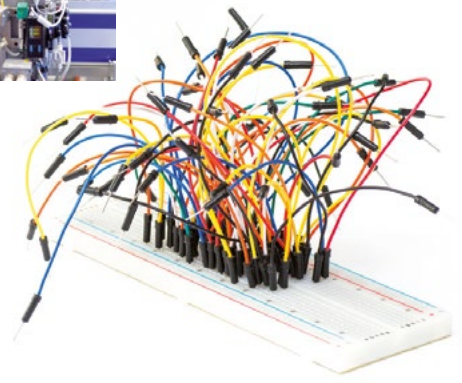
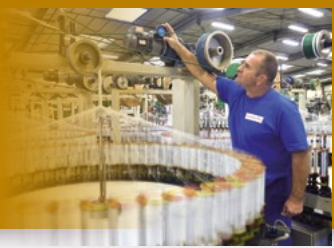
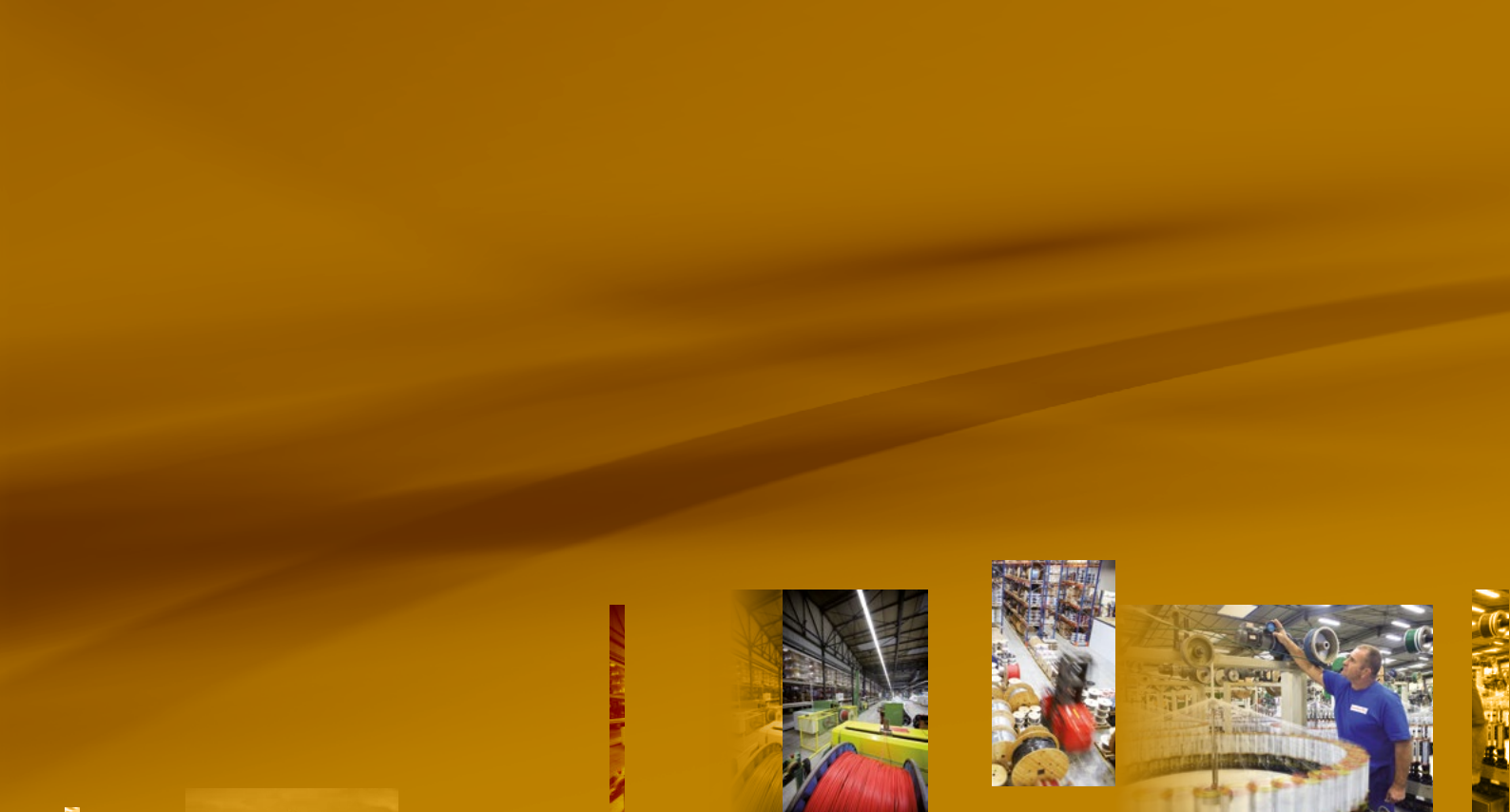




2

**HIGH TEMPERATURE WIRES AND CABLES  
FOR THE GENERAL MARKET**  
SECTION II: FLUOROPOLYMERS AND THERMOPLASTICS

**omerin**  
LES CABLES DE L'EXTREME

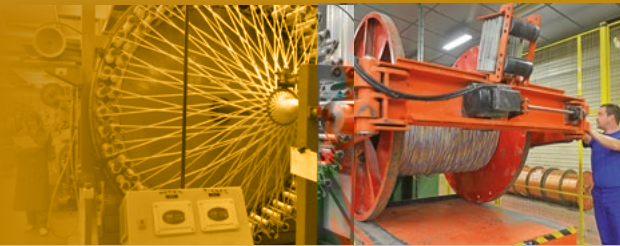


- The world's leading manufacturer of silicone-insulated wires and cables
- Europe's leading manufacturer of glass-yarn braids
- France's leading manufacturer of fire safety cables

**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 SECTION I: CROSS LINKED ELASTOMERS** 1

**HIGH TEMPERATURE WIRES AND CABLES FOR THE GENERAL MARKET SECTION II: FLUOROPOLYMERS AND THERMOPLASTICS** 2

**HIGH TEMPERATURE WIRES AND CABLES FOR THE GENERAL MARKET SECTION III: COMPOSITE INSULATIONS** 3

**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

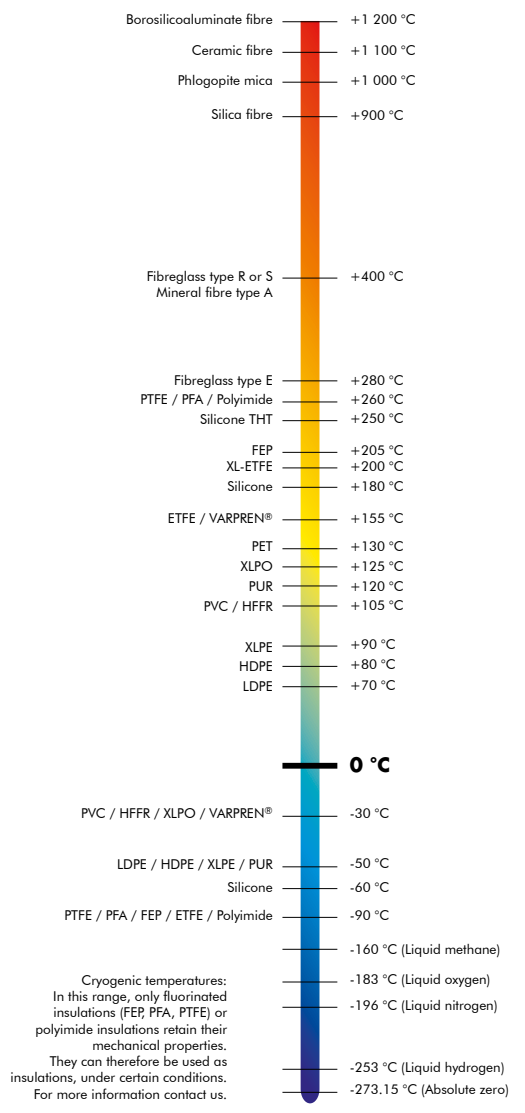
**[www.omerin.com](http://www.omerin.com)**

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 crosslinked 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

**FLUOROPOLYMER INSULATED  
WIRES AND CABLES**

**FT 2101 to 2133**

*Pages 6 to 46*

**THERMOPLASTIC INSULATED  
WIRES AND CABLES**

**FT 2201 to 2221**

*Pages 48 to 72*

# Product list

## FLUOROPOLYMER INSULATED WIRES AND CABLES


















FTNo.	PRODUCT REFERENCE	PAGE
2101	SILIFLON ETFE and EETFE.....	6
2102	SILIFLON KU 01 and KU 02.....	7
2103	SILIFLON 7YA .....	8
2104	SILIFLON 7Y.....	9
2105	SILIFLON LI7Y .....	10
2106	SILIFLON FEP and EFEP.....	12
2107	SILIFLON 6YS.....	13
2108	SILIFLON 6Y6YS and E6Y6YS.....	14
2109	SILIFLON PFA and EPFA .....	15
2110	SILIFLON 51YS.....	16
2111	SILIFLON RETFE, RFEP and RPFA.....	17
2112	SILIFLON 105 °C - Fluoropolymer insulation.....	18
2113	SILIFLON Style 10935.....	19
2132	SILIFLON Style 11881 .....	20
2114	SILIFLON 150 °C - Fluoropolymer insulation.....	22
2115	SILIFLON 200 °C - Fluoropolymer insulation.....	24

FTNo.	PRODUCT REFERENCE	PAGE
2116	SILIFLON 250 °C - Fluoropolymer insulation.....	26
2117	SILIFLON KZ 04.....	28
2118	SILIFLON KZ 05.....	29
2119	SILIFLON KZ 06.....	30
2120	SILIFLON KZ 07.....	31
2121	SILIFLON KZ 08.....	32
2122	SILIFLON KZ 09.....	33
2123	SILIFLON CN5YS and A5YS .....	34
2124	SILIFLON Style 10506 .....	35
2125	SILIFLON HT - Ignition wires .....	36
2126	SILIFLON HT - Ignition wires .....	37
2127	SILIFLON M6-E6.....	38
2128	SILIFLON M6BE-E6 .....	40
2129	SILIFLON KU 03, KU 04, KU 05, KU 06 .....	42
2130	SILIFLON 150 °C - Fluoropolymer insulation and sheathing	43
2131	SILIFLON 200 °C - Fluoropolymer insulation and sheathing	44
2133	SILIFLON VG 95218 T020 A - Fluoropolymer insulation	46

## THERMOPLASTIC INSULATED WIRES AND CABLES

FTNo.	PRODUCT REFERENCE	PAGE
2201	PLASTHERM Y2 and EY2 .....	48
2202	PLASTHERM 80 °C - PVC insulation .....	50
2203	PLASTHERM 105 °C - PVC insulation .....	52
2204	PLASTHERM Style 1015-HAR .....	54
2205	PLASTHERM Style 20199, 2-conductor flat cable .....	55
2206	PLASTHERM MY2-Y2 and MY2-EY2 .....	56
2207	PLASTHERM 80 °C - PVC insulation and sheathing...58	
2208	PLASTHERM 90 °C - PVC insulation and sheathing...59	
2209	PLASTHERM 105 °C - PVC insulation and sheathing.60	
2210	PLASTHERM 90 °C - Polyolefin insulation .....	61
2211	PLASTHERM PHF2 - Halogen-free insulation .....	62
2212	PLASTHERM PHF2E IRD - Halogen-free insulation ....63	
2213	PLASTHERM PHFLEX - Resistant to alternate bending .64	
2214	PLASTHERM style 21209 - Polyurethane sheathing...65	
2215	PLASTHERM MYBE-EY-CSI - Intrinsic safety .....	66
2216	PLASTHERM HP-U - 2-conductor flat cable.....67	
2217	PLASTHERM HP-M - 2-conductor flat cable.....68	
2218	PLASTHERM HP-M-HT - 2-conductor flat cable .....	69
2219	PLASTHERM 41.....	70
2220	PLASTHERM E43.....	71
2221	PLASTHERM E9 .....	72

## FLUOROPOLYMER INSULATED WIRES AND CABLES

FT No.	PRODUCT REFERENCE	APPROVAL	PAGE
<b>2101</b>	SILIFLON ETFE and EETFE		6
<b>2102</b>	SILIFLON KU 01 and KU 02		7
<b>2103</b>	SILIFLON 7YA		8
<b>2104</b>	SILIFLON 7Y		9
<b>2105</b>	SILIFLON LI7Y		10
<b>2106</b>	SILIFLON FEP and EFEP		12
<b>2107</b>	SILIFLON 6YS		13
<b>2108</b>	SILIFLON 6Y6YS and E6Y6YS		14
<b>2109</b>	SILIFLON PFA and EPFA		15
<b>2110</b>	SILIFLON 51YS		16
<b>2111</b>	SILIFLON RETFE, RFEP and RPFA		17
<b>2112</b>	SILIFLON 105 °C - Fluoropolymer insulation		18
<b>2113</b>	SILIFLON Style 10935		19
<b>2132</b>	SILIFLON Style 11881		20
<b>2114</b>	SILIFLON 150 °C - Fluoropolymer insulation		22
<b>2115</b>	SILIFLON 200 °C - Fluoropolymer insulation		24
<b>2116</b>	SILIFLON 250 °C - Fluoropolymer insulation		26
<b>2117</b>	SILIFLON KZ 04		28
<b>2118</b>	SILIFLON KZ 05		29
<b>2119</b>	SILIFLON KZ 06		30
<b>2120</b>	SILIFLON KZ 07		31
<b>2121</b>	SILIFLON KZ 08		32
<b>2122</b>	SILIFLON KZ 09		33
<b>2123</b>	SILIFLON CN5YS and A5YS		34
<b>2124</b>	SILIFLON Style 10506		35
<b>2125</b>	SILIFLON HT - Ignition wires		36
<b>2126</b>	SILIFLON HT - Ignition wires		37
<b>2127</b>	SILIFLON M6-E6		38
<b>2128</b>	SILIFLON M6BE-E6		40
<b>2129</b>	SILIFLON KU 03, KU 04, KU 05, KU 06		42
<b>2130</b>	SILIFLON 150 °C - Fluoropolymer insulation and sheathing		43
<b>2131</b>	SILIFLON 200 °C - Fluoropolymer insulation and sheathing		44
<b>2133</b>	SILIFLON VG 95218 T020 A - Fluoropolymer insulation		46

# SILIFLON® ETFE and EETFE

## -90 °C to +155 °C

### Approvals - standards

- Series inspired by standards  
NF C 93-524

### Applications

- Cabling for rotating machines (class F).
- Cabling in household electrical appliances, electronics.
- Cabling in hot or cold environments (cryogenics).
  - Cabling in aggressive environments (humidity, chemicals, etc.).
  - Cabling requiring compact size and excellent mechanical strength.

### Options

- Nickel-plated copper core: ref. CNETFE.
- Silver-plated copper core: ref. AETFE.
  - Pure nickel core: ref. NETFE.
  - Outer electrical shielding:
- Tin-plated copper braid: ref. ETFEBE or EETFEBE.
  - Other nominal metric or American cross-sections: contact us.
  - Other nominal stranding: contact us.
  - Other options and/or combinations of the options outlined above: contact us.



- 1 • Bare (ref. ETFE) or tin-plated (ref. EETFE) copper core.
- 2 • Insulation: Fluorinated polymer ETFE.

### Characteristics

#### General

- Continuous operating temperatures: -90 °C to +155 °C.
- Excellent resistance to aggressive chemical environments.
- Excellent resistance to humidity and UV.
- Excellent mechanical strength.

#### Electrical

- Rated voltage: 450/750 V.
- Test voltage: 2500 V.

### Standard products

- All colours including translucent.

