIFLAM 500 TX-K CR1-C1      | 9    |
| <b>4107</b> | SILIFLAM 500 TX-K BE CR1-C1   | 10   |
| <b>4108</b> | SILIFLAM 500 TEL-EI/EG CR1-C1 | 11   |

FIRE RESISTANT  
SAFETY CABLESPYRISOL® 500 EN  
CR1-C1

- 1 • Solid or stranded bare copper core, class 1 or 2 as per IEC 60228.
- 2 • EI2 fire-resistant elastomer insulation.
- 3 • Outer sheath in halogen-free flame-retardant polyolefine.

## Approvals - standards

- Fire-resistant as per NF C 32-070 CR1 test (voltage 300/500 V).
- Secured cable as per test report EFFECTIS no. 11-H-304-A (except PYRISOL 500 E).
- Fire retardant as per NF C 32-070 test C1, IEC 60332-3-22 and IEC 60332-3-24.
- Flame retardant as per NF C 32-070 test C2 and IEC 60332-1-2.
- Halogen free as per IEC 60754-1.
- No smoke corrosiveness as per IEC 60754-2.
- Low smoke opacity as per IEC 61034-2.
- Accepted to the NF-USE certification mark as per standards NF C 32-070 and NF C 32-310.

Characteristics  
General

- Rated voltage: 300/500 V.
- Maximum core temperature: +90°C.
- Minimum bending radius: 10 x diameter.

## Standard products

- Outer sheath: orange.

## Applications

- Fire safety circuits in public access or high-rise buildings.
- U30 of the ERP safety regulation validated by the French Central Safety Commission of 6 March 2014.

*PYRISOL 5000 EN cables will be installed in compliance with the regulations and the installation standard in force (NFC 15-100).*

*Special arrangements must be made based on outside influences.*

*In particular, in an unsheltered outside installation, these cables must be protected from weather conditions and direct sunlight by being run in sleeves, wireway or cowl.*

*PYRISOL 500 EN cables are not designed to be buried or for permanent or temporary immersion.*

## Conducting core/sheath\*

| Nominal cross-section (mm²) | Outside diameter (mm) |
|-----------------------------|-----------------------|
| 1 x 1.5(1)                  | 4.5                   |
| 1 x 2.5(1)                  | 5.2                   |
| 1 x 4(1)                    | 5.8                   |
| 1 x 6(1)                    | 6.5                   |
| 1 x 10                      | 8.2                   |
| 1 x 16                      | 9.4                   |
| 1 x 25                      | 10.5                  |
| 1 x 35                      | 11.9                  |
| 1 x 50                      | 13.9                  |
| 1 x 70                      | 15.3                  |
| 1 x 95                      | 17.6                  |
| 1 x 120                     | 19.2                  |
| 1 x 150                     | 21.3                  |
| 1 x 185                     | 23.9                  |
| 1 x 240                     | 26.6                  |
| 1 x 300                     | 30.0                  |
| 1 x 400                     | 34.0                  |

## Conducting core/sheath\*

| Nominal cross-section (mm²) | Outside diameter (mm) |
|-----------------------------|-----------------------|
| 2 x 1.5                     | 6.9                   |
| 3 x 1.5                     | 7.4                   |
| 4 x 1.5                     | 8.3                   |
| 5 x 1.5                     | 9.3                   |
| 7 x 1.5                     | 10.8                  |
| 12 x 1.5                    | 14.5                  |
| 19 x 1.5                    | 17.4                  |
| 24 x 1.5(1)                 | 22.0                  |
| 27 x 1.5(1)                 | 22.5                  |
| 37 x 1.5(1)                 | 24.7                  |
| 2 x 2.5                     | 8.2                   |
| 3 x 2.5                     | 8.7                   |
| 4 x 2.5                     | 9.7                   |
| 5 x 2.5                     | 11.0                  |
| 7 x 2.5                     | 12.6                  |
| 12 x 2.5                    | 16.3                  |
| 19 x 2.5                    | 19.4                  |
| 24 x 2.5(1)                 | 25.9                  |
| 27 x 2.5(1)                 | 26.1                  |
| 37 x 2.5(1)                 | 29.2                  |
| 2 x 4                       | 9.8                   |
| 3 x 4                       | 10.4                  |
| 4 x 4                       | 11.6                  |
| 5 x 4                       | 13.0                  |
| 7 x 4                       | 14.6                  |
| 2 x 6                       | 11.8                  |
| 3 x 6                       | 12.8                  |
| 4 x 6                       | 14.1                  |
| 5 x 6                       | 15.7                  |
| 7 x 6(1)                    | 19.0                  |

## Conducting core/sheath\*

| Nominal cross-section (mm²) | Outside diameter (mm) |
|-----------------------------|-----------------------|
| 2 x 10                      | 15.2                  |
| 3 x 10                      | 16.2                  |
| 4 x 10                      | 17.9                  |
| 5 x 10                      | 20.0                  |
| 7 x 10(1)                   | 23.0                  |
| 2 x 16                      | 17.2                  |
| 3 x 16                      | 18.3                  |
| 4 x 16                      | 20.5                  |
| 5 x 16                      | 22.7                  |
| 2 x 25                      | 20.0                  |
| 3 x 25                      | 21.5                  |
| 4 x 25                      | 23.9                  |
| 5 x 25                      | 26.6                  |
| 2 x 35                      | 22.4                  |
| 3 x 35                      | 24.1                  |
| 4 x 35                      | 26.8                  |
| 5 x 35                      | 29.9                  |
| 2 x 50                      | 26.2                  |
| 3 x 50                      | 28.2                  |
| 4 x 50                      | 31.3                  |
| 5 x 50                      | 35.0                  |
| 2 x 70                      | 28.8                  |
| 3 x 70                      | 30.9                  |
| 4 x 70                      | 34.3                  |
| 2 x 95                      | 33.5                  |
| 3 x 95                      | 36.0                  |

OMERIN division silisol ✓

BP 87 - ZI du Devey - F 42000 Saint-Etienne  
Tel. +33 (0)4 77 81 36 00 - Fax +33 (0)4 77 81 31 82  
silisol@omerin.com

Multi-conductor cables with an earth wire are identified by the symbol G in the place of the "x" (ex: 3G 1.5 mm²).