#### ETFE and EETFE

CONDUCTING CORE			INSULATED WIRE OR CABLE		
Nominal cross-section (mm <sup>2</sup> )	Nominal stranding	Maximum linear resistance at 20 °C (Ω/km) (bare copper core)	Nominal thickness of insulation (mm)	Nominal diameter (mm)	Approximate linear weight (kg/km)
0.05	7 x 0.10	373	0.17	0.65	0.9
0.09	7 x 0.13	214	0.17	0.7	1.3
0.12*	7 x 0.15	161	0.17	0.8	1.7
0.14**	7 x 0.16	141	0.17	0.8	1.8
0.15	19 x 0.10	136	0.20	0.9	2.1
0.22	7 x 0.20	89.9	0.20	1.0	2.7
0.25	19 x 0.13	80.0	0.20	1.05	3.2
0.34	7 x 0.25	57.5	0.20	1.15	4.0
0.38**	19 x 0.16	54.1	0.20	1.15	4.4
0.5	7 x 0.30	39.6	0.20	1.3	5.6
0.5	16 x 0.20	39.0	0.20	1.3	5.9
0.6	19 x 0.20	32.8	0.20	1.4	6.4
0.75	24 x 0.20	26.0	0.20	1.45	8.5
0.88	7 x 0.40	22.2	0.20	1.5	9.0
0.93	19 x 0.25	21.0	0.20	1.7	10.0
1	32 x 0.20	19.5	0.20	1.7	11.4
1.34	19 x 0.30	14.6	0.20	1.9	13.9
1.5	30 x 0.25	13.3	0.20	1.95	15.6
2.5	50 x 0.25	7.98	0.20	2.5	25.6
4	56 x 0.30	4.95	0.25	3.1	38.9
6	84 x 0.30	3.30	0.35	3.9	55.6
10	80 x 0.40	1.91	0.40	5.2	101
16	126 x 0.40	1.21	0.40	6.5	147
25	196 x 0.40	0.780	0.60	8.2	242
35	276 x 0.40	0.554	0.60	9.2	320
50	396 x 0.40	0.386	0.70	11.2	465

\*\* Nominal cross-section not available with the ref. EETFE.

\*\* Nominal cross-sections not available with the ref. ETFE.

For this product, please contact:

OMERIN division principale ✓  
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@omerin.com

[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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

# SILIFLON® KU 01 and KU 02

**-55 °C to +150 °C**

### Approvals - standards

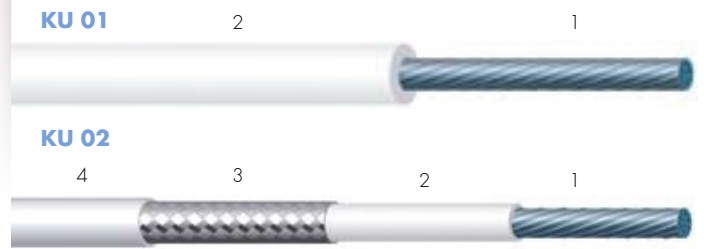
- Inspired from NF C 93-524 standard.

### Applications

- Wires used in aeronautical and electronic applications and all instrumentation uses requiring excellent resistance to high temperatures and to chemical influences.

### Options

- Compliance with American standards SAE AS 22756/16 and SAE AS 22759/18: contact us.
- Other colours: contact us.



- 1 • Concentric tin-plated copper core.
- 2 • Insulation: Fluorinated polymer ETFE.
- 3 • Electrical shielding: Tin-plated copper braid.
- 4 • Outer sheath: Fluorinated polymer ETFE.

### Characteristics

#### General

- Continuous operating temperatures: -55 °C to +150 °C.
- Excellent resistance to aggressive chemical environments.
- Excellent resistance to humidity and UV.
- Excellent mechanical strength.

#### Electrical (as per UTE C 93-524)

- Rated voltage: 600 Vac – 850 Vdc.
- Test voltage: KU 01: 3400 Vac.  
KU 02: 1500 Vac.

### Standard products

- Standard insulation colour: white.
- Standard outer sheath colour: white.

### KU 01 and KU 02

CONCENTRIC CORE			
Nominal cross-section AWG	Nominal cross-section (mm²)	Nominal stranding	Maximum linear resistance at 20 °C (Ω/km)
30	0.05	7 x 0.10	365.4
28	0.09	7 x 0.13	208.0
26	0.15	19 x 0.10	128.7
24	0.25	19 x 0.13	76.6
22	0.38	19 x 0.16	50.3
20	0.60	19 x 0.20	32.1
18	0.93	19 x 0.25	20.6
16	1.34	19 x 0.30	14.3
14	1.82	37 x 0.25	10.6
12	3.00	37 x 0.32	6.5

INSULATED WIRE			
KU 01		KU 02	
Nominal diameter (mm)	Approximate linear weight (kg/km)	Nominal diameter (mm)	Approximate linear weight (kg/km)
0.63	0.9	1.33	4.7
0.69	1.3	1.39	5.0
0.81	1.9	1.51	5.8
0.91	2.8	1.71	7.2
1.10	4.2	1.96	10.1
1.52	6.9	2.38	13.4
1.80	10.5	2.76	19.3
2.00	14.4	2.96	23.5
2.36	19.5	3.32	30.8
2.89	36.1	3.85	48.1

For this product, please contact:

OMERIN division principale ✓  
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@omerin.com

[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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

# SILIFLON® 7YA

## VDE approval

### -90 °C to +135 °C



#### Approvals - standards

- 7YA: VDE approval as per standards DIN VDE 0250 Part 1 and DIN VDE 0250 Part 106 - Licence no. 88272.

#### Applications

- Cabling in household electrical appliances, electronics.
- Cabling in hot or cold environments (cryogenics).
- Cabling in aggressive environments (humidity, chemicals, etc.).
  - Cabling requiring compact size and excellent mechanical strength.

#### Characteristics General

- Continuous operating temperatures:
  - > Bare copper core: -90 °C to +130 °C.
  - > Tin-plated, nickel-plated or silver-plated copper core: -90 °C to +135 °C.
- Excellent resistance to aggressive chemical environments.
- Excellent resistance to humidity and UV.
- Excellent mechanical strength.

#### Electrical

#### 7YA

- Rated voltage: 450/750 V
- Test voltage: 2500 V

#### Standard products

- All colours including translucent.

#### Options

- Flexible tin-plated copper core – ref. E7YA and E7YS: contact us.
- Flexible nickel-plated copper core – ref. CN7YA and CN7YS: contact us.
- Flexible silver-plated copper core – ref. A7YA and A7YS: contact us.
- Solid bare copper core – ref. R7YA and R7YS: see details of the option below.
- Solid tin-plated copper core – ref. RE7YA and RE7YS: contact us.

#### 7YA

##### Flexible core • class 5 as per IEC 60228

Nominal cross-section (mm <sup>2</sup> )	Nominal stranding	Maximum linear resistance at 20 °C (Ω/km)
0.25*	19 x 0.13 or 7 x 0.22	80.7
0.5	16 x 0.20	39.0
0.75	24 x 0.20	26.0
1	32 x 0.20	19.5
1.5	30 x 0.25	13.3
2.5	50 x 0.25	7.98
4	56 x 0.30	4.95
6	84 x 0.30	3.30

##### INSULATED WIRE

Nominal thickness of insulation (mm)	Nominal diameter (mm)	Approximate linear weight (kg/km)
0.40	1.45	4.6
0.40	1.7	7.8
0.40	1.85	9.9
0.40	2.0	12.6
0.50	2.4	18.9
0.60	3.1	31.0
0.60	3.8	43.6
0.60	4.3	60.1

#### Option • R7YA

##### Solid core • class 1 as per IEC 60228

Nominal cross-section (mm <sup>2</sup> )	Nominal diameter (mm)	Maximum linear resistance at 20 °C (Ω/km)	Nominal thickness of insulation (mm)	Nominal diameter (mm)	Approximate linear weight (kg/km)
0.25*	1 x 0.56	73.4	0.40	1.35	4.2
0.5	1 x 0.80	36.0	0.40	1.6	7.1
0.75	1 x 0.98	24.5	0.40	1.8	9.8
1	1 x 1.13	18.1	0.40	1.95	12.4
1.5	1 x 1.36	12.1	0.50	2.4	18.3
2.5	1 x 1.77	7.41	0.60	3.0	30.0
4	1 x 2.24	4.61	0.60	3.45	44.7
6	1 x 2.74	3.08	0.60	3.95	63.9

For this product, please contact:

OMERIN division principale   
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@omerin.com

\* Nominal cross-section not included in IEC 60228.

(1) Standardised name: N7YAF VDE.

(2) Standardised name: N7YA VDE.

#### 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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

# SILIFLON® 7Y

VDE approval  
-90 °C to +135 °C



- 1 • Solid bare or tin-plated copper core.
- 2 • Insulation: Fluorinated polymer ETFE.

## Approvals - standards

- VDE approval as per standard DIN VDE 0881 - licence no. 088244.

## Applications

- Cabling in electronics and household appliances.
  - Cabling in hot and aggressive environments (humidity, chemicals, etc.).

## Options

- Solid silver-plated copper core: contact us.
  - Twisted pair or triple or quad with no outer sheath - Standardised reference: 7Y n x Cross-section/Østranding (n being the number of twisted conductors).

## Characteristics General

- Continuous operating temperatures: -90 °C to +135 °C.
- Excellent resistance to aggressive chemical environments.
- Excellent resistance to humidity and UV.
- Excellent mechanical strength.

## Electrical

- Rated voltage:
  - > Nominal thickness of insulation (0.15 mm): 375 V.
  - > Nominal thickness of insulation (0.25 mm): 900 V.
- Test voltage:
  - > Nominal thickness of insulation (0.15 mm): 1500 V.
  - > Nominal thickness of insulation (0.25 mm): 2500 V.

## Standard products

- All colours including translucent.

### 7Y

SOLID CORE				INSULATED WIRE		
Standardised reference	Nominal cross-section	Nominal stranding	Maximum linear resistance at 20 °C	Nominal thickness of insulation (mm)	Nominal diameter (mm)	Approximate linear weight (kg/km)
	(mm <sup>2</sup> )		(Ω/km) (bare copper core)			
7Y 1 x 0.25/0.55	0.05	1 x 0.25	384	0.15	0.55	0.8
7Y 1 x 0.32/0.6*	0.08	1 x 0.32	230	0.15	0.62	1.1
7Y 1 x 0.4 /0.7	0.125	1 x 0.40	146	0.15	0.7	1.6
7Y 1 x 0.5 /0.8	0.20	1 x 0.50	93.1	0.15	0.8	2.3
7Y 1 x 0.63/0.95*	0.31	1 x 0.63	58.7	0.15	0.93	3.4
7Y 1 x 0.8 /1.1	0.50	1 x 0.80	36.0	0.15	1.1	5.3
7Y 1 x 0.25/0.75	0.05	1 x 0.25	384	0.25	0.75	1.1
7Y 1 x 0.32/0.8*	0.08	1 x 0.32	230	0.25	0.82	1.5
7Y 1 x 0.4 /0.9	0.125	1 x 0.40	146	0.25	0.9	2.0
7Y 1 x 0.5 /1.0	0.20	1 x 0.50	93.1	0.25	1.0	2.8
7Y 1 x 0.63/1.2*	0.31	1 x 0.63	58.7	0.25	1.13	4.0
7Y 1 x 0.8 /1.3	0.50	1 x 0.80	36.0	0.25	1.3	5.9
7Y 1 x 1.0 /1.5*	0.785	1 x 1.00	23.1	0.25	1.5	8.7
7Y 1 x 1.3 /1.8*	1.33	1 x 1.30	13.6	0.25	1.8	14.0
7Y 1 x 1.6 /2.1*	2.01	1 x 1.60	9.01	0.25	2.1	20.6
7Y 1 x 2.1 /2.6*	3.46	1 x 2.10	5.23	0.25	2.6	34.3

\* Contact us.

For this product, please contact:

OMERIN division principale   
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@omerin.com

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

**omerin**  
LES CABLES DE L'EXTREME

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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

**SILIFLON® Li7Y**  
VDE approval**-90 °C to +135 °C**

- 1 • Concentric bare, tin-plated or silver-plated copper core.
- 2 • Insulation: Fluorinated polymer ETFE.

**Approvals - standards**

- VDE approval as per standard DIN VDE 0881 - licence no. 085392.

**Applications**

- Cabling in electronics and household appliances.
  - Cabling in hot and aggressive environments (humidity, chemicals, etc.).

**Options**

- Twisted pair or triple or quad with no outer sheath - Standardised reference: Li7Y n x Cross-section/Østranding (n being the number of twisted conductors).

**Characteristics****General**

- Continuous operating temperatures: -90 °C to +135 °C.
- Excellent resistance to aggressive chemical environments.
- Excellent resistance to humidity and UV.
- Excellent mechanical strength.

**Electrical**

- Rated voltage:
  - > Nominal thickness of insulation (0.15 mm): 375 V.
  - > Nominal thickness of insulation (0.25 mm): 900 V.
  - > Nominal thickness of insulation (0.40 mm): 1500 V.
  - > Nominal thickness of "ECO" insulation: 900 V.
- Test voltage:
  - > Nominal thickness of insulation (0.15 mm): 1500 V.
  - > Nominal thickness of insulation (0.25 mm): 2500 V.
  - > Nominal thickness of insulation (0.40 mm): 3000 V.
  - > Nominal thickness of "ECO" insulation: 2500 V.

**Standard products**

- All colours including translucent.

For this product, please contact:

OMERIN division principale

Zone Industrielle - F 63600 Ambert

Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10

omerin@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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

## CONCENTRIC CORE

Standardised reference	Nominal cross-section (mm <sup>2</sup> )	Nominal stranding	Maximum linear resistance at 20 °C (Ω/km) (bare copper core)
<b>Standardised series</b>			
Li7Y 1 x 0.055/0.6	0.055	7 x 0.10	349
Li7Y 1 x 0.079/0.7	0.079	7 x 0.12	236
Li7Y 1 x 0.12 /0.8	0.12	7 x 0.15	151
Li7Y 1 x 0.22 /0.9	0.22	7 x 0.20	84.8
Li7Y 1 x 0.34 /1.1	0.34	7 x 0.25	54.3
Li7Y 1 x 0.56 /1.3	0.56	19 x 0.20**	32.5
Li7Y 1 x 0.055/0.8	0.055	7 x 0.10	349
Li7Y 1 x 0.079/0.9	0.079	7 x 0.12	236
Li7Y 1 x 0.12 /1.0	0.12	7 x 0.15	151
Li7Y 1 x 0.22 /1.1	0.22	7 x 0.20	84.8
Li7Y 1 x 0.34 /1.3	0.34	7 x 0.25	54.3
Li7Y 1 x 0.56 /1.5	0.56	19 x 0.20**	32.5
Li7Y 1 x 0.93 /1.8	0.93	19 x 0.25	20.0
Li7Y 1 x 1.3 /2.0	1.3	19 x 0.29	14.9
Li7Y 1 x 1.9 /2.3	1.9	19 x 0.36	9.46
Li7Y 1 x 3.2 /2.8	3.2	19 x 0.46	5.79
Li7Y 1 x 0.12 /1.3	0.12	7 x 0.15	151
Li7Y 1 x 0.22 /1.4	0.22	7 x 0.20	84.8
Li7Y 1 x 0.34 /1.6	0.34	7 x 0.25	54.3
Li7Y 1 x 0.56 /1.8	0.56	19 x 0.20**	32.5
Li7Y 1 x 0.93 /2.1	0.93	19 x 0.25	20.0
Li7Y 1 x 1.3 /2.3	1.3	19 x 0.29	14.9
Li7Y 1 x 1.9 /2.6	1.9	19 x 0.36	9.46
Li7Y 1 x 3.2 /3.1	3.2	19 x 0.46	5.79
Li7Y 1 x 4.6 /3.6	4.6	37 x 0.40	3.93
Li7Y 1 x 8.8 /5.2	8.8	133 x 0.29*	2.12
Li7Y 1 x 13.5 /6.2	13.5	133 x 0.36*	1.35
<b>Economical series</b>			
Li7Y 1 x 0.15 /0.8	0.15	19 x 0.10	135
Li7Y 1 x 0.22 /0.9	0.22	19 x 0.12	86.0
Li7Y 1 x 0.36 /1.1	0.36	19 x 0.15	53.2
Li7Y 1 x 0.59 /1.3	0.59	19 x 0.20	32.4
Li7Y 1 x 0.93 /1.55	0.93	19 x 0.25	20.4
Li7Y 1 x 1.3 /1.8	1.3	19 x 0.29	15.8
Li7Y 1 x 1.9 /2.15	1.9	19 x 0.36	10.0
Li7Y 1 x 2.8 /2.7	2.8	37 x 0.31	6.63
Li7Y 1 x 4.6 /3.4	4.6	37 x 0.40	4.13

## INSULATED WIRE OR CABLE

Nominal thickness of insulation (mm)	Nominal diameter (mm)	Approximate linear weight (kg/km)
0.15	0.6	0.9
0.15	0.65	1.1
0.15	0.75	1.6
0.15	0.9	2.6
0.15	1.05	3.8
0.15	1.25	5.9
0.25	0.8	1.2
0.25	0.85	1.5
0.25	0.95	2.0
0.25	1.1	3.1
0.25	1.25	4.4
0.25	1.45	6.6
0.25	1.75	10.4
0.25	1.95	13.6
0.25	2.3	20.1
0.25	2.8	31.8
0.40	1.25	2.9
0.40	1.4	4.1
0.40	1.55	5.5
0.40	1.75	7.9
0.40	2.05	11.9
0.40	2.25	15.2
0.40	2.6	22.1
0.40	3.1	34.2
0.40	3.6	48.7
0.60	5.2	93.8
0.60	6.25	140
0.16	0.8	1.9
0.16	0.9	2.5
0.16	1.1	3.9
0.17	1.3	6.3
0.17	1.55	9.5
0.21	1.8	12.8
0.23	2.15	19.3
0.26	2.7	28.6
0.32	3.4	46.8

\* Non-concentric cores.

\*\* Nominal stranding not defined in standard DIN VDE 0881.

For this product, please contact:

OMERIN division principale   
 Zone Industrielle - F 63600 Ambert  
 Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
 omerin@omerin.com

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

**omerin**  
 LES CABLES DE L'EXTREME

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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

**SILIFLON® FEP and EFEP****-90 °C to +205 °C****Approvals - standards**

- Series inspired by standards NF C 93-524 and DIN VDE 0250 Part 106.

**Applications**

- Cabling for rotating machines.
- Cabling in household electrical appliances, electronics.
- Cabling in hot or cold environments (cryogenics).
- Cabling in aggressive environments (humidity, chemicals, etc.).
- Cabling requiring compact size and excellent mechanical strength.

**Options**

- Nickel-plated copper core: ref. CNFEP.
- Silver-plated copper core: ref. AFEP.
  - Pure nickel core: ref. NFEP.
  - Outer electrical shielding:
- Tin-plated copper braid: ref. FEPBE or EFEPBE.
- Other nominal metric or American cross-sections: contact us.
- Other nominal stranding: contact us.
- Other options and/or combinations of the options outlined above: contact us.

**Characteristics****General**

- Continuous operating temperatures: -90 °C to +205 °C.
- Excellent resistance to aggressive chemical environments.
- Excellent resistance to humidity and UV.
- Excellent mechanical strength.

**Electrical**

- Rated voltage: 450/750 V.
- Test voltage: 2500 V.

**Standard products**

- All colours including translucent.



- 1 • Bare (ref. FEP) or tin-plated (ref. EFEP) copper core.
- 2 • Insulation: Fluorinated polymer FEP.

**FEP and EFEP****CONDUCTING CORE**

Nominal cross-section (mm <sup>2</sup> )	Nominal stranding	Maximum linear resistance at 20 °C (Ω/km) (bare copper core)
0.05	7 x 0.10	373
0.09	7 x 0.13	214
0.12*	7 x 0.15	161
0.14**	7 x 0.16	141
0.15	19 x 0.10	136
0.22	7 x 0.20	89.9
0.25	19 x 0.13	80.0
0.34	7 x 0.25	57.5
0.38**	19 x 0.16	54.1
0.5	7 x 0.30	39.6
0.5	16 x 0.20	39.0
0.6	19 x 0.20	32.8
0.75	24 x 0.20	26.0
0.88	7 x 0.40	22.2
0.93	19 x 0.25	21.0
1	32 x 0.20	19.5
1.34	19 x 0.30	14.6
1.5	30 x 0.25	13.3
2.5	50 x 0.25	7.98
4	56 x 0.30	4.95
6	84 x 0.30	3.30
10	80 x 0.40	1.91
16	126 x 0.40	1.21
25	196 x 0.40	0.780
35	276 x 0.40	0.554
50	396 x 0.40	0.386

**INSULATED WIRE OR CABLE**

Nominal thickness of insulation (mm)	Nominal diameter (mm)	Approximate linear weight (kg/km)
0.17	0.65	1.1
0.17	0.7	1.4
0.17	0.8	1.9
0.17	0.8	2.0
0.20	0.9	2.3
0.20	1.0	3.0
0.20	1.05	3.4
0.20	1.15	4.3
0.20	1.15	4.6
0.20	1.3	5.9
0.20	1.3	6.2
0.20	1.4	6.7
0.20	1.45	8.8
0.20	1.5	9.3
0.20	1.7	10.5
0.20	1.7	11.9
0.20	1.9	14.3
0.20	1.95	16.3
0.20	2.5	26.6
0.25	3.1	40.4
0.35	3.9	57.7
0.40	5.2	104
0.40	6.2	150
0.60	8.2	248
0.60	9.2	328
0.70	11.2	478

For this product, please contact:

**OMERIN division principale** ✓  
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@omerin.com

\* Nominal cross-section not available with the ref. EFEP.

\*\* Nominal cross-sections not available with the ref. FEP.

**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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

**SILIFLON® 6YS**  
VDE approval**-90 °C to +180 °C****Approvals - standards**

- 6YS: VDE approval as per standard DIN VDE 0250 Part 106 - Licence no. 107583.

**Applications**

- Cabling in household electrical appliances, electronics.
  - Cabling in hot or cold environments (cryogenics).
  - Cabling in aggressive environments (humidity, chemicals, etc.).
- Cabling requiring compact size and excellent mechanical strength.

**Characteristics****General**

- Continuous operating temperatures:
  - > Bare copper core: -90 °C to +130 °C.
  - > Tin-plated, nickel-plated or silver-plated copper core: -90 °C to +180 °C.
- Excellent resistance to aggressive chemical environments.
- Excellent resistance to humidity and UV.
- Excellent mechanical strength.

**Electrical 6YS**

- Rated voltage: 300/500 V.
- Test voltage: 2000 V.

**Standard products**

- All colours including translucent.

**Options**

- Flexible tin-plated copper core – ref. E6YA and E6YS: contact us.
- Flexible nickel-plated copper core – ref. CN6YA and CN6YS: contact us.
- Flexible silver-plated copper core – ref. A6YA and A6YS: contact us.
- Solid bare copper core – ref. R6YA and R6YS: see details of the option below.
- Solid tin-plated copper core – ref. RE6YA and RE6YS: contact us.

**6YS****Flexible core • class 5 as per IEC 60228**

Nominal cross-section (mm <sup>2</sup> )	Nominal stranding	Maximum linear resistance at 20 °C (Ω/km)
0.25*	19 x 0.13 or 7 x 0.22	80.7
0.5	16 x 0.20	39.0
0.6*	19 x 0.20	32.8
0.75	24 x 0.20	26.0
1	32 x 0.20	19.5
1.5	30 x 0.25	13.3
2.5	50 x 0.25	7.98
4	56 x 0.30	4.95
6	84 x 0.30	3.30

**INSULATED WIRE**

Nominal thickness of insulation (mm)	Nominal diameter (mm)	Approximate linear weight (kg/km)
0.30	1.25	4.2
0.30	1.5	6.5
0.30	1.5	7.4
0.30	1.65	8.7
0.30	1.8	10.9
0.30	2.0	14.9
0.35	2.6	25.0
0.40	3.4	41.9
0.40	3.9	60.1

**Option • R6YS****Solid core • class 1 as per IEC 60228**

0.25*	1 x 0.56	73.4	0.30	1.15	3.9
0.5	1 x 0.80	36.0	0.30	1.4	6.8
0.75	1 x 0.98	24.5	0.30	1.6	9.5
1	1 x 1.13	18.1	0.30	1.75	12.0
1.5	1 x 1.36	12.1	0.30	2.0	16.7
2.5	1 x 1.77	7.41	0.35	2.5	27.4
4	1 x 2.24	4.61	0.40	3.05	42.7
6	1 x 2.74	3.08	0.40	3.55	61.7

For this product, please contact:

\* Nominal cross-sections not described in IEC 60228.

**OMERIN** division principale 

Zone Industrielle - F 63600 Ambert

Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10

omerin@omerin.com

[www.omerin.com](http://www.omerin.com)**omerin**  
LES CABLES DE L'EXTREME

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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

# SILIFLON® 6Y6YS and E6Y6YS

Double insulating layer  
VDE approval  
-90 °C to +180 °C



M2 - VDE REG-NR : 7724

- 1 • Multistrand bare (ref. 6Y6YS) or tin-plated (ref. E6Y6YS) copper core.
- 2 • Insulation: Fluorinated polymer FEP.

## Approvals - standards

- VDE approval as per standard DIN VDE 0250 Part 106 - Licence no. 40001865.



## Applications

- Cabling for class 2 light fittings, household electrical appliances, electronics, etc.
- Cabling in hot or cold environments (cryogenics).
  - Cabling in aggressive environments (humidity, chemicals, etc.).
    - Cabling in the medical field.
    - Cabling requiring compact size and excellent mechanical strength.

## Options

- Nickel-plated copper core – ref. CN6Y6YS: contact us.
- Silver-plated copper core – ref. A6Y6YS: contact us.
- Solid bare (ref. R6Y6YS) or tin-plated (ref. RE6Y6YS) copper core: See details of the option below.

## Characteristics

### General

- Continuous operating temperatures:
  - > Bare copper core: -90 °C to +130 °C.
  - > Tin-plated, nickel-plated or silver-plated copper core: -90 °C to +180 °C.
- Excellent resistance to aggressive chemical environments.
- Excellent resistance to humidity and UV.
- Excellent mechanical strength.

### Electrical

- Rated voltage: 300/500 V.
- Test voltage: 2000 V.

## Standard products

- All solid colours.

### 6Y6YS and E6Y6YS

MULTISTRAND CORE				INSULATED WIRE		
Nominal cross-section		Nominal stranding	Maximum linear resistance at 20 °C	Nominal thickness of insulation	Nominal diameter	Approximate linear weight
AWG	(mm <sup>2</sup> )		(Ω/km) (tin-plated copper core)	(mm)	(mm)	(kg/km)
24	0.25	19 x 0.13	82.9	0.60	1.85	7.3
22	0.34	7 x 0.25	60.6	0.60	1.95	8.5
-	0.38	19 x 0.16	55.7	0.60	2.0	9.1
-	0.5	16 x 0.20	40.1	0.60	2.1	10.5
-	0.5	7 x 0.30	36.7	0.60	2.1	10.5
20	0.6	19 x 0.20	33.7	0.60	2.15	11.4
18	0.75	24 x 0.20	26.7	0.60	2.25	13.8
-	0.93	19 x 0.25	21.6	0.60	2.4	15.4
-	1	32 x 0.20	20.0	0.60	2.45	17.2
16	1.34	19 x 0.30	15.0	0.60	2.6	20.2
-	1.5	30 x 0.25	13.7	0.60	2.65	21.7
<b>Option • R6Y6YS and RE6Y6YS</b>						
SOLID CORE						
-	0.25	1 x 0.56	74.8	0.60	1.75	6.9
-	0.5	1 x 0.80	36.7	0.60	2.0	10.2
-	0.75	1 x 0.98	24.8	0.60	2.2	13.3
-	1	1 x 1.13	18.2	0.60	2.35	16.2
-	1.5	1 x 1.38	12.2	0.60	2.6	21.7

For this product, please contact:

OMERIN division principale   
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@omerin.com

[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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

# SILIFLON® PFA and EPFA

-90 °C to +260 °C



- 1 • Bare (ref. PFA) or tin-plated (ref. EPFA) copper core.  
2 • Insulation: Fluorinated polymer PFA.

## Approvals - standards

- Series inspired by standards NF C 93-524 and DIN VDE 0250 Part 106.

## Applications

- Cabling for rotating machines.
- Cabling in household electrical appliances, electronics.
  - Cabling in hot or cold environments (cryogenics).
  - Cabling in aggressive environments (humidity, chemicals, etc.).
- Cabling requiring compact size and excellent mechanical strength.

## Options

- Nickel-plated copper core: ref. CNPFA.
- Silver-plated copper core: ref. APFA.
  - Pure nickel core: ref. NPFA.
  - Outer electrical shielding:
- Tin-plated copper braid: ref. PFABE or EPFABE.
- Other nominal metric or American cross-sections: contact us.
- Other nominal stranding: contact us.
- Other options and/or combinations of the options outlined above: contact us.

## Characteristics

### General

- Continuous operating temperatures: -90 °C to +260 °C.
- Excellent resistance to aggressive chemical environments.
- Excellent resistance to humidity and UV.
- Excellent mechanical strength.

### Electrical

- Rated voltage: 450/750 V.
- Test voltage: 2500 V.

## Standard products

- All colours including translucent.

### PFA and EPFA

CONDUCTING CORE			INSULATED WIRE OR CABLE		
Nominal cross-section (mm <sup>2</sup> )	Nominal stranding	Maximum linear resistance at 20 °C (Ω/km) (bare copper core)	Nominal thickness of insulation (mm)	Nominal diameter (mm)	Approximate linear weight (kg/km)
0.05	7 x 0.10	373	0.17	0.65	1.1
0.09	7 x 0.13	214	0.17	0.7	1.4
0.12*	7 x 0.15	161	0.17	0.8	1.9
0.14**	7 x 0.16	141	0.17	0.8	2.0
0.15	19 x 0.10	136	0.20	0.9	2.3
0.22	7 x 0.20	89.9	0.20	1.0	3.0
0.25	19 x 0.13	80.0	0.20	1.05	3.4
0.34	7 x 0.25	57.5	0.20	1.15	4.3
0.38**	19 x 0.16	54.1	0.20	1.15	4.6
0.5	7 x 0.30	39.6	0.20	1.3	5.9
0.5	16 x 0.20	39.0	0.20	1.3	6.2
0.6	19 x 0.20	32.8	0.20	1.4	6.7
0.75	24 x 0.20	26.0	0.20	1.45	8.8
0.88	7 x 0.40	22.2	0.20	1.5	9.3
0.93	19 x 0.25	21.0	0.20	1.7	10.5
1	32 x 0.20	19.5	0.20	1.7	11.9
1.34	19 x 0.30	14.6	0.20	1.9	14.3
1.5	30 x 0.25	13.3	0.20	1.95	16.3
2.5	50 x 0.25	7.98	0.20	2.5	26.6
4	56 x 0.30	4.95	0.25	3.1	40.4
6	84 x 0.30	3.30	0.35	3.9	57.7
10	80 x 0.40	1.91	0.40	5.2	104
16	126 x 0.40	1.21	0.40	6.2	150
25	196 x 0.40	0.780	0.60	8.2	248
35	276 x 0.40	0.554	0.60	9.2	328
50	396 x 0.40	0.386	0.70	11.2	478

For this product, please contact:

OMERIN division principale ✓  
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@omerin.com

\* Nominal cross-section not available with the ref. EPFA.  
\*\* Nominal cross-sections not available with the ref. PFA.

[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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

# SILIFLON® 51YS

VDE approval  
-90 °C to +250 °C



## Approvals - standards

- VDE approval as per standard DIN VDE 0250 Part 106 - Licence no. 106489.

## Applications

- Cabling in household electrical appliances, electronics.
  - Cabling in hot or cold environments (cryogenics).
- Cabling in aggressive environments (humidity, chemicals, etc.).
  - Cabling requiring compact size and excellent mechanical strength.

## Options

- Flexible tin-plated copper core – ref. E51YS: contact us.
- Flexible nickel-plated copper core – ref. CN51YS: contact us.
- Flexible silver-plated copper core – ref. A51YS: contact us.
  - Solid bare copper core – ref. R51YS: see details of the option below.
- Solid tin-plated copper core – ref. RE51YS: contact us.
  - Rated voltage 450/750 V – ref. 51YA: contact us.

## Characteristics

### General

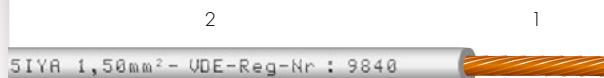
- Continuous operating temperatures:
  - > Bare copper core: -90 °C to +130 °C.
  - > Tin-plated copper core: -90 °C to +180 °C.
  - > Silver-plated copper core: -90 °C to +200 °C.
  - > Nickel-plated copper core: -90 °C to +250 °C.
- Excellent resistance to aggressive chemical environments.
- Excellent resistance to humidity and UV.
- Excellent mechanical strength.

### Electrical

- Rated voltage: 300/500 V.
- Test voltage: 2000 V.

## Standard products

- All colours including translucent.



- Flexible bare copper core – class 5 as per IEC 60228 / DIN VDE 0295.
- Insulation: Fluorinated polymer PFA.