\* Nominal values.

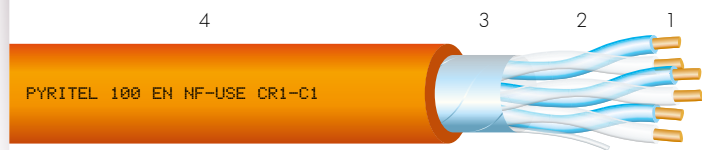
(1) Outer brick red sheath in fire-resistant elastomer: reference PYRISOL 500 E.

[www.omerin.com](http://www.omerin.com)

The information provided in this technical data sheet is indicative and may be modified without prior notice, laying, wiring and electrical conditions and the environment of the cable can not be fully considered in our studies. In no way the company OMERIN shall be held responsible for any incidents in the case of inappropriate uses, particularly in the case of wiring conditions that do not respect the good practice and the standards in force.

For an optimum use of the cables produced by our company, we recommend testing in real conditions. Our sales department is available for a possible provision of samples, and/or for the conditions of a complete study in our laboratories.

© Registered trademark of the OMERIN Group. Drawings and photos are not contractual. Reproduction is prohibited without the prior agreement of OMERIN.

FIRE RESISTANT  
SAFETY CABLESPYRITEL® 100 EN  
CR1-C1

- 1 • Solid bare copper core Ø 0.9 mm.
- 2 • E12 fire-resistant elastomer insulation.
- 3 • Electrical shielding: metallic tape + continuity wire.
- 4 • Outer sheath in halogen-free flame-retardant polyolefine (T) or in E12 fire-resistant elastomer (E).

## Approvals - standards

- Fire-resistant as per NF C 32-070 CR1 test.
- Fire-resistant as per IEC 60331-21, 90 minutes.
  - Fire retardant as per NF C 32-070 test C1, IEC 60332-3-22 and IEC 60332-3-24.
- Flame retardant as per NF C 32-070 test C2 and IEC 60332-1-2.
  - Halogen free as per IEC 60754-1.
- No smoke corrosiveness as per IEC 60754-2.
  - Low smoke opacity as per IEC 61034-2.
- Accepted to the NF-USE certification mark as per standards NF C 32-070 and NF C 32-310.

Characteristics  
General

- Rated voltage: 100/170 V.
- Maximum core temperature: +90 °C.
- Minimum bending radius: 10 x diameter.

## Standard products

- Outer sheath: orange.

## Applications

- Fire safety circuits in public-access or high-rise buildings.

## Options

- Individual and general shielding: reference SILIFLAM 500 TEL EI/EG.

PYRITEL 100 EN cables will be installed in compliance with the regulations and the installation standard in force (NFC 15-100). Special arrangements must be made based on outside influences.

In particular, in an unsheltered outside installation, these cables must be protected from weather conditions and direct sunlight by being run in sleeves, wireway or cowl.

PYRITEL 100 EN cables are not designed to be buried or for permanent or temporary immersion.

| Conductor*      |                      |                  | Sheath*               |      |        |
|-----------------|----------------------|------------------|-----------------------|------|--------|
| Number of pairs | Cross-sections (mm²) | Radial thickness | Outside diameter (mm) | Type | Colour |
| 1               | 0.636                | 0.5              | 5.0 8.0               | T    |        |
| 2(1)            | 0.636                | 0.5              | 7.0 11.0              | T    |        |
| 3               | 0.636                | 0.5              | 7.5 11.5              | T    |        |
| 5               | 0.636                | 0.5              | 9.0 14.0              | T    |        |
| 7               | 0.636                | 0.5              | 12.0 14.5             | T    |        |
| 10              | 0.636                | 0.5              | 14.0 17.0             | T    |        |
| 15              | 0.636                | 0.5              | 16.0 19.0             | T    |        |
| 21              | 0.636                | 0.5              | 20.0 28.0             | E    |        |
| 30              | 0.636                | 0.5              | 25.0 32.0             | E    |        |
| 42              | 0.636                | 0.5              | 32.0 36.0             | E    |        |
| 56              | 0.636                | 0.5              | 33.0 40.0             | E    |        |

## Colour of conductors\*

| Number of pairs | Conductor 1 | Conductor 2             |
|-----------------|-------------|-------------------------|
| 1               | White       | Blue                    |
| 2 to 5          | White + no. | Blue + no.              |
| 7 to 56         | White + no. | Blue or two-colour pair |

\* Nominal values.

(1) Assembled as a quad

OMERIN division silisol

BP 87 - ZI du Devey - F 42000 Saint-Etienne  
Tel. +33 (0)4 77 81 36 00 - Fax +33 (0)4 77 81 31 82  
silisol@omerin.com

**omerin**  
LES CABLES DE L'EXTREME

[www.omerin.com](http://www.omerin.com)

The information provided in this technical data sheet is indicative and may be modified without prior notice, laying, wiring and electrical conditions and the environment of the cable can not be fully considered in our studies. In no way the company OMERIN shall be held responsible for any incidents in the case of inappropriate uses, particularly in the case of wiring conditions that do not respect the good practice and the standards in force.