## 51YS

### Flexible core • class 5 as per IEC 60228

Nominal cross-section (mm <sup>2</sup> )	Nominal stranding	Maximum linear resistance at 20 °C (Ω/km)
0.25*	19 x 0.13 or 7 x 0.22	79.9
0.5	16 x 0.20	39.0
0.75	24 x 0.20	26.0
1	32 x 0.20	19.5
1.5	30 x 0.25	13.3
2.5	50 x 0.25	7.98
4	56 x 0.30	4.95
6	84 x 0.30	3.30

### INSULATED WIRES

Nominal thickness of insulation (mm)	Nominal diameter (mm)	Approximate linear weight (kg/km)
0.30	1.25	4.2
0.30	1.5	6.5
0.30	1.65	8.7
0.30	1.8	10.9
0.30	2.0	14.9
0.35	2.6	25.0
0.40	3.4	41.9
0.40	3.9	60.1

## Option • R51YS

### Solid core • class 1 as per IEC 60228

0.25*	1 x 0.56	74.5	0.30	1.15	3.9
0.5	1 x 0.80	36.0	0.30	1.4	6.8
0.75	1 x 0.98	23.1	0.30	1.6	9.5
1	1 x 1.13	18.1	0.30	1.75	12.0
1.5	1 x 1.36	12.1	0.30	2.0	16.7
2.5	1 x 1.77	7.41	0.35	2.5	27.4
4	1 x 2.24	4.61	0.40	3.05	42.7
6	1 x 2.74	3.08	0.40	3.55	61.7

For this product, please contact:

OMERIN division principale   
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@omerin.com

\* Nominal cross-section not described in IEC 60228.

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

**omerin**  
LES CABLES DE L'EXTREME

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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

# SILIFLON® RETFE, RFEP and RPFA

-90 °C to +260 °C



- 1 • Solid bare copper core.
- 2 • Insulation: Fluorinated polymer ETFE (ref. RETFE) or FEP (ref. RFEP) or PFA (ref. RPFA).

## Approvals - standards

- Series inspired by standard NF C 93-522.

## Applications

- Cabling in household electrical appliances, electronics.
- Cabling in hot or cold environments (cryogenics).
- Cabling in aggressive environments (humidity, chemicals, etc.).
  - Cabling requiring compact size and excellent mechanical strength.

## Options

- Solid tin-plated copper core  
– ref. REETFE, REFEP and REPPA: contact us.
- Solid silver-plated copper core  
– ref. RAETFE, RAFEP and RAPPA: contact us.
- Solid nickel-plated copper core  
– ref. RCNETFE, RCNFEP and RCNPFA: contact us.
- Solid pure nickel core  
– ref. RNETFE, RNFEF and RNPPA: contact us.

## Characteristics

### General

- Continuous operating temperatures:  
RETFE: -90 °C to +155 °C.  
RFEP: -90 °C to +205 °C.  
RPFA: -90 °C to +260 °C.
- Excellent resistance to aggressive chemical environments.
- Excellent resistance to humidity and UV.
- Excellent mechanical strength.

### Electrical

- Rated voltage: 300/500 V.
- Test voltage: 2500 V.

### Standard products

- All colours including translucent.

## RETFE, RFEP and RPFA

SOLID CORE			INSULATED WIRE		
Nominal cross-section	Nominal stranding	Maximum linear resistance at 20 °C	Nominal thickness of insulation	Nominal diameter	Approximate linear weight
(mm <sup>2</sup> )		(Ω/km)	(mm)	(mm)	(kg/km)
0.03	1 x 0.20	599	0.15	0.5	0.6
0.05	1 x 0.25	384	0.15	0.55	0.8
0.07	1 x 0.30	268	0.17	0.65	1.2
0.125	1 x 0.40	140	0.17	0.75	1.8
0.15	1 x 0.43	118	0.17	0.8	2.1
0.2	1 x 0.50	93.1	0.17	0.85	2.6
0.22	1 x 0.52	84.2	0.17	0.85	2.7
0.32*	1 x 0.64	57.5	0.20	1.05	4.1
0.5	1 x 0.80	36.0	0.20	1.2	5.9
0.75	1 x 0.98	24.5	0.20	1.4	8.5
1	1 x 1.13	18.1	0.25	1.65	11.5
1.5	1 x 1.36	12.1	0.25	1.9	16.0
2.5	1 x 1.77	7.41	0.30	2.4	26.6
4	1 x 2.24	4.61	0.35	2.95	41.7
6	1 x 2.74	3.08	0.35	3.45	60.5

For this product, please contact:

OMERIN division principale   
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@omerin.com

\*\* Nominal cross-section available in the solid tin-plated copper core version only.

[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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

# SILIFLON® 105 °C

## Fluoropolymer insulation

### UL and cUL approval



- 1 • Bare, tin-plated, nickel-plated or silver-plated copper core.
- 2 • Insulation: Fluorinated polymer.

### Approvals - standards

- UL approval as per standard UL 758 – File no.: E101965.
  - cUL approval (CSA) as per standard C22.2 No. 210 – File no.: E101965.
- “Horizontal flame test” as per UL approval.
- “FT1 flame rating” as per cUL approval.

### Applications

- Cabling for household electrical heating appliances, small electric motors, electronic equipment, rear computer panels, etc.

### Options

- Other nominal cross-sections: contact us.
  - Other style nos. available: styles no. 1226, 1517 and 1523.
- Style n° 1863 (125°C - 300 V): contact us.

### Characteristics

#### General

- Continuous operating temperatures: -90 °C to +105 °C.
- Excellent resistance to aggressive chemical environments.
- Excellent resistance to humidity and UV.
- Excellent mechanical strength.

#### Electrical

- Rated voltage: as per style no.
- Test voltage: 10 x Rated voltage.

### Standard products

- All colours including translucent.
- Stranding of conducting cores: contact us.

Style no.		1513		1227		1508		10101	
Insulation		ETFE “Thin-wall”		FEP		ETFE “Thin-wall”		ETFE	
Approval		105 °C - VNS		105 °C - VNS		105 °C - 30 V		105 °C - 250 V	
Nominal cross-section		Average thickness of insulation (mm)	Nominal diameter* (mm)	Average thickness of insulation (mm)	Nominal diameter* (mm)	Average thickness of insulation (mm)	Nominal diameter* (mm)	Average thickness of insulation (mm)	Nominal diameter* (mm)
AWG	(mm <sup>2</sup> )								
30	0.05	0.13	0.55	0.20	0.7	0.14	0.6	0.25	0.8
28	0.09	0.13	0.65	0.20	0.8	0.14	0.7	0.25	0.9
26	0.13	0.13	0.75	0.20	0.9	0.14	0.75	0.25	1.0
24	0.22	0.13	0.85	0.20	1.0	0.14	0.9	0.25	1.1
22	0.34	0.13	1.0	0.20	1.15	0.14	1.05	0.25	1.25
-	0.5	0.13	1.2	0.20	1.3	0.14	1.2	0.25	1.35
20	0.6	0.13	1.25	0.20	1.4	0.14	1.3	0.25	1.45
-	0.75	-	-	0.33	1.75	-	-	-	-
18	0.93	-	-	0.33	1.9	-	-	-	-
-	1	-	-	0.33	1.95	-	-	-	-
16	1.34	-	-	0.33	2.2	-	-	-	-
-	1.5	-	-	0.33	2.2	-	-	-	-
14	-	-	-	0.33	2.6	-	-	-	-
-	2.5	-	-	0.33	2.7	-	-	-	-
12	-	-	-	0.33	3.2	-	-	-	-
-	4	-	-	0.33	3.25	-	-	-	-
10	-	-	-	0.33	3.9	-	-	-	-
-	6	-	-	0.33	3.9	-	-	-	-
Conducting metal		BCD		BCDEFG		BCD		BCD	

#### KEY

- Conducting metals
- B Tin-plated copper
- B\* Tin-plated copper (ø > 0.38 mm)
- C Nickel-plated copper
- D Silver-plated copper
- E Nickel
- F Bare copper
- F\* Bare copper (ø > 0.38 mm)
- G Nickel-plated copper 27 %

- AWM I A Internal wiring, not subject to mechanical abuse
- AWM I A/B Internal wiring
- AWM II A/B External or Internal wiring

- NS Not Specified
- VNS Voltage Not Specified

■: UL approved nominal cross-sections only.

\* The diameter is provided for information purposes as it may vary depending on the stranding of the core. Only the average thickness of insulation should be taken into account.

#### 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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

For this product, please contact:

**OMERIN division principale** ✓  
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@omerin.com

**OMERIN division Berne** ✓  
La Forie - F 63600 Ambert  
Tel. +33 (0)4 73 82 03 81 - Fax +33 (0)4 73 82 18 69  
berne@omerin.com



# SILIFLON® style 10935

## ETFE insulation + reinforcing braid

### UL and cUL approval

### -60 °C to +150 °C

#### Approvals - standards

- UL approval as per standard UL 758 – File no.: E101965.
- cUL approval as per standard C22.2 No. 210 (AWM I A/B FT1 FT2 150°C 600V) – File no.: E101965.
- CSA approval as per standard C22.2 No. 127 (Equipment and Lead Wire).
- "Horizontal flame test" as per UL approval.
- "FT1 flame rating" as per cUL approval.
- "FT2 flame rating" as per cUL approval.

#### Applications

- Internal cabling for electrical appliances or electronic appliances.

#### Options

- Other nominal stranding: contact us.
- Other colours: contact us.



- 1 • Bare or tin-plated copper core.
- 2 • Insulation: Fluorinated polymer ETFE.
- 3 • Reinforcement: Varnished synthetic fibre braid.

#### Characteristics

##### General

- Continuous operating temperatures: -60 °C to +150 °C.
- Excellent resistance to solvents, impregnation varnish and other chemical influences.
- Excellent resistance to humidity and UV.
- Excellent mechanical strength.

##### Electrical

- Rated voltage: 600 V.
- Test voltage: 6000 V.

#### Standard products

- Standard insulation colour: white.
- Standard reinforcing braid colours: white, blue, red, black, yellow or brown.

#### KEY

- Conducting metals
- B** Tin-plated copper
- B\*** Tin-plated copper (ø > 0.38 mm)
- C** Nickel-plated copper
- D** Silver-plated copper
- E** Nickel
- F** Bare copper
- F\*** Bare copper (ø > 0.38 mm)
- G** Nickel-plated copper 27 %

- AWM I A** Internal wiring, not subject to mechanical abuse
  - AWM I A/B** Internal wiring
  - AWM II A/B** External or Internal wiring
  - NS** Not Specified
  - VNS** Voltage Not Specified
- : UL approved nominal cross-sections only.

#### Style no.

#### 10935

#### Approval

#### 150 °C - 600 V AWM I A/B

AWG	Nominal cross-section (mm²)	Average thickness of insulation (mm)	Nominal diameter*		Approximate linear weight (kg/km)
			Multistrand core (mm)	Solid core (mm)	
24	0.22	0.15	1.2	1.15	3.2
22	0.34	0.15	1.3	1.2	4.3
-	0.5	0.15	1.5	1.4	6.1
20	0.6	0.15	1.6	-	6.8
-	0.75	0.20	1.7	1.65	8.9
18	0.93	0.20	1.85	1.7	10.1
-	1	0.20	2.0	1.9	11.5
16	1.34	0.20	2.2	2.0	15.0
-	1.5	0.20	2.25	2.1	16.0
14	-	0.33	2.8	2.6	22.4
-	2.5	0.33	3.1	2.9	26.4
12	-	0.33	3.4	-	38.2
-	4	0.33	3.6	3.3	38.6
10	-	0.33	4.1	-	56.0
-	6	0.33	4.2	4.0	56.1
8	-	0.51	5.2	-	91.5
-	10	0.51	6.0	-	107
6	-	0.51	6.8	-	143
-	16	0.51	7.1	-	160
4	-	0.51	8.1	-	220
-	25	0.51	8.6	-	249
2	35	0.51	9.7	-	331
1	-	0.76	11.3	-	443
-	50	0.76	11.7	-	478
1/0	-	0.76	12.4	-	545
2/0	70	0.76	13.5	-	659
3/0	-	0.76	15.1	-	838
-	95	0.76	15.2	-	855
4/0	-	0.76	16.7	-	1 045
-	120	0.76	16.9	-	1 094

Conducting metal

BF

For this product, please contact:

**OMERIN division principale** ✓  
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@omerin.com

\* The diameter is provided for information purposes as it may vary depending on the stranding of the core. Only the average thickness of insulation should be taken into account.

[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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

# SILIFLON® Style 11881

## FEP insulation + reinforcing braid

### UL and cUL approval

### -60 °C to +200 °C



#### Approvals - standards

- UL approval as per standard UL 758 – File no.: E101965.
- cUL approval as per standard C22.2 No. 210 (AWM I A/B FT1 FT2 200°C 600V) – File no.: E101965.
- “Horizontal flame test” as per UL approval.
- “FT1 flame rating” as per cUL approval.
- “FT2 flame rating” as per cUL approval.

#### Applications

- Internal cabling for electrical appliances or electronic appliances.

#### Options

- Other nominal stranding: contact us.
- Other colours: contact us.

#### Characteristics

##### General

- Continuous operating temperatures: -60 °C to +200 °C.
- Excellent resistance to solvents, impregnation varnish and other chemical influences.
- Excellent resistance to humidity and UV.
- Excellent mechanical strength.

##### Electrical

- Rated voltage: 600 V.
- Test voltage: 6000 V.

#### Standard products

- Standard insulation colour: white.
- Standard reinforcing braid colours: white, blue, red, black, yellow or brown.

#### FLUOROPOLYMER INSULATED WIRES AND CABLES



- 1 • Bare, tin-plated, nickel-plated or silver-plated copper core.
- 2 • Insulation: Fluorinated polymer FEP.
- 3 • Reinforcement: Varnished fiberglass braid.

Style no.

11881

Approval

200°C - 600 V  
AWM I A/B

Nominal cross-section		Average thickness of insulation (mm)	Nominal diameter*		Approximate linear weight (kg/km)
AWG	(mm <sup>2</sup> )		Multistrand core (mm)	Solid core (mm)	
24	0.22	0.15	1.2	1.15	3.2
22	0.34	0.15	1.3	1.2	4.3
-	0.5	0.15	1.5	1.4	6.1
20	0.6	0.15	1.6	-	6.8
-	0.75	0.20	1.7	1.65	8.9
18	0.93	0.20	1.85	1.7	10.1
-	1	0.20	2.0	1.9	11.5
16	1.34	0.20	2.2	2.0	15.0
-	1.5	0.20	2.25	2.1	16.0
14	-	0.33	2.8	2.6	22.4
-	2.5	0.33	3.1	2.9	26.4
12	-	0.33	3.4	-	38.2
-	4	0.33	3.6	3.3	38.6
10	-	0.33	4.1	-	56.0
-	6	0.33	4.2	4.0	56.1
8	-	0.51	5.2	-	91.5
-	10	0.51	6.0	-	107
6	-	0.51	6.8	-	143
-	16	0.51	7.1	-	160
4	-	0.51	8.1	-	220
-	25	0.51	8.6	-	249
2	35	0.51	9.7	-	331
1	-	0.76	11.3	-	443
-	50	0.76	11.7	-	478
1/0	-	0.76	12.4	-	545
2/0	70	0.76	13.5	-	659
3/0	-	0.76	15.1	-	838
-	95	0.76	15.2	-	855
4/0	-	0.76	16.7	-	1 045
-	120	0.76	16.9	-	1 094

Conducting metal: B\*CDEF\*G

\* The diameter is provided for information purposes as it may vary depending on the stranding of the core. Only the average thickness of insulation should be taken into account.

**KEY**

- Conducting metals
- B Tin-plated copper
- B\* Tin-plated copper (ø > 0.38 mm)
- C Nickel-plated copper
- D Silver-plated copper
- E Nickel
- F Bare copper
- F\* Bare copper (ø > 0.38 mm)
- G Nickel-plated copper 27 %

- AWM I A Internal wiring, not subject to mechanical abuse
- AWM I A/B Internal wiring
- AWM II A/B External or Internal wiring
- NS Not Specified
- VNS Voltage Not Specified
- : UL approved nominal cross-sections only.

# SILIFLON® 150 °C

## Fluoropolymer insulation

### UL and cUL approval



- 1 • Bare, tin-plated, nickel-plated or silver-plated copper core.
- 2 • Insulation: Fluorinated polymer.

### Approvals - standards

- UL approval as per standard UL 758 – File no.: E101965.
- cUL approval (CSA) as per standard C22.2 No. 210 – File no.: E101965.
- “Horizontal flame test” as per UL approval.
- “FT1 flame rating” as per cUL approval.
- VW-1 approval for Style 1333, Style 10126 and Style 11945 (AWG 24 to 18 Cross-sections).

### Characteristics General

- Continuous operating temperatures: -90 °C to +150 °C.
- Excellent resistance to aggressive chemical environments.
- Excellent resistance to humidity and UV.
- Excellent mechanical strength.

### Electrical

- Rated voltage: as per style no.
- Test voltage: 10 x Rated voltage.

### Standard products

- All colours including translucent.
- Stranding of conducting cores: contact us.

### Applications

- Cabling for household electrical heating appliances, rotating machines, industrial machines, electronic equipment, rear computer panels, etc.

### Options

- Other nominal cross-sections: contact us.
- Other style nos. available: styles no. 1591, 1814, 1829, 1857, 1858, 1859, 11537, 10211.

#### Style no. 1827

Insulation ETFE “Thin-wall”  
Approval

#### 10125

ETFE “Thin-wall”

#### 1828

ETFE

#### 1643

ETFE

150 °C – 125 V			150 °C – 300 V		150 °C – 300 V		150 °C – 300 V	
Nominal cross-section	Average thickness of insulation (mm)	Nominal diameter*	Average thickness of insulation (mm)	Nominal diameter*	Average thickness of insulation (mm)	Nominal diameter*	Average thickness of insulation (mm)	Nominal diameter*
30	0.05	0.14	0.15	0.6	0.33	0.95	0.33	0.95
28	0.09	0.14	0.15	0.7	0.33	1.05	0.33	1.05
26	0.13	0.14	0.15	0.75	0.33	1.15	0.33	1.15
24	0.22	0.14	0.15	0.9	0.33	1.3	0.33	1.3
22	0.34	0.14	0.15	1.05	0.33	1.4	0.33	1.4
-	0.5	0.14	0.15	1.2	0.33	1.6	0.33	1.6
20	0.6	0.14	0.15	1.3	0.33	1.65	0.33	1.65
-	0.75	0.20	0.15	1.4	0.33	1.75	0.33	1.75
18	0.93	0.20	0.15	1.55	0.33	1.9	0.33	1.9
-	1	0.20	0.15	1.65	0.33	1.95	0.33	1.95
16	1.34	0.20	0.20	1.9	0.33	2.2	0.33	2.2
-	1.5	0.20	0.20	1.9	0.33	2.2	0.33	2.2
14	-	0.33	0.20	2.5	0.33	2.55	0.33	2.55
-	2.5	0.33	0.20	2.45	0.33	2.7	0.33	2.7
12	-	0.33	0.25	2.9	0.33	3.1	0.33	3.0
-	4	0.33	0.25	3.1	0.33	3.25	0.33	3.25
10	-	0.33	0.25	3.6	0.33	3.7	0.33	3.9
-	6	0.33	0.25	3.7	0.33	3.9	0.33	3.9
8	-	-	0.64	5.4	-	-	0.51	5.3
-	10	-	0.64	5.7	-	-	0.51	5.4
6	-	-	0.64	6.6	-	-	0.51	6.3
-	16	-	0.64	6.7	-	-	0.51	6.6
4	-	-	0.64	7.8	-	-	0.51	7.4
-	25	-	0.64	8.3	-	-	0.51	8.0
2	35	-	0.89	10.0	-	-	0.51	9.3
1	-	-	0.89	11.0	-	-	0.76	10.7
-	50	-	0.89	11.4	-	-	0.76	11.1
1/0	-	-	1.14	12.5	-	-	0.76	11.7
2/0	70	-	1.14	14.0	-	-	0.76	12.8
3/0	-	-	1.14	15.2	-	-	0.76	14.4
-	95	-	1.14	15.4	-	-	0.76	14.6
4/0	-	-	1.14	16.8	-	-	0.76	16.0
-	120	-	1.14	17.1	-	-	0.76	16.3

### KEY

- Conducting metals
- B Tin-plated copper
- B\* Tin-plated copper (ø > 0.38 mm)
- C Nickel-plated copper
- D Silver-plated copper
- E Nickel
- F Bare copper
- F\* Bare copper (ø > 0.38 mm)
- G Nickel-plated copper 27 %

- AWM I A Internal wiring, not subject to mechanical abuse
- AWM I A/B Internal wiring
- AWM II A/B External or Internal wiring

- NS Not Specified
- VNS Voltage Not Specified

■ UL approved nominal cross-sections only.

For this product, please contact:

OMERIN division principale ✓  
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@omerin.com

\* The diameter is provided for information purposes as it may vary depending on the stranding of the core. Only the average thickness of insulation should be taken into account.

### 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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.



Style no. Insulation Approval		1333-VW-1 FEP 150 °C - 300 V		10210 ETFE "Thin-wall" 150 °C - 600 V		10126-VW-1 ETFE "Thin-wall" 150 °C - 600 V		1644 ETFE 150 °C - 600 V		1331 FEP 150 °C - 600 V		11945 ETFE "Thin-wall" 150 °C - 750 V		10358 ETFE 150 °C - 1000 V (cUL 600 V)	
Nominal cross-section		Average thickness of insulation (mm)	Nominal diameter* (mm)	Average thickness of insulation (mm)	Nominal diameter* (mm)	Average thickness of insulation (mm)	Nominal diameter* (mm)	Average thickness of insulation (mm)	Nominal diameter* (mm)	Average thickness of insulation (mm)	Nominal diameter* (mm)	Average thickness of insulation (mm)	Nominal diameter* (mm)	Average thickness of insulation (mm)	Nominal diameter* (mm)
AWG	(mm²)														
30	0.05	0.33	0.95	-	-	0.25	0.8	0.51	1.3	0.51	1.3	-	-	0.51	1.3
28	0.09	0.33	1.05	-	-	0.25	0.9	0.51	1.4	0.51	1.4	-	-	0.51	1.4
26	0.13	0.33	1.15	-	-	0.25	1.05	0.51	1.5	0.51	1.5	-	-	0.51	1.5
24	0.22	0.33	1.3	0.15	0.9	0.25	1.15	0.51	1.65	0.51	1.65	0.15	0.9	0.51	1.65
22	0.34	0.33	1.4	0.15	1.05	0.25	1.3	0.51	1.8	0.51	1.8	0.15	1.05	0.51	1.8
-	0.5	0.33	1.6	0.15	1.25	0.25	1.4	0.51	1.95	0.51	1.95	0.15	1.25	0.51	1.95
20	0.6	0.33	1.65	0.15	1.35	0.25	1.5	0.51	2.0	0.51	2.0	0.15	1.35	0.51	2.0
-	0.75	0.33	1.75	0.15	1.4	0.25	1.55	0.51	2.1	0.51	2.1	0.15	1.4	0.51	2.1
18	0.93	0.33	1.9	0.15	1.55	0.25	1.8	0.51	2.25	0.51	2.25	0.15	1.55	0.51	2.25
-	1	0.33	1.95	0.15	1.65	0.25	1.8	0.51	2.3	0.51	2.3	0.15	1.65	0.51	2.3
16	1.34	0.33	2.2	0.20	1.9	0.25	2.0	0.51	2.5	0.51	2.5	0.20	1.9	0.51	2.5
-	1.5	0.33	2.2	0.20	1.9	0.25	2.0	0.51	2.55	0.51	2.55	0.20	1.9	0.51	2.55
14	-	0.33	2.55	0.20	2.25	0.25	2.4	0.51	2.85	0.51	2.85	0.20	2.25	0.51	2.85
-	2.5	0.33	2.7	0.20	2.45	0.25	2.45	0.51	3.0	0.51	3.0	0.20	2.45	0.51	3.0
12	-	0.33	3.1	0.25	2.9	0.38	3.2	0.51	3.25	0.51	3.3	0.25	2.9	0.51	3.3
-	4	0.33	3.25	0.25	3.1	0.38	3.35	0.51	3.6	0.51	3.6	0.25	3.1	0.51	3.6
10	-	0.33	3.7	0.25	3.6	0.38	4.1	0.51	4.1	0.51	4.1	0.25	3.6	0.51	4.1
-	6	0.33	3.9	-	-	0.38	4.5	0.51	4.3	0.51	4.3	-	-	0.51	4.3
8	-	-	-	-	-	0.64	5.4	0.76	5.6	0.76	5.4	-	-	0.76	5.4
-	10	-	-	-	-	0.64	5.7	0.76	5.9	0.76	5.9	-	-	0.76	5.9
6	-	-	-	-	-	0.64	6.6	0.76	6.8	0.76	6.8	-	-	0.76	6.8
-	16	-	-	-	-	0.64	6.7	0.76	7.1	0.76	7.1	-	-	0.76	7.1
4	-	-	-	-	-	0.64	7.8	0.76	8.0	0.76	8.0	-	-	0.76	8.0
-	25	-	-	-	-	0.64	8.3	0.76	8.5	0.76	8.5	-	-	0.76	8.5
2	35	-	-	-	-	0.89	10.0	0.76	9.6	0.76	9.6	-	-	0.76	9.6
1	-	-	-	-	-	0.89	11.0	1.14	11.2	1.14	11.2	-	-	1.14	11.2
-	50	-	-	-	-	0.89	11.4	1.14	12.0	1.14	12.0	-	-	1.14	12.0
1/0	-	-	-	-	-	1.14	12.5	1.14	12.5	1.14	12.5	-	-	1.14	12.5
2/0	70	-	-	-	-	1.14	14.0	1.14	14.6	1.14	14.0	-	-	1.14	14.0
3/0	-	-	-	-	-	1.14	15.2	1.14	15.2	1.14	15.2	-	-	1.14	15.2
-	95	-	-	-	-	1.14	15.4	1.14	15.4	1.14	15.4	-	-	1.14	15.4
4/0	-	-	-	-	-	1.14	16.8	1.14	16.8	1.14	16.8	-	-	1.14	16.8
-	120	-	-	-	-	1.14	17.1	1.14	17.1	1.14	17.1	-	-	1.14	17.1
Conducting metal		BCDEFG		BCDEFG		BCDEFG		BCDEFG		BCDEFG		BCDEFG		BCDEFG	

**KEY**

- Conducting metals
- B Tin-plated copper
- B\* Tin-plated copper (ø > 0.38 mm)
- C Nickel-plated copper
- D Silver-plated copper
- E Nickel
- F Bare copper
- F\* Bare copper (ø > 0.38 mm)
- G Nickel-plated copper 27 %

- AWM I A Internal wiring, not subject to mechanical abuse
- AWM I A/B Internal wiring
- AWM II A/B External or Internal wiring

- NS Not Specified
- VNS Voltage Not Specified

■: UL approved nominal cross-sections only.

For this product, please contact:

OMERIN division principale ✓  
 Zone Industrielle - F 63600 Ambert  
 Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
 omerin@omerin.com

\* The diameter is provided for information purposes as it may vary depending on the stranding of the core. Only the average thickness of insulation should be taken into account.

[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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.



# SILIFLON® 200°C

## Fluoropolymer insulation

### UL and cUL approval



- 1 • Bare, tin-plated, nickel-plated or silver-plated copper core.
- 2 • Insulation: Fluorinated polymer.

### Approvals - standards

- UL approval as per standard UL 758 – File no.: E101965.
- cUL approval (CSA) as per standard C22.2 No. 210 – File no.: E101965.
- “Horizontal flame test” as per UL approval.
- “FT1 flame rating” as per cUL approval.
- VVW-1 approval.

### Characteristics General

- Continuous operating temperatures: -90°C to +200°C.
- Excellent resistance to aggressive chemical environments.
  - Excellent resistance to humidity and UV.
  - Excellent mechanical strength.

### Electrical

- Rated voltage: as per style no.
- Test voltage: 10 x Rated voltage.

### Standard products

- All colours including translucent.
- Stranding of conducting cores: contact us.

### Applications

- Cabling for household electrical heating appliances, rotating machines, industrial machines, electronic equipment, rear computer panels, etc.

### Options

- Other nominal cross-sections: contact us.

Style no. Insulation Approval		10109 ETFE "Thin-wall" 200°C - 300 V		10969 FEP 200°C - 300 V		1900 FEP 200°C - 300 V		1332 FEP "Thick-wall" 200°C - 300 V	
Nominal cross-section		Average thickness of insulation (mm)	Nominal diameter* (mm)	Average thickness of insulation (mm)	Nominal diameter* (mm)	Average thickness of insulation (mm)	Nominal diameter* (mm)	Average thickness of insulation (mm)	Nominal diameter* (mm)
30	0.05	0.15	0.6	0.20	0.7	0.25	0.8	0.33	0.95
28	0.09	0.15	0.7	0.20	0.8	0.25	0.9	0.33	1.05
26	0.13	0.15	0.8	0.20	0.9	0.25	1.0	0.33	1.15
24	0.22	0.15	0.9	0.20	1.0	0.25	1.1	0.33	1.3
22	0.34	0.15	1.05	0.20	1.15	0.25	1.25	0.33	1.45
-	0.5	0.15	1.25	0.20	1.3	0.25	1.4	0.33	1.55
20	0.6	0.15	1.3	0.20	1.4	0.25	1.5	0.33	1.7
-	0.75	0.15	1.4	0.33	1.75	0.25	1.55	0.33	1.75
18	0.93	0.15	1.55	0.33	1.9	0.25	1.7	0.33	1.9
-	1	0.15	1.65	0.33	1.95	0.25	1.8	0.33	1.95
16	1.34	0.20	1.9	0.33	2.1	0.25	2.0	0.33	2.1
-	1.5	0.20	1.9	0.33	2.2	0.25	2.0	0.33	2.2
14	-	0.20	2.25	0.33	2.5	0.25	2.4	0.33	2.7
-	2.5	0.20	2.45	0.33	2.7	0.25	2.55	0.33	2.7
12	-	0.25	2.9	0.33	3.2	0.25	2.9	0.33	3.2
-	4	0.25	3.1	0.33	3.25	0.25	3.1	0.33	3.25
10	-	0.25	3.6	0.33	3.9	0.25	3.6	0.33	3.9
-	6	0.25	3.7	0.33	3.9	0.25	3.7	0.33	3.9
8	-	0.64	5.4	-	-	-	-	-	-
-	10	0.64	5.7	-	-	-	-	-	-
6	-	0.64	6.6	-	-	-	-	-	-
-	16	0.64	6.7	-	-	-	-	-	-
4	-	0.64	7.8	-	-	-	-	-	-
-	25	0.64	8.3	-	-	-	-	-	-
2	35	0.89	10.0	-	-	-	-	-	-
1	-	0.89	11.0	-	-	-	-	-	-
-	50	0.89	11.4	-	-	-	-	-	-
1/0	-	1.14	12.5	-	-	-	-	-	-
2/0	70	1.14	14.0	-	-	-	-	-	-
3/0	-	1.14	15.2	-	-	-	-	-	-
-	95	1.14	15.4	-	-	-	-	-	-
4/0	-	1.14	16.8	-	-	-	-	-	-
-	120	1.14	17.1	-	-	-	-	-	-
Conducting metal		B*CDEF*G		B*CDEF*G		B*CDEG		B*CDEF*G	

### KEY

- Conducting metals
- B Tin-plated copper
- B\* Tin-plated copper (ø > 0.38 mm)
- C Nickel-plated copper
- D Silver-plated copper
- E Nickel
- F Bare copper
- F\* Bare copper (ø > 0.38 mm)
- G Nickelplated copper 27 %

- AWM I A Internal wiring, not subject to mechanical abuse
- AWM I A/B Internal wiring
- AWM II A/B External or Internal wiring

- NS Not Specified
- VNS Voltage Not Specified

■: UL approved nominal cross-sections only.

For this product, please contact:

OMERIN division principale ✓  
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@omerin.com

\* The diameter is provided for information purposes as it may vary depending on the stranding of the core. Only the average thickness of insulation should be taken into account.