For an optimum use of the cables produced by our company, we recommend testing in real conditions. Our sales department is available for a possible provision of samples, and/or for the conditions of a complete study in our laboratories.

© Registered trademark of the OMERIN Group. Drawings and photos are not contractual. Reproduction is prohibited without the prior agreement of OMERIN.

FIRE RESISTANT  
SAFETY CABLESPYRISOL® 500 ENA  
CR1-C1

## Approvals - standards

- Fire-resistant as per NF C 32-070 CR1 test (voltage 300/500 V).
- Fire retardant as per NF C 32-070 test C1, IEC 60332-3-22 and IEC 60332-3-24.
- Flame retardant as per NF C 32-070 test C2 and IEC 60332-1-2.
- Halogen free as per IEC 60754-1.
- No smoke corrosiveness as per IEC 60754-2.
- Low smoke opacity as per IEC 61034-2.
- Accepted to the NF-USE certification mark as per standards NF C 32-070 and NF C 32-310.

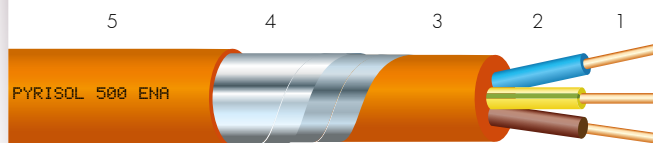
## Applications

- Fire safety circuits in public-access and high-rise buildings.

PYRISOL 500 ENA cables in compliance with the regulations and the installation standard in force (NFC 15-100). Special arrangements must be made based on outside influences.

In particular, in an unsheltered outside installation, these cables must be protected from weather conditions and direct sunlight by being run in sleeveings, wireway or cowl.

PYRISOL 500 ENA cables are not designed to be buried or for permanent or temporary immersion.



- 1 • Solid or stranded bare copper core, class 1 or 2 as per IEC 60228.
- 2 • EI2 fire-resistant elastomer insulation.
- 3 • Inner sheath in halogen-free flame-retardant polyolefine.
- 4 • Double steel tape.
- 5 • Outer sheath in halogen-free flame-retardant polyolefine.

## Characteristics

## General

- Rated voltage: 300/500 V.
- Maximum core temperature: +90 °C.
- Minimum bending radius: 20 x diameter.

## Standard products

- Outer sheath: orange.

## Conducting core/sheath\*

| Cross-section<br>(mm²) | Outside<br>diameter<br>(mm) |
|------------------------|-----------------------------|
| 2 x 1.5                | 9.7                         |
| 3 x 1.5                | 10.2                        |
| 4 x 1.5                | 11.1                        |
| 5 x 1.5                | 12.3                        |
| 2 x 2.5                | 11.0                        |
| 3 x 2.5                | 11.5                        |
| 4 x 2.5                | 13.2                        |
| 5 x 2.5                | 14.0                        |
| 2 x 4                  | 12.4                        |
| 3 x 4                  | 13.0                        |
| 4 x 4                  | 14.4                        |
| 5 x 4                  | 16.0                        |
| 2 x 6                  | 15.2                        |
| 3 x 6                  | 15.8                        |
| 4 x 6                  | 17.1                        |
| 5 x 6                  | 19.8                        |
| 2 x 10                 | 18.6                        |
| 3 x 10                 | 19.4                        |
| 4 x 10                 | 21.1                        |
| 5 x 10                 | 23.4                        |
| 2 x 16                 | 20.4                        |
| 3 x 16                 | 21.5                        |
| 4 x 16                 | 23.9                        |
| 5 x 16                 | 26.1                        |
| 2 x 25                 | 23.4                        |
| 3 x 25                 | 24.9                        |
| 4 x 25                 | 27.5                        |
| 5 x 25                 | 30.4                        |

## Conducting core/sheath\*

| Cross-section<br>(mm²) | Outside<br>diameter<br>(mm) |
|------------------------|-----------------------------|
| 2 x 35                 | 26.2                        |
| 3 x 35                 | 27.7                        |
| 4 x 35                 | 30.4                        |
| 5 x 35                 | 33.5                        |
| 2 x 50                 | 30.6                        |
| 3 x 50                 | 32.0                        |
| 4 x 50                 | 35.1                        |
| 5 x 50                 | 40.0                        |
| 2 x 70                 | 35.2                        |
| 3 x 70                 | 34.7                        |
| 2 x 95                 | 37.6                        |
| 1 x 6                  | 9.1                         |
| 1 x 10                 | 11.7                        |
| 1 x 16                 | 12.9                        |
| 1 x 25                 | 14.2                        |
| 1 x 35                 | 15.8                        |
| 1 x 50                 | 17.4                        |
| 1 x 70                 | 19.0                        |
| 1 x 95                 | 21.3                        |
| 1 x 120                | 23.3                        |
| 1 x 150                | 25.2                        |
| 1 x 185                | 27.7                        |
| 1 x 240                | 31.3                        |
| 1 x 300                | 34.4                        |

Multi-conductor cables with an earth wire are identified by the symbol G in the place of the "x" (ex: 3G 1.5 mm²).

\* Nominal values.