[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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

Style no. Insulation		10086 ETFE "Thin-wall"		10588 FEP "Thin-wall"		1901 FEP		1330 FEP "Thick-wall"		1930 PFA "Thick-wall"		10203 FEP		10048 FEP "Thick-wall"	
Approval		200°C - 600 V		200°C - 600 V		200°C - 600 V		200°C - 600 V		200°C - 600 V		200°C - 1 000 V		200°C - 1 000 V	
Nominal cross-section		Average thickness of insulation	Nominal diameter*	Average thickness of insulation	Nominal diameter*	Average thickness of insulation	Nominal diameter*	Average thickness of insulation	Nominal diameter*	Average thickness of insulation	Nominal diameter*	Average thickness of insulation	Nominal diameter*	Average thickness of insulation	Nominal diameter*
AWG	(mm²)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
30	0.05	0.25	0.8	0.23	0.75	0.36	1.0	0.51	1.3	0.51	1.3	0.51	1.3	0.64	1.6
28	0.09	0.25	0.9	0.23	0.85	0.36	1.1	0.51	1.4	0.51	1.4	0.51	1.4	0.64	1.7
26	0.13	0.25	1.0	0.23	0.95	0.36	1.2	0.51	1.5	0.51	1.5	0.51	1.5	0.64	1.8
24	0.22	0.25	1.1	0.23	1.05	0.36	1.35	0.51	1.65	0.51	1.65	0.51	1.65	0.64	1.9
22	0.34	0.25	1.25	0.23	1.2	0.36	1.5	0.51	1.85	0.51	1.8	0.51	1.8	0.64	2.05
-	0.5	0.25	1.4	0.23	1.35	0.36	1.65	0.51	1.95	0.51	1.95	0.51	1.95	0.64	2.2
20	0.6	0.25	1.5	0.23	1.45	0.36	1.7	0.51	2.0	0.51	2.0	0.51	2.0	0.64	2.3
-	0.75	0.25	1.55	0.23	1.5	0.36	1.8	0.51	2.1	0.51	2.1	0.51	2.1	0.64	2.4
18	0.93	0.25	1.7	0.23	1.65	0.36	2.0	0.51	2.25	0.51	2.25	0.51	2.25	0.64	2.55
-	1	0.25	1.8	0.23	1.75	0.36	2.0	0.51	2.3	0.51	2.3	0.51	2.3	0.64	2.6
16	1.34	0.25	2.0	0.23	1.95	0.36	2.2	0.51	2.5	0.51	2.55	0.51	2.5	0.64	2.8
-	1.5	0.25	2.0	0.23	1.95	0.36	2.3	0.51	2.55	0.51	2.55	0.51	2.55	0.64	2.85
14	-	0.25	2.4	0.23	2.35	0.36	2.7	0.51	3.0	0.51	3.0	0.51	3.0	0.64	3.2
-	2.5	0.25	2.55	0.23	2.5	0.36	2.75	0.51	3.0	0.51	3.0	0.51	3.0	0.64	3.3
12	-	0.38	3.2	0.23	2.9	0.36	3.1	0.51	3.4	0.51	3.4	0.51	3.4	0.64	3.6
-	4	0.38	3.35	0.23	3.1	0.36	3.3	0.51	3.6	0.51	3.6	0.51	3.6	0.64	3.9
10	-	0.38	3.8	0.23	3.5	0.36	3.8	0.51	4.0	0.51	4.0	0.51	4.0	0.64	4.3
-	6	0.38	4.0	-	-	0.36	4.0	0.51	4.3	0.51	4.3	0.51	4.3	0.64	4.5
8	-	0.64	5.4	-	-	0.51	5.2	0.76	5.3	0.76	5.6	0.76	5.6	-	-
-	10	0.64	5.7	-	-	0.51	5.4	0.76	5.9	0.76	5.9	0.76	5.9	-	-
6	-	0.64	6.6	-	-	0.51	6.3	0.76	6.8	0.76	6.8	0.76	6.8	-	-
-	16	0.64	6.7	-	-	0.51	6.6	0.76	7.1	0.76	7.1	0.76	7.1	-	-
4	-	0.64	7.8	-	-	0.51	7.4	0.76	8.0	0.76	8.0	0.76	8.0	-	-
-	25	0.64	8.3	-	-	0.51	8.0	0.76	8.5	0.76	8.5	0.76	8.5	-	-
2	35	0.89	10.0	-	-	0.51	9.3	0.76	9.2	0.76	9.2	0.76	9.2	-	-
1	-	0.89	11.0	-	-	0.76	10.7	1.14	11.2	1.14	11.2	1.14	11.2	-	-
-	50	0.89	11.4	-	-	0.76	11.1	1.14	12.0	1.14	12.0	1.14	12.0	-	-
1/0	-	1.14	12.5	-	-	0.76	11.7	1.14	12.5	1.14	12.5	1.14	12.5	-	-
2/0	70	1.14	14.0	-	-	0.76	12.8	1.14	14.0	1.14	14.0	1.14	14.0	-	-
3/0	-	1.14	15.2	-	-	0.76	14.4	1.14	15.2	1.14	15.2	1.14	15.2	-	-
-	95	1.14	15.4	-	-	0.76	14.6	1.14	15.4	1.14	15.4	1.14	15.4	-	-
4/0	-	1.14	16.8	-	-	0.76	16.0	1.14	16.8	1.14	16.8	1.14	16.8	-	-
-	120	1.14	17.1	-	-	0.76	16.3	1.14	17.1	1.14	17.1	1.14	17.1	-	-
Conducting metal		B*CDEF*G		B*CDEF*G		B*CDEF*G		B*CDEF*G		B*CDEF*G		B*CDEF*G		B*CDEF*G	

**KEY**

- Conducting metals
- B Tin-plated copper
- B\* Tin-plated copper (ø > 0.38 mm)
- C Nickel-plated copper
- D Silver-plated copper
- E Nickel
- F Bare copper
- F\* Bare copper (ø > 0.38 mm)
- G Nickel-plated copper 27 %

- AWM I A Internal wiring, not subject to mechanical abuse
- AWM I A/B Internal wiring
- AWM II A/B External or Internal wiring

- NS Not Specified
- VNS Voltage Not Specified

■: UL approved nominal cross-sections only.

For this product, please contact:

**OMERIN** division principale ✓  
 Zone Industrielle - F 63600 Ambert  
 Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
 omerin@omerin.com

\* The diameter is provided for information purposes as it may vary depending on the stranding of the core. Only the average thickness of insulation should be taken into account.

[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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

# SILIFLON® 250°C

## Fluoropolymer insulation

### UL and cUL approval



- 1 • Bare, tin-plated, nickel-plated or silver-plated copper core.
- 2 • Insulation: Fluorinated polymer.

### Approvals - standards

- UL approval as per standard UL 758 – File no.: E101965.
- cUL approval (CSA) as per standard C22.2 No. 210 – File no.: E101965.
- “Horizontal flame test” as per UL approval.
- “FT1 flame rating” as per cUL approval.
  - VW-1 approval.

### Characteristics General

- Continuous operating temperatures: -90°C to +250°C.
- Excellent resistance to aggressive chemical environments.
  - Excellent resistance to humidity and UV.
  - Excellent mechanical strength.

### Electrical

- Rated voltage: as per style no.
- Test voltage: 10 x Rated voltage.

### Standard products

- All colours including translucent.
- Stranding of conducting cores: contact us.

### Applications

- Cabling for household electrical heating appliances, rotating machines, industrial machines, electronic equipment, rear computer panels, etc.

### Options

- Other nominal cross-sections: contact us.

Style no. Insulation Approval	1933 PFA "Thin-wall"		1882 PFA		10486 PFA	
	250°C - VNS		250°C - 150 V		250°C - 300 V	
Nominal cross-section	Average thickness of insulation (mm)	Nominal diameter* (mm)	Average thickness of insulation (mm)	Nominal diameter* (mm)	Average thickness of insulation (mm)	Nominal diameter* (mm)
AWG (mm²)						
30 (0.05)	0.15	0.6	0.25	0.8	0.23	0.75
28 (0.09)	0.15	0.7	0.25	0.9	0.23	0.85
26 (0.13)	0.15	0.8	0.25	1.0	0.23	0.95
24 (0.22)	0.15	0.9	0.25	1.1	0.23	1.1
22 (0.34)	0.15	1.05	0.25	1.25	0.23	1.2
- (0.5)	0.15	1.2	0.25	1.4	0.23	1.4
20 (0.6)	0.15	1.3	0.25	1.5	0.23	1.5
- (0.75)	-	-	0.25	1.55	0.23	1.55
18 (0.93)	-	-	0.25	1.8	0.23	1.75
- (1)	-	-	0.25	1.8	0.23	1.75
16 (1.34)	-	-	0.25	2.0	0.23	2.0
- (1.5)	-	-	0.25	2.0	0.23	2.0
14 (-)	-	-	-	-	0.23	2.3
- (2.5)	-	-	-	-	0.23	2.5
12 (-)	-	-	-	-	0.23	2.8
- (4)	-	-	-	-	0.23	3.05
10 (-)	-	-	-	-	0.23	3.6
- (6)	-	-	-	-	0.23	3.65
8 (-)	-	-	-	-	0.51	5.2
- (10)	-	-	-	-	0.51	5.4
6 (-)	-	-	-	-	0.51	6.3
- (16)	-	-	-	-	0.51	6.6
4 (-)	-	-	-	-	0.76	8.0
- (25)	-	-	-	-	0.76	8.5
2 (35)	-	-	-	-	0.76	9.6
1 (-)	-	-	-	-	1.14	11.2
- (50)	-	-	-	-	1.14	12.0
1/0 (-)	-	-	-	-	1.14	12.5
2/0 (70)	-	-	-	-	1.14	14.0
3/0 (-)	-	-	-	-	1.14	15.2
- (95)	-	-	-	-	1.14	15.4
4/0 (-)	-	-	-	-	1.14	16.8
- (120)	-	-	-	-	1.14	17.1
Conducting metal	CEG		CEG		CEG	

### KEY

- Conducting metals
- B Tin-plated copper
- B\* Tin-plated copper (ø > 0.38 mm)
- C Nickel-plated copper
- D Silver-plated copper
- E Nickel
- F Bare copper
- F\* Bare copper (ø > 0.38 mm)
- G Nickelplated copper 27 %

- AWM I A Internal wiring, not subject to mechanical abuse
- AWM I A/B Internal wiring
- AWM II A/B External or Internal wiring

- NS Not Specified
- VNS Voltage Not Specified

■: UL approved nominal cross-sections only.

For this product, please contact:

OMERIN division principale ✓  
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@omerin.com

\* The diameter is provided for information purposes as it may vary depending on the stranding of the core. Only the average thickness of insulation should be taken into account.

[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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

Style no. Insulation Approval		1726 PFA 250°C - 300 V		10362 PFA "Thin-wall" 250°C - 600 V		1727 PFA 250°C - 600 V		10371 PFA "Thin-wall" 250°C - 1000 V (cUL 600 V)	
Nominal cross-section		Average thickness of insulation	Nominal diameter*	Average thickness of insulation	Nominal diameter*	Average thickness of insulation	Nominal diameter*	Average thickness of insulation	Nominal diameter*
AWG	(mm <sup>2</sup> )	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
30	0.05	0.33	0.95	0.25	0.8	0.51	1.3	0.51	1.3
28	0.09	0.33	1.05	0.25	0.9	0.51	1.4	0.51	1.4
26	0.13	0.33	1.15	0.25	1.0	0.51	1.5	0.51	1.5
24	0.22	0.33	1.3	0.25	1.1	0.51	1.65	0.51	1.65
22	0.34	0.33	1.45	0.25	1.25	0.51	1.8	0.51	1.8
-	0.5	0.33	1.6	0.25	1.4	0.51	1.95	0.51	1.95
20	0.6	0.33	1.65	0.25	1.5	0.51	2.0	0.51	2.0
-	0.75	0.33	1.75	0.25	1.55	0.51	2.1	0.51	2.1
18	0.93	0.33	1.9	0.25	1.8	0.51	2.2	0.51	2.2
-	1	0.33	1.95	0.25	1.8	0.51	2.3	0.51	2.3
16	1.34	0.33	2.2	0.25	2.0	0.51	2.45	0.51	2.45
-	1.5	0.33	2.2	0.25	2.0	0.51	2.65	0.51	2.55
14	-	0.33	2.6	0.25	2.4	0.51	2.85	0.51	2.8
-	2.5	0.33	2.7	0.25	2.55	0.51	3.0	0.51	3.0
12	-	0.33	3.2	0.25	2.9	0.51	3.4	0.51	3.4
-	4	0.33	3.25	0.25	3.1	0.51	3.6	0.51	3.6
10	-	0.33	3.9	0.25	3.6	0.51	4.2	0.51	4.2
-	6	0.33	3.9	0.25	3.7	0.51	4.3	0.51	4.3
8	-	0.51	5.2	0.76	5.8	0.76	5.7	0.76	5.7
-	10	0.51	5.4	0.76	5.9	0.76	5.9	0.76	5.9
6	-	0.51	6.3	0.76	6.8	0.76	6.8	0.76	6.8
-	16	0.51	6.6	0.76	7.1	0.76	7.1	0.76	7.1
4	-	0.76	8.0	0.76	8.0	0.76	8.0	0.76	8.0
-	25	0.76	8.5	0.76	8.5	0.76	8.5	0.76	8.5
2	35	0.76	9.6	0.76	9.6	0.76	9.6	0.76	9.6
1	-	1.14	11.2	1.14	11.2	1.14	11.2	1.14	11.2
-	50	1.14	12.0	1.14	12.0	1.14	12.0	1.14	12.0
1/0	-	1.14	12.5	1.14	12.5	1.14	12.5	1.14	12.5
2/0	70	1.14	14.0	1.14	14.0	1.14	14.0	1.14	14.0
3/0	-	1.14	15.2	1.14	15.2	1.14	15.2	1.14	15.2
-	95	1.14	15.4	1.14	15.4	1.14	15.4	1.14	15.4
4/0	-	1.14	16.8	1.14	16.8	1.14	16.8	1.14	16.8
-	120	1.14	17.1	1.14	17.1	1.14	17.1	1.14	17.1
Conducting metal		CEG		CEG		CEG		CEG	

**KEY**

- Conducting metals
- B Tin-plated copper
- B\* Tin-plated copper (ø > 0.38 mm)
- C Nickel-plated copper
- D Silver-plated copper
- E Nickel
- F Bare copper
- F\* Bare copper (ø > 0.38 mm)
- G Nickel-plated copper 27 %

- AWM I A Internal wiring, not subject to mechanical abuse
- AWM I A/B Internal wiring
- AWM II A/B External or Internal wiring

- NS Not Specified
- VNS Voltage Not Specified

■: UL approved nominal cross-sections only.

For this product, please contact:

OMERIN division principale   
 Zone Industrielle - F 63600 Ambert  
 Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
 omerin@omerin.com

\* The diameter is provided for information purposes as it may vary depending on the stranding of the core. Only the average thickness of insulation should be taken into account.

[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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

# SILIFLON® KZ 04

## -55 °C to +200 °C



- 1 • Concentric silver-plated copper core.
- 2 • Insulation: PTFE tape(s).

### Approvals - standards

- Inspired from NF C 93-523 standard.

### Applications

- Wires used in aeronautical and electronic applications and all instrumentation uses requiring excellent resistance to high temperatures and to chemical influences.

### Options

- Compliance with the American standard ANSI NEMA HP3: contact us.

### Characteristics

#### General

- Continuous operating temperatures: -55 °C to +200 °C.
- Excellent resistance to aggressive chemical environments.
- Excellent resistance to humidity.
- Excellent resistance to hydrocarbons and fluids.

#### Electrical (as per UTE C 93-523)

- Rated voltage: 250 Vac – 350 Vdc.
- Test voltage: 2500 V.

### Standard products

- Standard insulation colours: all solid colours.

### KZ 04

CONCENTRIC CORE				INSULATED WIRE	
Nominal cross-section AWG	(mm <sup>2</sup> )	Nominal stranding	Maximum linear resistance at 20 °C (Ω/km)	Nominal diameter (mm)	Approximate linear weight (kg/km)
32	0.035	7 x 0.08	546	0.53	0.7
30	0.055	7 x 0.10	349	0.61	1.0
28	0.093	7 x 0.13	201	0.68	1.4
26	0.14	7 x 0.16	132	0.79	2.0
24	0.22	7 x 0.20	86	0.91	2.8
22	0.34	7 x 0.25	54.4	1.06	4.1
20	0.60	19 x 0.20	31.3	1.35	7.3

For this product, please contact:

OMERIN division principale   
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@omerin.com

[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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

# SILIFLON® KZ 05

**-55 °C to +200 °C**



- 1 • Concentric silver-plated copper core.
- 2 • Insulation: PTFE tape(s).

## Approvals - standards

- Inspired from NF C 93-523 standard.

## Applications

- Wires used in aeronautical and electronic applications and all instrumentation uses requiring excellent resistance to high temperatures and to chemical influences.

## Options

- Compliance with the American standard ANSI NEMA HP3: contact us.

## Characteristics

### General

- Continuous operating temperatures: -55 °C to +200 °C.
- Excellent resistance to aggressive chemical environments.
- Excellent resistance to humidity.
- Excellent resistance to hydrocarbons and fluids.

### Electrical (as per UTE C 93-523)

- Rated voltage: 600 Vac – 850 Vdc.
- Test voltage: 3400 V.

## Standard products

- Standard insulation colours: all solid colours.

## KZ 05

CONCENTRIC CORE				INSULATED WIRE	
Nominal cross-section AWG	(mm <sup>2</sup> )	Nominal stranding	Maximum linear resistance at 20 °C (Ω/km)	Nominal diameter (mm)	Approximate linear weight (kg/km)
32	0.035	7 x 0.08	546	0.73	1.3
30	0.055	7 x 0.10	349	0.81	1.5
28	0.093	7 x 0.13	201	0.90	2.0
26	0.14	7 x 0.16	132	1.00	2.6
24	0.22	7 x 0.20	86	1.13	3.6
22	0.34	7 x 0.25	54.4	1.27	5.0
20	0.60	19 x 0.20	31.3	1.52	7.8
18	0.93	19 x 0.25	20.5	1.80	11.6
16	1.34	19 x 0.30	13.9	2.10	16.5
14	1.91	27 x 0.30*	10	2.48	22.3
12	3.18	45 x 0.30*	6	3.06	35.7

\* Non-concentric cores.

For this product, please contact:

OMERIN division principale   
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

# SILIFLON® KZ 06

**-55 °C to +200 °C**



- 1 • Concentric silver-plated copper core.
- 2 • Insulation: PTFE tape(s).

## Approvals - standards

- Inspired from NF C 93-523 standard.

## Applications

- Wires used in aeronautical and electronic applications and all instrumentation uses requiring excellent resistance to high temperatures and to chemical influences.

## Options

- Compliance with the American standard ANSI NEMA HP3: contact us.

## Characteristics

### General

- Continuous operating temperatures: -55 °C to +200 °C.
- Excellent resistance to aggressive chemical environments.
- Excellent resistance to humidity.
- Excellent resistance to hydrocarbons and fluids.

### Electrical (as per UTE C 93-523)

- Rated voltage: 1000 Vac – 1400 Vdc.
- Test voltage: 5000 V.

## Standard products

- Standard insulation colours: all solid colours.

### KZ 06

CONCENTRIC CORE				INSULATED WIRE	
Nominal cross-section AWG	Nominal cross-section (mm <sup>2</sup> )	Nominal stranding	Maximum linear resistance at 20 °C (Ω/km)	Nominal diameter (mm)	Approximate linear weight (kg/km)
32	0.035	7 x 0.08	546	0.99	2.3
30	0.055	7 x 0.10	349	1.05	2.5
28	0.093	7 x 0.13	201	1.14	3.0
26	0.14	7 x 0.16	132	1.24	3.7
24	0.22	7 x 0.20	86	1.37	4.7
22	0.34	7 x 0.25	54.4	1.53	6.2
20	0.60	19 x 0.20	31.3	1.76	9.1
18	0.93	19 x 0.25	20.5	2.05	12.6
16	1.34	19 x 0.30	13.9	2.25	17.1
14	1.91	27 x 0.30*	10	2.70	25.3
12	3.18	45 x 0.30*	6	3.35	38.7

\* Non-concentric cores.

For this product, please contact:

OMERIN division principale   
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

**SILIFLON® KZ 07****-55 °C to +260 °C**

- 1 • Concentric nickel-plated copper core.
- 2 • Insulation: PTFE tape(s).

**Approvals - standards**

- Inspired from NF C 93-523 standard.

**Applications**

- Wires used in aeronautical and electronic applications and all instrumentation uses requiring excellent resistance to high temperatures and to chemical influences.

**Options**

- Compliance with the American standard ANSI NEMA HP3: contact us.

**Characteristics****General**

- Continuous operating temperatures: -55 °C to +260 °C.
- Excellent resistance to aggressive chemical environments.
- Excellent resistance to humidity.
- Excellent resistance to hydrocarbons and fluids.

**Electrical (as per UTE C 93-523)**

- Rated voltage: 250 Vac – 350 Vdc.
- Test voltage: 2500 V.

**Standard products**

- Standard insulation colours: all solid colours.

**KZ 07****CONCENTRIC CORE**

Nominal cross-section AWG	Nominal cross-section (mm <sup>2</sup> )	Nominal stranding	Maximum linear resistance at 20 °C (Ω/km)
32	0.035	7 x 0.08	612
30	0.055	7 x 0.10	391
28	0.093	7 x 0.13	225
26	0.14	7 x 0.16	148
24	0.22	7 x 0.20	96.5
22	0.34	7 x 0.25	60.8
20	0.60	19 x 0.20	35

**INSULATED WIRE**

Nominal diameter (mm)	Approximate linear weight (kg/km)
0.53	0.7
0.61	1.0
0.68	1.4
0.79	2.0
0.91	2.8
1.06	4.1
1.35	7.3

For this product, please contact:

OMERIN division principale ✓

Zone Industrielle - F 63600 Ambert

Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10

omerin@omerin.com

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

**omerin**  
LES CABLES DE L'EXTREME

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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

# SILIFLON® KZ 08

## -55 °C to +260 °C



- 1 • Concentric nickel-plated copper core.
- 2 • Insulation: PTFE tape(s).

### Approvals - standards

- Inspired from NF C 93-523 standard.

### Applications

- Wires used in aeronautical and electronic applications and all instrumentation uses requiring excellent resistance to high temperatures and to chemical influences.

### Options

- Compliance with the American standard ANSI NEMA HP3: contact us.

### Characteristics

#### General

- Continuous operating temperatures: -55 °C to +260 °C.
- Excellent resistance to aggressive chemical environments.
- Excellent resistance to humidity.
- Excellent resistance to hydrocarbons and fluids.

#### Electrical (as per UTE C 93-523)

- Rated voltage: 600 Vac – 850 Vdc.
- Test voltage: 3400 V.

### Standard products

- Standard insulation colours: all solid colours.

#### KZ 08

CONCENTRIC CORE				INSULATED WIRE	
Nominal cross-section AWG	(mm <sup>2</sup> )	Nominal stranding	Maximum linear resistance at 20 °C (Ω/km)	Nominal diameter (mm)	Approximate linear weight (kg/km)
32	0.035	7 x 0.08	612	0.73	1.3
30	0.055	7 x 0.10	391	0.81	1.5
28	0.093	7 x 0.13	225	0.90	2.0
26	0.14	7 x 0.16	148	1.00	2.6
24	0.22	7 x 0.20	96.5	1.13	3.6
22	0.34	7 x 0.25	60.8	1.27	5.0
20	0.60	19 x 0.20	35	1.52	7.8
18	0.93	19 x 0.25	23	1.80	11.6
16	1.34	19 x 0.30	15.6	2.10	16.5
14	1.91	27 x 0.30*	11.2	2.48	22.3
12	3.18	45 x 0.30*	6.7	3.06	35.7

\* Non-concentric cores.

For this product, please contact:

OMERIN division principale   
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@omerin.com

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

**omerin**  
LES CABLES DE L'EXTREME

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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

# SILIFLON® KZ 09

## -55 °C to +260 °C



- 1 • Concentric nickel-plated copper core.
- 2 • Insulation: PTFE tape(s).

### Approvals - standards

- Inspired from NF C 93-523 standard.

### Applications

- Wires used in aeronautical and electronic applications and all instrumentation uses requiring excellent resistance to high temperatures and to chemical influences.

### Options

- Compliance with the American standard ANSI NEMA HP3: contact us.

### Characteristics

#### General

- Continuous operating temperatures: -55 °C to +260 °C.
- Excellent resistance to aggressive chemical environments.
- Excellent resistance to humidity.
- Excellent resistance to hydrocarbons and fluids.

#### Electrical (as per UTE C 93-523)

- Rated voltage: 1000 Vac – 1400 Vdc.
- Test voltage: 5000 V.

### Standard products

- Standard insulation colours: all solid colours.

#### KZ 09

CONCENTRIC CORE				INSULATED WIRE	
Nominal cross-section AWG	Nominal cross-section (mm <sup>2</sup> )	Nominal stranding	Maximum linear resistance at 20 °C (Ω/km)	Nominal diameter (mm)	Approximate linear weight (kg/km)
32	0.035	7 x 0.08	612	0.99	2.3
30	0.055	7 x 0.10	391	1.05	2.5
28	0.093	7 x 0.13	225	1.14	3.0
26	0.14	7 x 0.16	148	1.24	3.7
24	0.22	7 x 0.20	96.5	1.37	4.7
22	0.34	7 x 0.25	60.8	1.53	6.2
20	0.60	19 x 0.20	35	1.76	9.1
18	0.93	19 x 0.25	23	2.05	12.6
16	1.34	19 x 0.30	15.6	2.25	17.1
14	1.91	27 x 0.30*	11.2	2.70	25.3
12	3.18	45 x 0.30*	6.7	3.35	38.7

\* Non-concentric cores.

For this product, please contact:

OMERIN division principale   
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@omerin.com

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

**omerin**  
LES CABLES DE L'EXTREME

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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

# SILIFLON® CN5YS and A5YS

VDE approval  
-90 °C to +250 °C

## Approvals - standards

- VDE approval as per standard DIN VDE 0250 Part 106 - licence no. 40005809.



## Applications

- Cabling in household electrical appliances, electronics.
  - Lighting, lights
- Cabling in hot or very cold environments (cryogenics).
  - Cabling in aggressive environments (humidity, chemicals, etc.).
  - Cabling requiring compact size and excellent mechanical strength.

## Options

- Other colours: contact us.
- Other cores available:
  - Rigid nickel-plated (ref. RCN5YS) or rigid silver-plated (ref. RASYS) copper core - class 1 as per IEC 60228 / DIN VDE 0295.

## Characteristics

### General

- Continuous operating temperatures:
  - > Silver-plated copper core: -90 °C to +200 °C.
  - > Nickel-plated copper core: -90 °C to +250 °C.
- Excellent resistance to aggressive chemical environments.
- Excellent resistance to humidity.
- Excellent resistance to hydrocarbons and fluids.

### Electrical

- Rated voltage: 300/500 V.
- Test voltage: 2000 V.

## Standard products

- Standard insulation colour: white.



- Flexible nickel-plated (ref. CN5YS) or silver-plated (ref. A5YS) copper core - class 5 as per IEC 60228 / DIN VDE 0295.
- Insulation: Crossed and heat-sealed PTFE tapes.

## CN5YS and A5YS

### Flexible core • class 5 as per IEC 60228

Nominal cross-section (mm <sup>2</sup> )	Nominal stranding	Maximum linear resistance at 20 °C (Ω/km)
0.25*	19 x 0.13	89.3
0.5	16 x 0.20	40.1
0.75	24 x 0.20	26.7
1	32 x 0.20	20.0
1.5	30 x 0.25	13.7
2.5	50 x 0.25	8.21
4	56 x 0.30	5.09
6	84 x 0.30	3.39

### INSULATED WIRE

Nominal thickness of insulation (mm)	Nominal diameter (mm)	Approximate linear weight (kg/km)
0.30	1.25	4.3
0.30	1.55	7.1
0.30	1.8	10.6
0.30	1.9	13.2
0.30	2.2	16.6
0.35	2.8	26.7
0.40	3.3	41.6
0.40	3.9	60.5

\* Nominal cross-section not described in IEC 60228.

For this product, please contact:

OMERIN division principale   
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

**SILIFLON®** Style 10506

PTFE insulation

UL and cUL approval

**-90 °C to +250 °C****Approvals - standards**

- Nickel-plated copper complying with the 2% class as per standard ASTM B355.
- UL approval as per standard UL 758 – File no.: E101965.
- cUL approval (CSA) as per standard C22.2 No. 210 – File no.: E101965.
- "Horizontal flame test" as per UL approval.
- "FT1 flame rating" as per cUL approval.

**Applications**

- Internal cabling for electrical or electronic appliances.

**Options**

- Pure nickel core: contact us.
- 27% nickel-plated copper core: contact us.
- Other nominal cross-sections: contact us.
- Other nominal stranding: contact us.
- Other style no. available: style 10487 with PTFE tape + glass tape(s) based insulation.

**Characteristics****General**

- Continuous operating temperatures: -90 °C to +250 °C.
- Excellent resistance to aggressive chemical environments.
- Excellent resistance to humidity and UV.
- Excellent mechanical strength.

**Electrical**

- Rated voltage: 600 V.
- Test voltage: 2000 V.

**Standard products**

- Standard insulation colours: all solid colours.



- 1 • Multistrand nickel-plated copper core.
- 2 • Insulation: PTFE tape(s).

**Style 10506****MULTISTRAND CORE**

Nominal cross-section AWG	Nominal cross-section (mm <sup>2</sup> )	Nominal stranding*
30	0.05	7 x 0.10
28	0.09	7 x 0.13
26	0.14	7 x 0.16
24	0.22	7 x 0.20
22	0.34	7 x 0.25
-	0.5	7 x 0.30
20	0.6	19 x 0.20
-	0.75	24 x 0.20
18	0.93	19 x 0.25
-	1	32 x 0.20
16	1.34	19 x 0.30
-	1.5	30 x 0.25
14	-	29 x 0.30
-	2.5	50 x 0.25
12	-	46 x 0.30
-	4	56 x 0.30

**INSULATED WIRE**

Nominal thickness of insulation (mm)	Nominal diameter** (mm)	Approximate linear weight (kg/km)
0.15	0.66	1.1
0.15	0.76	1.6
0.15	0.86	2.1
0.15	0.99	3.0
0.15	1.16	4.4
0.15	1.30	6.1
0.15	1.38	7.0
0.15	1.51	8.7
0.18	1.70	10.9
0.18	1.76	11.7
0.18	1.96	15.1
0.18	2.05	16.5
0.18	2.33	22.3
0.18	2.53	26.5
0.18	2.98	34.9
0.18	3.25	42.1

For this product, please contact:

**OMERIN** division principale   
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@omerin.com

\* The most common nominal stranding. Some stranding is not available in all types of conductor metals. Other stranding can be produced taking into account the possibilities permitted by standard UL 758 and/or IEC 60228.

\*\* The diameter is provided for information purposes as it may vary depending on the stranding of the core. Only the average thickness of insulation should be taken into account.

[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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

# SILIFLON® HT

## Ignition wires

### -90 °C to +260 °C



- 1 • Bare, tin-plated, nickel-plated or silver-plated copper core.
- 2 • Insulation: Fluorinated polymer.

### Applications

- Ignition circuit, creation of an electric arc for piezo-electric system of household electric appliances, burners, etc.

### Options

- Pure nickel core: contact us.
- Outer electrical shielding:
  - > Tin-plated copper braid: contact us.
- Other nominal cross-sections: contact us.
  - Other nominal stranding: contact us.
  - Other colours: contact us.

### Characteristics General

- Continuous operating temperatures:
  - > ETFE insulation: -90 °C to +155 °C.
  - > FEP insulation: -90 °C to +205 °C.
  - > MFA insulation: -90 °C to +250 °C.
  - > PFA insulation: -90 °C to +260 °C.
- Excellent resistance to aggressive chemical environments.
- Excellent resistance to humidity and UV.
- Excellent mechanical strength.

### Electrical

- Pulse voltage: from 12 to 30 kV.

### Standard products

- Main products: see table below.
- Standard insulation colours: translucent or white.