OMERIN division silisol ✓

BP 87 - ZI du Devey - F 42000 Saint-Etienne  
Tel. +33 (0)4 77 81 36 00 - Fax +33 (0)4 77 81 31 82  
silisol@omerin.com

**omerin**  
LES CABLES DE L'EXTREME

[www.omerin.com](http://www.omerin.com)

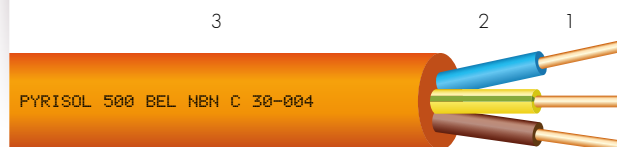
The information provided in this technical data sheet is indicative and may be modified without prior notice, laying, wiring and electrical conditions and the environment of the cable can not be fully considered in our studies. In no way the company OMERIN shall be held responsible for any incidents in the case of inappropriate uses, particularly in the case of wiring conditions that do not respect the good practice and the standards in force.

For an optimum use of the cables produced by our company, we recommend testing in real conditions. Our sales department is available for a possible provision of samples, and/or for the conditions of a complete study in our laboratories.

® Registered trademark of the OMERIN Group. Drawings and photos are not contractual. Reproduction is prohibited without the prior agreement of OMERIN.

FIRE RESISTANT  
SAFETY CABLES

## PYRISOL® 500 BEL



## Approvals - standards

- Compliant with standard NF C 30-004:
  - > F1: Non propagateur de la flamme (NBN EN 60332-1-2).
  - > F2: Fire retardant (NBN EN 50266-2-4).
  - > SD: Smoke density (NBN EN 61034).
  - > SA: Gas acidity (NBN EN 60754-2).
  - > FR1: Fire resistant (NBN EN 50200/NBN EN 250362).
  - > FR2: Fire-resistant (NBN 713-020/A3).
- Range approved by the Belgian Fire Safety Institute (ISIB).

## Goedkeuringen / Normen

- Conform de norm NBN C 30-004 :
  - > F1: Niet vlamverspreidend (NBN EN 60332-1-2).
  - > F2: Niet brandverspreidend (NBN EN 50266-2-4).
  - > SD: Dichtheid van de rook (NBN EN 61034).
  - > SA : Zuurheid van de gasen (NBN EN 60754-2).
  - > FR1: Vuurbestendig (NBN EN 50200 / NBN EN 50362).
  - > FR2: Vuurbestendig (NBN 713-020/A3);
  - Gamma goedgekeurd door het Instituut voor Brandveiligheid (ISIB).

## Applications

- Vital circuits as per the Royal decree of 25 April 2013.

## Toepassingen

- Vitale stroombanen volgens het koninklijk besluit van 25 april 2013.

## Markings

OMERIN – PYRISOL 500 BEL 300/500V <cross-section>  
NBN C 30-004 F1 F2 SD SA FR1 FR2

## Markering

OMERIN – PYRISOL 500 BEL 300/500V <doorsnede>  
NBN C 30-004 F1 F2 SD SA FR1 FR2

Special arrangements must be made based on outside influences.  
In particular, in an unsheltered outside installation, these cables must be protected from weather conditions and direct sunlight by being run in sleeveings, wireway or cowl. PYRISOL 500 BEL cables are not designed to be buried or for permanent or temporary immersion.

OMERIN division silisol ✓

BP 87 - ZI du Devey - F 42000 Saint-Etienne  
Tel. +33 (0)4 77 81 36 00 - Fax +33 (0)4 77 81 31 82  
silisol@omerin.com

## Characteristics

- Rated voltage: 300/500 V.
- Maximum core temperature: +90°C.
- Minimum bending radius: 10 x diameter.

## Standard products

- Outer sheath: orange.
- Colour identification of conductors:
  - 1 conductor: black or white.
  - 2 conductors: blue-brown.
  - 3 conductors: brown-black-grey or green/yellow-blue-brown.
  - 4 conductors: blue-brown-black-grey or green/yellow-brown-black-grey.
  - 5 conductors: blue-brown-black-grey-black or green/yellow-blue-brown-black-grey.
  - 7 conductors: numbered conductors or green/yellow+numbered conductors.

## Eigenschappen

- Toegekende spanning : 300/500 V.
- Maximale temperatuur van de kern : + 90°C.
- Minimale buigingsstraal : 10 x buitendiameter.

## Standaard producties

- Buitenmantel : oranje.
- Kleuren geleiders :
  - 1 geleider : zwart of wit.
  - 2 geleiders : blauw-bruin.
  - 3 geleiders : bruin-zwart-grijs of geel/groen-blauw-bruin.
  - 4 geleiders : blauw-bruin-zwart-grijs of geel/groen-bruin-zwart-grijs.
  - 5 geleiders : blauw-bruin-zwart-grijs-zwart of geel/groen-blauw-bruin-zwart-grijs.
  - 7 geleiders : genummerde geleiders of geel/groen+genummerde geleiders.

| Nominal cross-section<br>Nominale doorsnede (mm²) | Nominal outside diameter<br>Nominale buitendiameter (mm) | Nominal cross-section<br>Nominale doorsnede (mm²) | Nominal outside diameter<br>Nominale buitendiameter (mm) | Nominal cross-section<br>Nominale doorsnede (mm²) | Nominal outside diameter<br>Nominale buitendiameter (mm) |
|---|--|---|--|---|--|
| 1 x 16 Rf 120                                     | 9.4  | 3 x 1.5 Rf 90                                     | 7.4  | 5 x 1.5 Rf 90                                     | 9.3  |
| 1 x 25 Rf 120                                     | 10.5   | 3 x 2.5 Rf 90                                     | 8.7  | 5 x 2.5 Rf 90                                     | 11.0   |
| 1 x 35 Rf 120                                     | 11.9   | 3 x 4 Rf 90                                       | 10.4   | 5 x 4 Rf 90                                       | 13.0   |
| 1 x 50 Rf 120                                     | 13.9   | 3 x 6 Rf 90                                       | 12.8   | 5 x 6 Rf 90                                       | 15.7   |
| 1 x 70 Rf 120                                     | 15.3   | 3 x 10 Rf 90                                      | 16.2   | 5 x 10 Rf 90                                      | 20.0   |
| 1 x 95 Rf 120                                     | 17.6   | 3 x 16 Rf 90                                      | 18.3   | 5 x 16 Rf 90                                      | 22.7   |
| 1 x 120 Rf 120                                    | 19.2   | 3 x 25 Rf 90                                      | 21.5   | 5 x 25 Rf 90                                      | 26.6   |
| 1 x 150 Rf 120                                    | 21.3   | 3 x 35 Rf 90                                      | 24.1   | 5 x 35 Rf 90                                      | 29.9   |
| 1 x 185 Rf 120                                    | 23.9   | 3 x 50 Rf 90                                      | 28.2   | 5 x 50 Rf 90                                      | 35.0   |
| 1 x 240 Rf 120                                    | 26.6   | 3 x 70 Rf 90                                      | 30.9   |   |  |
| 1 x 300 Rf 120                                    | 30.0   |   |  |   |  |
| 1 x 400 Rf 120                                    | 34.0   |   |  |   |  |
|   |  | 2 x 1.5 Rf 90                                     | 6.9  | 4 x 1.5 Rf 90                                     | 8.3  |
|   |  | 2 x 2.5 Rf 90                                     | 8.2  | 4 x 2.5 Rf 90                                     | 9.7  |
|   |  | 2 x 4 Rf 90                                       | 9.8  | 4 x 4 Rf 90                                       | 11.6   |
|   |  | 2 x 6 Rf 90                                       | 11.8   | 4 x 6 Rf 90                                       | 14.1   |
|   |  | 2 x 10 Rf 90                                      | 15.2   | 4 x 10 Rf 90                                      | 17.9   |
|   |  | 2 x 16 Rf 90                                      | 17.2   | 4 x 16 Rf 90                                      | 20.5   |
|   |  | 2 x 25 Rf 90                                      | 20.0   | 4 x 25 Rf 90                                      | 23.9   |
|   |  | 2 x 35 Rf 90                                      | 22.4   | 4 x 35 Rf 90                                      | 26.8   |
|   |  | 2 x 50 Rf 90                                      | 26.2   | 4 x 50 Rf 90                                      | 31.3   |
|   |  | 2 x 70 Rf 90                                      | 28.8   | 4 x 70 Rf 90                                      | 34.3   |
|   |  |   |  | 7 x 1.5 Rf 90                                     | 10.8   |
|   |  |   |  | 7 x 2.5 Rf 60                                     | 12.6   |
|   |  |   |  | 7 x 4 Rf 60                                       | 14.6   |

Multi-conductor cables with an earth wire are identified by the symbol G in the place of the "x" (ex: 3G 1.5 mm²).  
De multigeleiders met aardingsgeleider worden aangeduid met het symbool "G" in plaats van "x" (vb : 3 G 1.5 mm²).

www.omerin.com

The information provided in this technical data sheet is indicative and may be modified without prior notice, laying, wiring and electrical conditions and the environment of the cable can not be fully considered in our studies. In no way the company OMERIN shall be held responsible for any incidents in the case of inappropriate uses, particularly in the case of wiring conditions that do not respect the good practice and the standards in force.  
For an optimum use of the cables produced by our company, we recommend testing in real conditions. Our sales department is available for a possible provision of samples, and/or for the conditions of a complete study in our laboratories.  
© Registered trademark of the OMERIN Group. Drawings and photos are not contractual. Reproduction is prohibited without the prior agreement of OMERIN.

FIRE RESISTANT  
SAFETY CABLES

## PYRITEL® 100 BEL



## Approvals - standards

- Compliant with standard NBN C 30-004:
  - > F1: Flame retardant (NBN EN 60332-1-2).
  - > F2: Fire retardant (NBN EN 50266-2-4).
  - > SD: Smoke density (NBN EN 61034).
  - > SA: Gas acidity (NBN EN 60754-2).
  - > FR1: Fire resistant (NBN EN 50200/NBN EN 250362).
  - > FR2: Fire-resistant (NBN 713-020/A3).
- Range approved by the Belgian Fire Safety Institute (ISIB).

## Goedkeuringen / Normen

- Conform de norm NBN C 30-004 :
  - > F1: Niet vlamverspreidend (NBN EN 60332-1-2).
  - > F2: Niet brandverspreidend (NBN EN 50266-2-4).
  - > SD: Dichtheid van de rook (NBN EN 61034).
  - > SA : Zuurheid van de gassen (NBN EN 60754-2).
  - > FR1: Vuurbestendig (NBN EN 50200 / NBN EN 250362).
  - > FR2: Vuurbestendig (NBN 713-020/A3).
- Gamma goedgekeurd door het Instituut voor Brandveiligheid (ISIB).

## Applications

- Vital circuits as per the Royal decree of 25 April 2013.

## Toepassingen

- Vitale stroombanen volgens het koninklijk besluit van 25 april 2013.

## Markings

OMERIN – PYRITEL 100 BEL 100/170V  
<cross-section> NBN C 30-004 F1 F2 SD SA FR1  
FR2

## Markering

OMERIN – PYRITEL 100 BEL 100/170V  
<doorsnede> NBN C 30-004 F1 F2 SD SA FR1 FR2

Special arrangements must be made based on outside influences.

In particular, in an unsheltered outside installation, these cables must be protected from weather conditions and direct sunlight by being run in sleeveings, wireway or cowl. PYRITEL 100 BEL cables are not designed to be buried or for permanent or temporary immersion.

OMERIN division siliSol

BP 87 - ZI du Devey - F 42000 Saint-Etienne  
Tel. +33 (0)4 77 81 36 00 - Fax +33 (0)4 77 81 31 82  
siliSol@omerin.com

## Characteristics

- Rated voltage: 100/170 V.
- Maximum core temperature: +90 °C.
- Minimum bending radius: 10 x diameter.

## Standard products

- Outer sheath: orange.

## Eigenschappen

- Toegekende spanning : 100/170 V.
- Maximale temperatuur van de kern : +90°C.
- Minimale buigingstraal : 10 x buitendiameter.

## Standaard producties

- Buitenmantel : oranje.

| Number of pairs<br>Aantal paren | Nominal core diameter<br>Nominale diameter kern | Nominal outside diameter<br>Nominale buitendiameter |      |
|---------------------------------|---|---|------|
| 1                               | 0.9   | Rf 90   | 6.0  |
| 2 (1)                           | 0.9   | Rf 90   | 7.3  |
| 3                               | 0.9   | Rf 90   | 10.0 |
| 5                               | 0.9   | Rf 90   | 12.4 |

Colour of conductors  
Kleuren van de geleiders

| Number of pairs<br>Aantal paren | Conductor 1<br>Geleider 1 | Conductor 2<br>Geleider 2 |
|---------------------------------|---------------------------|---------------------------|
| 1                               | White<br>Wit              | Blue<br>Blauw             |
| 2 to/tot 5                      | White + no.<br>Wit + nr   | Blue + no.<br>Blauw + nr  |

(1) Assembled as a quad  
Samengeslagen als een kwart

[www.omerin.com](http://www.omerin.com)

The information provided in this technical data sheet is indicative and may be modified without prior notice, laying, wiring and electrical conditions and the environment of the cable can not be fully considered in our studies. In no way the company OMERIN shall be held responsible for any incidents in the case of inappropriate uses, particularly in the case of wiring conditions that do not respect the good practice and the standards in force. For an optimum use of the cables produced by our company, we recommend testing in real conditions. Our sales department is available for a possible provision of samples, and/or for the conditions of a complete study in our laboratories.  
® Registered trademark of the OMERIN Group. Drawings and photos are not contractual. Reproduction is prohibited without the prior agreement of OMERIN.

**omerin**  
LES CABLES DE L'EXTREME

FIRE RESISTANT  
SAFETY CABLES**SILIFLAM® 500 TX-K  
CR1-C1**

- 1 • Flexible bare copper core, class 5 as per IEC 60228.
- 2 • EI2 fire-resistant elastomer insulation.
- 3 • Outer sheath in fire-resistant elastomer.

**Approvals - standards**

- Fire-resistant as per NF C 32-070 CR1 test (voltage 300/500 V).
- Fire-resistant as per IEC 60331-21 90 minutes (voltage 600/1000 V).
- Fire retardant as per NF C 32-070 test C1, IEC 60332-3-22 and IEC 60332-3-24.
- Flame retardant as per NF C 32-070 test C2 and IEC 60332-1-2.
- Halogen free as per IEC 60754-1.
- No smoke corrosiveness as per IEC 60754-2.
- Low smoke opacity as per IEC 61034-2.
- Accepted to the NF-USE certification mark as per standards NF C 32-070 and NF C 32-310.

**Characteristics  
General**

- Rated voltage: 300/500 V.
- Maximum core temperature: +90 °C.
- Minimum bending radius: 10 x diameter.

**Standard products**

- Outer sheath: brick red.

**Applications**

- Fire safety circuits in public-access or high-rise buildings.

**Options**

- Electrical shielding: tin-plated copper braid: reference SILIFLAM 500 TX-K BE.
- Solid or stranded bare copper core: reference PYRISOL 500 EN.

*SILIFLAM 500 TX-K cables in compliance with the regulations and the installation standard in force (NFC 15-100). Special arrangements must be made based on outside influences.*

*In particular, in an unsheltered outside installation, these cables must be protected from weather conditions and direct sunlight by being run in sleeves, wireway or cowl.*

*SILIFLAM 500 TX-K cables are not designed to be buried or for permanent or temporary immersion.*

**Conducting core/sheath\***

| Cross-sections<br>(mm <sup>2</sup> ) | Stranding | Outside<br>diameter<br>(mm) |
|--------------------------------------|-----------|-----------------------------|
| 2 x 1.5                              | 30 x 0.25 | 9.6                         |
| 3 x 1.5                              | 30 x 0.25 | 10.2                        |
| 4 x 1.5                              | 30 x 0.25 | 11.1                        |
| 5 x 1.5                              | 30 x 0.25 | 12.3                        |
| 2 x 2.5                              | 50 x 0.25 | 10.8                        |
| 3 x 2.5                              | 50 x 0.25 | 11.5                        |
| 4 x 2.5                              | 50 x 0.25 | 12.8                        |
| 5 x 2.5                              | 50 x 0.25 | 13.6                        |
| 2 x 4                                | 56 x 0.30 | 12.6                        |
| 3 x 4                                | 56 x 0.30 | 13.4                        |
| 4 x 4                                | 56 x 0.30 | 14.5                        |
| 5 x 4                                | 56 x 0.30 | 16.0                        |
| 1 x 6                                | 84 x 0.30 | 5.7                         |
| 2 x 6                                | 84 x 0.30 | 14.0                        |
| 3 x 6                                | 84 x 0.30 | 14.9                        |
| 4 x 6                                | 84 x 0.30 | 16.3                        |
| 5 x 6                                | 84 x 0.30 | 18.0                        |
| 1 x 10                               | 80 x 0.40 | 7.3                         |
| 2 x 10                               | 80 x 0.40 | 17.4                        |
| 3 x 10                               | 80 x 0.40 | 18.5                        |
| 4 x 10                               | 80 x 0.40 | 20.4                        |
| 5 x 10                               | 80 x 0.40 | 22.6                        |

**Conducting core/sheath\***

| Cross-sections<br>(mm <sup>2</sup> ) | Stranding   | Outside<br>diameter<br>(mm) |
|--------------------------------------|-------------|-----------------------------|
| 1 x 16                               | 126 x 0.40  | 8.6                         |
| 2 x 16                               | 126 x 0.40  | 20.2                        |
| 3 x 16                               | 126 x 0.40  | 21.5                        |
| 4 x 16                               | 126 x 0.40  | 23.7                        |
| 5 x 16                               | 126 x 0.40  | 26.3                        |
| 1 x 25                               | 196 x 0.40  | 13.5                        |
| 2 x 25                               | 196 x 0.40  | 24.0                        |
| 3 x 25                               | 196 x 0.40  | 25.6                        |
| 4 x 25                               | 196 x 0.40  | 28.3                        |
| 5 x 25                               | 196 x 0.40  | 31.5                        |
| 1 x 35                               | 276 x 0.40  | 11.6                        |
| 1 x 50                               | 396 x 0.40  | 13.4                        |
| 1 x 70                               | 360 x 0.50  | 15.9                        |
| 1 x 95                               | 485 x 0.50  | 17.9                        |
| 1 x 120                              | 608 x 0.50  | 19.8                        |
| 1 x 150                              | 756 x 0.50  | 22.9                        |
| 1 x 185                              | 944 x 0.50  | 25.0                        |
| 1 x 240                              | 1221 x 0.50 | 27.5                        |

\* Nominal values.

OMERIN division silisol

BP 87 - ZI du Devey - F 42000 Saint-Etienne  
Tel. +33 (0)4 77 81 36 00 - Fax +33 (0)4 77 81 31 82  
silisol@omerin.com

**omerin**  
LES CABLES DE L'EXTREME

[www.omerin.com](http://www.omerin.com)

The information provided in this technical data sheet is indicative and may be modified without prior notice, laying, wiring and electrical conditions and the environment of the cable can not be fully considered in our studies. In no way the company OMERIN shall be held responsible for any incidents in the case of inappropriate uses, particularly in the case of wiring conditions that do not respect the good practice and the standards in force.

For an optimum use of the cables produced by our company, we recommend testing in real conditions. Our sales department is available for a possible provision of samples, and/or for the conditions of a complete study in our laboratories.

® Registered trademark of the OMERIN Group. Drawings and photos are not contractual. Reproduction is prohibited without the prior agreement of OMERIN.

FIRE RESISTANT  
SAFETY CABLES**SILIFLAM®  
500 TX-K BE  
CR1-C1**

- 1 • Flexible bare copper core, class 5 as per IEC 60228.
- 2 • EI2 fire-resistant elastomer insulation.
- 3 • Electrical shielding: copper braid.
- 4 • Outer sheath in fire-resistant elastomer.

**Approvals - standards**

- Fire-resistant as per NF C 32-070 CR1 test (voltage 300/500 V).
- Fire-resistant as per IEC 60331-21 90 minutes (voltage 600/1,000 V).
- Fire retardant as per NF C 32-070 test C1, IEC 60332-3-22 and IEC 60332-3-24.
- Flame retardant as per NF C 32-070 test C2 and IEC 60332-1-2.
- Halogen free as per IEC 60754-1.
- No smoke corrosiveness as per IEC 60754-2.
  - Low smoke opacity as per IEC 61034-2.
- Accepted to the NF-USE certification mark as per standards NF C 32-070 and NF C 32-310.

**Characteristics  
General**

- Rated voltage: 300/500 V.
- Maximum core temperature: +90 °C.
- Minimum bending radius: 10 x diameter.

**Standard products**

- Outer sheath: brick red.

**Applications**

- Fire safety circuits in publicaccess or high-rise buildings.

**Options**

- No electrical shielding: ref. SILIFLAM 500 TX-K BE.
- Solid or stranded bare copper core: reference PYRISOL 500 EN.

*SILIFLAM 500 TX-K BE cables will be installed in compliance with the regulations and the installation standard in force (NFC 15-100). Special arrangements must be made based on outside influences.*

*In particular, in an unsheltered outside installation, these cables must be protected from weather conditions and direct sunlight by being run in sleeveings, wireway or cowl.*

*SILIFLAM 500 TX-K BE cables are not designed to be buried or for permanent or temporary immersion.*

| Conductor*                       |           |                  | Sheath*          |                  |
|----------------------------------|-----------|------------------|------------------|------------------|
| Cross-section (mm <sup>2</sup> ) | Stranding | Radial thickness | Radial thickness | Outside diameter |
| 2 x 1.5                          | 30 x 0.25 | 1.0              | 1.0              | 11.0             |
| 2 x 2.5                          | 50 x 0.25 | 1.1              | 1.1              | 12.5             |
| 2 x 4.0                          | 56 x 0.30 | 1.2              | 1.2              | 14.70            |

\* Nominal values.

OMERIN division silisol

BP 87 - ZI du Devey - F 42000 Saint-Etienne  
Tel. +33 (0)4 77 81 36 00 - Fax +33 (0)4 77 81 31 82  
silisol@omerin.com

**omerin**  
LES CABLES DE L'EXTREME

[www.omerin.com](http://www.omerin.com)

The information provided in this technical data sheet is indicative and may be modified without prior notice, laying, wiring and electrical conditions and the environment of the cable can not be fully considered in our studies. In no way the company OMERIN shall be held responsible for any incidents in the case of inappropriate uses, particularly in the case of wiring conditions that do not respect the good practice and the standards in force.  
For an optimum use of the cables produced by our company, we recommend testing in real conditions. Our sales department is available for a possible provision of samples, and/or for the conditions of a complete study in our laboratories.

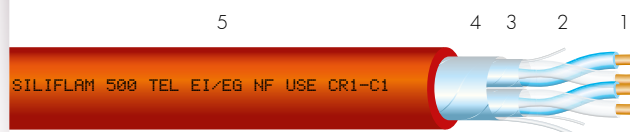
© Registered trademark of the OMERIN Group. Drawings and photos are not contractual. Reproduction is prohibited without the prior agreement of OMERIN.

FIRE RESISTANT  
SAFETY CABLES

# SILIFLAM®

## 500 TEL-EI/EG

### CR1-C1



- 1 • Solid bare copper core Ø 0.9 mm.
- 2 • EI2 fire-resistant elastomer insulation.
- 3 • Electrical shielding: metallic tape + continuity wire.
- 4 • Electrical shielding: metallic tape + continuity wire.
- 5 • Outer sheath in fire-resistant elastomer.

### Approvals - standards

- Fire-resistant as per NF C 32-070 CR1 test.
- Fire-resistant as per IEC 60331-21, 90 minutes.
- Fire retardant as per NF C 32-070 test C1, IEC 60332-3-22 and IEC 60332-3-24.
- Flame retardant as per NF C 32-070 test C2 and IEC 60332-1-2.
- Halogen free as per IEC 60754-1.
- No smoke corrosiveness as per IEC 60754-2.
- Low smoke opacity as per IEC 61034-2.
- Admitted to the NF-USE certification mark as per standards NF C 32-070 and NF C 32-310.

### Characteristics General

- Rated voltage: 100/170 V.
- Maximum core temperature: +90 °C.
- Minimum bending radius: 10 x diameter.

### Standard products

- Outer sheath: brick red.

### Applications

- Fire safety circuits in public-access or high-rise buildings.

### Options

- General shielding only: reference PYRITEL 100 EN.

Other stranding: contact us.

*SILIFLAM 500 TEL-EI/EG cables will be installed in compliance with the regulations and the installation standard in force (NFC 15-100).*

*Special arrangements must be made based on outside influences.*

*In particular, in an unsheltered outside installation, these cables must be protected from weather conditions and direct sunlight by being run in sleeveings, wireway or cowl.*

*SILIFLAM 500 TEL-EI/EG cables are not designed to be buried or for permanent or temporary immersion.*

#### Conductor\*

| Number of pairs | Cross-sections | Radial thickness (mm) |
|-----------------|----------------|-----------------------|
| 2               | 0.636          | 0.7                   |
| 3               | 0.636          | 0.7                   |
| 5               | 0.636          | 0.7                   |
| 7               | 0.636          | 0.7                   |
| 10              | 0.636          | 0.7                   |
| 15              | 0.636          | 0.7                   |
| 21              | 0.636          | 0.7                   |
| 30              | 0.636          | 0.7                   |

#### Sheath\*

| Radial thickness (mm) | Outside diameter (mm) |       |
|-----------------------|-----------------------|-------|
|                       | Min.                  | Max.  |
| 1.0                   | 9.7                   | 11.60 |
| 1.2                   | 10.8                  | 12.80 |
| 1.4                   | 13.3                  | 15.60 |
| 1.6                   | 14.9                  | 17.40 |
| 1.8                   | 19.2                  | 22.10 |
| 2.0                   | 22.6                  | 25.80 |
| 2.2                   | 25.4                  | 29.00 |
| 2.4                   | 30.4                  | 34.50 |

\* Nominal values.

#### Colour of conductors

Conductor 1\*

Conductor 2\*

Light blue

White + no.

\* of each pair.

OMERIN division silisol

BP 87 - ZI du Devey - F 42000 Saint-Etienne  
Tel. +33 (0)4 77 81 36 00 - Fax +33 (0)4 77 81 31 82  
silisol@omerin.com

**omerin**  
LES CABLES DE L'EXTREME

[www.omerin.com](http://www.omerin.com)

The information provided in this technical data sheet is indicative and may be modified without prior notice, laying, wiring and electrical conditions and the environment of the cable can not be fully considered in our studies. In no way the company OMERIN shall be held responsible for any incidents in the case of inappropriate uses, particularly in the case of wiring conditions that do not respect the good practice and the standards in force.

For an optimum use of the cables produced by our company, we recommend testing in real conditions. Our sales department is available for a possible provision of samples, and/or for the conditions of a complete study in our laboratories.

® Registered trademark of the OMERIN Group. Drawings and photos are not contractual. Reproduction is prohibited without the prior agreement of OMERIN.

## Notes

[illegible]





**omerin**  
division principale

Headquarters and division principale  
Zone industrielle - 63600 Ambert - France

Tel. +33 (0)4 73 82 50 00

Fax +33 (0)4 73 82 50 10

e-mail: omerin@omerin.com

**omerin**  
division silisol

division silisol  
B.P. 87 - 11, allée du Couchant Z.I. du Devey  
42010 Saint-Etienne Cedex 2 - France

Tel. +33 (0)4 77 81 36 00

Fax +33 (0)4 77 81 37 00

e-mail: silisol@omerin.com

**www.omerin.com**