Core	Insulation ETFE	Insulation FEP	Insulation MFA	Insulation PFA
In bare copper	ETFE-HT	FEP-HT	MFA-HT	PFA-HT
In tin-plated copper	EETFE-HT	EFEP-HT	EMFA-HT	EPFA-HT
In silver-plated copper	AETFE-HT	AFEP-HT	AMFA-HT	APFA-HT
In nickel-plated copper	CNETFE-HT	CNFEF-HT	CNMFA-HT	CNPFA-HT

### INSULATED WIRE - Voltage\*

CONDUCTING CORE			12 KV		15 KV		20 KV		25 KV		30 KV	
Nominal cross-section (mm <sup>2</sup> )	Nominal stranding	Maximum linear resistance at 20 °C (Ω/km) (tin-plated copper core)	Nominal diameter (mm)	Approximate linear weight (kg/km)	Nominal diameter (mm)	Approximate linear weight (kg/km)	Nominal diameter (mm)	Approximate linear weight (kg/km)	Nominal diameter (mm)	Approximate linear weight (kg/km)	Nominal diameter (mm)	Approximate linear weight (kg/km)
0.22	7 x 0.20	92.5	1.4	4.7	1.5	5.2	1.7	6.3	1.8	6.8	2.0	8.1
0.34	7 x 0.25	59.2	1.6	6.5	1.7	7.0	1.8	7.6	2.0	8.9	2.2	10.3
0.5	16 x 0.20	40.1	1.7	8.1	1.8	8.7	1.9	9.3	2.1	10.7	2.3	12.2
0.6	19 x 0.20	33.7	1.8	9.3	1.9	9.9	2.0	10.6	2.2	12.0	2.4	13.6
0.75	24 x 0.20	26.7	1.9	10.9	2.0	11.6	2.1	12.3	2.3	13.8	2.5	15.4
0.93	19 x 0.25	21.6	2.0	12.8	2.1	13.5	2.3	14.9	2.4	15.7	2.6	17.4
1	32 x 0.20	20.0	2.1	13.9	2.2	14.6	2.3	15.4	2.5	17.0	2.7	18.8
1.34	19 x 0.30	15.0	2.3	17.6	2.4	18.4	2.5	19.2	2.7	21.0	2.8	21.9
1.5	30 x 0.25	13.7	2.4	19.2	2.4	19.2	2.6	20.9	2.7	21.8	2.9	23.6
2.5	50 x 0.25	8.21	2.8	29.0	2.9	29.9	3.0	30.9	3.2	33.0	3.3	34.1

For this product, please contact:

OMERIN division principale   
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@omerin.com

\* Pulse voltage.

[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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

# SILIFLON® HT

## Ignition wires

### UL and cUL approval



#### Approvals - standards

- UL approval as per standard UL 758 – File no.: E101965.
- cUL approval (CSA) as per standard C22.2 No. 210 – File no.: E101965.
- "Horizontal flame test" as per UL approval.
- "FT1 flame rating" as per cUL approval.

#### Applications

- Ignition circuit, creation of an electric arc for piezo-electric system of household electric appliances, burners, etc.

#### Options

- Pure nickel core: contact us.
- 27% nickel-plated copper core: contact us.
- Other nominal cross-sections: contact us.

#### Characteristics

##### General

- Continuous operating temperatures: -90 °C to +250 °C.
- Excellent resistance to aggressive chemical environments.
- Excellent resistance to humidity and UV.
- Excellent mechanical strength.

##### Electrical

- Pulse voltage: as per style no. except style 1813.

#### Standard products

- All colours including translucent.
- Stranding of conducting cores: contact us.



- 1 • Bare, tin-plated, nickel-plated or silver-plated copper core.
- 2 • Insulation: Fluorinated polymer.

Style no.	10185-E150		1911-F150		1813		10185-E200		1911-F250	
Approval	150 °C – 10 KV AC** (cUL 600 V)		150 °C – 20 KV DC** (cUL 1000 V)		200 °C – 3000 V (cUL 1000 V)		200 °C – 10 KV AC** (cUL 150°C-600 V)		250 °C – 20 KV DC**	
Nominal cross-section	Average thickness of insulation (mm)	Nominal diameter* (mm)	Average thickness of insulation (mm)	Nominal diameter* (mm)	Average thickness of insulation (mm)	Nominal diameter* (mm)	Average thickness of insulation (mm)	Nominal diameter* (mm)	Average thickness of insulation (mm)	Nominal diameter* (mm)
AWG (mm²)										
30 (0.05)	-	-	-	-	0.64	1.6	-	-	-	-
28 (0.09)	-	-	-	-	0.64	1.7	-	-	-	-
26 (0.13)	-	-	-	-	0.64	1.8	-	-	-	-
24 (0.22)	0.36	1.4	0.48	1.6	0.64	1.9	0.36	1.4	0.61	1.8
22 (0.34)	0.36	1.5	0.48	1.75	0.64	2.05	0.36	1.5	0.61	1.95
- (0.5)	0.36	1.65	0.48	1.9	0.64	2.2	0.36	1.65	0.61	2.15
20 (0.6)	0.36	1.7	0.48	2.0	0.64	2.3	0.36	1.7	0.61	2.15
- (0.75)	0.36	1.85	0.48	2.1	0.64	2.4	0.36	1.85	0.61	2.35
18 (0.93)	0.36	2.0	0.48	2.2	0.64	2.55	0.36	2.0	0.61	2.5
- (1)	0.36	2.05	0.48	2.25	0.64	2.6	0.36	2.05	0.61	2.55
16 (1.34)	0.36	2.2	0.48	2.5	0.64	2.8	0.36	2.2	0.61	2.7
- (1.5)	0.36	2.3	0.48	2.55	0.64	2.9	0.36	2.3	0.61	2.8
14 (-)	0.36	2.6	0.48	2.9	0.64	3.15	0.36	2.6	0.61	3.0
- (2.5)	0.36	2.8	0.48	3.0	0.64	3.35	0.36	2.8	0.61	3.3
12 (-)	0.36	3.1	0.48	3.35	0.64	3.65	0.36	3.1	0.61	3.6
- (4)	0.36	3.4	0.48	3.6	0.64	3.9	0.36	3.4	0.61	3.85
10 (-)	0.36	3.8	0.48	4.0	0.64	4.3	0.36	3.8	0.61	4.25
- (6)	0.36	3.9	0.48	4.2	0.64	4.5	0.36	3.9	0.61	4.4
Conducting metal	BCDEFG		BCDEFG		B*CDEFG		B*CDEF*G		CEG	

#### KEY

- Conducting metals
- B Tin-plated copper
- B\* Tin-plated copper (ø > 0.38 mm)
- C Nickel-plated copper
- D Silver-plated copper
- E Nickel
- F Bare copper
- F\* Bare copper (ø > 0.38 mm)
- G Nickel-plated copper 27%

- AWM I A Internal wiring, not subject to mechanical abuse
- AWM I A/B Internal wiring
- AWM II A/B External or Internal wiring

- NS Not Specified
- VNS Voltage Not Specified

■: UL approved nominal cross-sections only.

For this product, please contact:

OMERIN division principale ✓  
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@omerin.com

\* The diameter is provided for information purposes as it may vary depending on the stranding of the core.  
Only the average thickness of insulation should be taken into account.  
\*\* Pulse voltage.

[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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

**SILIFLON® M6-E6****-90 °C to +205 °C**

- 1 • Flexible tin-plated copper core – class 5 as per IEC 60228.
- 2 • Insulation: Fluorinated polymer FEP.
- 3 • Outer sheath: Fluorinated polymer FEP.

**Applications**

- Cabling in household electrical appliances, electronics.
  - Cabling in hot or cold environments (cryogenics).
    - Cabling in aggressive environments (humidity, chemicals, etc.).
      - Cabling requiring compact size and excellent mechanical strength.
- Cabling of thermoresistant detectors type PT 100.

**Options**

- Bare copper core: ref. M6-6.
- Silver-plated copper core: ref. M6-A6.
- Nickel-plated copper core: ref. M6-CN6.
- Pure nickel core (not described in IEC 60228): ref. M6-N6.
  - PFA fluorinated polymer insulation and sheathing for continuous operating temperatures up to +260°C: ref. M5-E5.
  - ETFE fluorinated polymer insulation and sheathing for continuous operating temperatures up to +155 °C: ref. M7-E7.
    - Other nominal metric or American cross-sections: contact us.
- Other numbers of conductors: contact us.
  - Other nominal stranding: contact us.
    - Other colours: contact us.
- Other options and/or combinations of the options outlined above: contact us.

**Characteristics****General**

- Continuous operating temperatures: -90°C to +205 °C.
- Excellent resistance to aggressive chemical environments.
- Excellent resistance to humidity and UV.
- Excellent mechanical strength.

**Electrical**

- Rated voltage: 300/500 V.
- Test voltage: 2000 V.

**Standard products**

- Standard conductor colours: all solid colours including yellow/green.
- Standard outer sheath colours: grey, white or black.

For this product, please contact:

OMERIN division principale

Zone Industrielle - F 63600 Ambert

Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10

omerin@omerin.com

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

**omerin**  
LES CABLES DE L'EXTREME

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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

Flexible core • class 5 as per IEC 60228

INSULATED CONDUCTORS

SHEATHED CABLE

Nominal cross-section (mm <sup>2</sup> )	Nominal stranding	Maximum linear resistance at 20 °C (Ω/km)	Nominal thickness of insulation (mm)	Nominal diameter (mm)	Nominal diameter (mm)	Approximate linear weight (kg/km)
2 x 0.5	16 x 0.20	40.1	0.20	1.3	3.1	17.0
3 x 0.5	16 x 0.20	40.1	0.20	1.3	3.3	23.3
4 x 0.5	16 x 0.20	40.1	0.20	1.3	3.6	29.6
5 x 0.5	16 x 0.20	40.1	0.20	1.3	4.1	38.0
7 x 0.5	16 x 0.20	40.1	0.20	1.3	4.5	51.1
2 x 0.75	24 x 0.20	26.7	0.20	1.45	3.4	22.1
3 x 0.75	24 x 0.20	26.7	0.20	1.45	3.6	30.5
4 x 0.75	24 x 0.20	26.7	0.20	1.45	4.0	39.9
5 x 0.75	24 x 0.20	26.7	0.20	1.45	4.6	51.8
7 x 0.75	24 x 0.20	26.7	0.20	1.45	5.0	69.0
2 x 1	32 x 0.20	20.0	0.20	1.7	3.9	28.8
3 x 1	32 x 0.20	20.0	0.20	1.7	4.2	41.0
4 x 1	32 x 0.20	20.0	0.20	1.7	4.6	52.7
5 x 1	32 x 0.20	20.0	0.20	1.7	5.3	68.5
7 x 1	32 x 0.20	20.0	0.20	1.7	5.7	90.2
2 x 1.5	30 x 0.25	13.7	0.20	1.95	4.4	38.7
3 x 1.5	30 x 0.25	13.7	0.20	1.95	4.7	54.9
4 x 1.5	30 x 0.25	13.7	0.20	1.95	5.3	73.6
5 x 1.5	30 x 0.25	13.7	0.20	1.95	5.9	91.3
7 x 1.5	30 x 0.25	13.7	0.20	1.95	6.6	127
2 x 2.5	50 x 0.25	8.21	0.20	2.5	5.6	63.3
3 x 2.5	50 x 0.25	8.21	0.20	2.5	6.2	94.5
4 x 2.5	50 x 0.25	8.21	0.20	2.5	6.8	122
5 x 2.5	50 x 0.25	8.21	0.20	2.5	7.6	152
7 x 2.5	50 x 0.25	8.21	0.20	2.5	8.4	208
2 x 4	56 x 0.30	5.09	0.25	3.1	7.2	102
3 x 4	56 x 0.30	5.09	0.25	3.1	7.9	149
4 x 4	56 x 0.30	5.09	0.25	3.1	8.7	192
5 x 4	56 x 0.30	5.09	0.25	3.1	9.6	235
7 x 4	56 x 0.30	5.09	0.25	3.1	10.9	333
2 x 6	84 x 0.30	3.39	0.35	3.9	9.0	162
3 x 6	84 x 0.30	3.39	0.35	3.9	9.6	228
4 x 6	84 x 0.30	3.39	0.35	3.9	10.8	303
5 x 6	84 x 0.30	3.39	0.35	3.9	12.1	380
7 x 6	84 x 0.30	3.39	0.35	3.9	13.7	532

For this product, please contact:

OMERIN division principale   
 Zone Industrielle - F 63600 Ambert  
 Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
 omerin@omerin.com

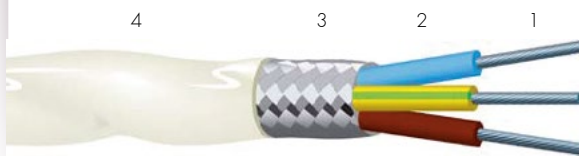
[www.omerin.com](http://www.omerin.com)



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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

# SILIFLON® M6BE-E6

-90 °C to +205 °C



- 1 • Flexible tin-plated copper core – class 5 as per IEC 60228.
- 2 • Insulation: Fluorinated polymer FEP.
- 3 • Electrical shielding: Tin-plated copper braid.
- 4 • Outer sheath: Fluorinated polymer FEP.

## Applications

- Cabling for electrical heating appliances.
  - Use in the medical field as cabling for sterilisable surgical instruments.
  - All power cords requiring resistance to alternate bendings.
- Cabling of thermoresistant detectors type PT 100.

## Options

- Bare copper core: contact us.
- Silver-plated copper core: contact us.
- Nickel-plated copper core: contact us.
- Pure nickel core (not described in IEC 60228): contact us.
- Electrical shielding made of an aluminium tape + continuity wire (ref. M6BAL-E6): contact us.
  - PFA fluorinated polymer insulation and sheathing for continuous operating temperatures up to +260°C: ref. M5BE-E5.
  - ETFE fluorinated polymer insulation and sheathing for continuous operating temperatures up to +155 °C: ref. M7BE-E7.
  - Other nominal metric or American cross-sections: contact us.
- Other numbers of conductors: contact us.
  - Other nominal stranding: contact us.
  - Other colours: contact us.
- Other options and/or combinations of the options outlined above: contact us.

## Characteristics

### General

- Continuous operating temperatures: -90 °C to +205 °C.
- Excellent resistance to aggressive chemical environments.
- Excellent resistance to humidity and UV.
- Excellent mechanical strength.

### Electrical

- Rated voltage: 300/500 V.
- Test voltage: 2000 V.

## Standard products

- Standard conductor colours: all solid colours including yellow/green.
- Standard outer sheath colours: grey, white or black.

For this product, please contact:

OMERIN division principale ✓

Zone Industrielle - F 63600 Ambert

Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10

omerin@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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

## Flexible core • class 5 as per IEC 60228

## INSULATED CONDUCTORS

## SHEATHED CABLE

Nominal cross-section (mm <sup>2</sup> )	Nominal stranding	Maximum linear resistance at 20 °C (Ω/km)	Nominal thickness of insulation (mm)	Nominal diameter (mm)	Nominal diameter (mm)	Approximate linear weight (kg/km)
2 x 0.5	16 x 0.20	40.1	0.20	1.3	3.6	30.0
3 x 0.5	16 x 0.20	40.1	0.20	1.3	3.8	37.3
4 x 0.5	16 x 0.20	40.1	0.20	1.3	4.1	45.0
5 x 0.5	16 x 0.20	40.1	0.20	1.3	4.6	55.2
7 x 0.5	16 x 0.20	40.1	0.20	1.3	4.9	68.3
2 x 0.75	24 x 0.20	26.7	0.20	1.45	3.8	35.2
3 x 0.75	24 x 0.20	26.7	0.20	1.45	4.0	44.4
4 x 0.75	24 x 0.20	26.7	0.20	1.45	4.5	56.9
5 x 0.75	24 x 0.20	26.7	0.20	1.45	5.0	69.1
7 x 0.75	24 x 0.20	26.7	0.20	1.45	5.6	95.6
2 x 1	32 x 0.20	20.0	0.20	1.7	4.6	48.4
3 x 1	32 x 0.20	20.0	0.20	1.7	4.8	60.4
4 x 1	32 x 0.20	20.0	0.20	1.7	5.1	72.3
5 x 1	32 x 0.20	20.0	0.20	1.7	5.6	90.7
7 x 1	32 x 0.20	20.0	0.20	1.7	6.4	123
2 x 1.5	30 x 0.25	13.7	0.20	1.95	4.8	55.8
3 x 1.5	30 x 0.25	13.7	0.20	1.95	5.4	78.5
4 x 1.5	30 x 0.25	13.7	0.20	1.95	6.2	108
5 x 1.5	30 x 0.25	13.7	0.20	1.95	6.8	130
7 x 1.5	30 x 0.25	13.7	0.20	1.95	7.6	172
2 x 2.5	50 x 0.25	8.21	0.20	2.5	6.4	97.6
3 x 2.5	50 x 0.25	8.21	0.20	2.5	6.8	127
4 x 2.5	50 x 0.25	8.21	0.20	2.5	7.5	160
5 x 2.5	50 x 0.25	8.21	0.20	2.5	8.5	201
7 x 2.5	50 x 0.25	8.21	0.20	2.5	9.2	259
2 x 4	56 x 0.30	5.09	0.25	3.1	7.7	138
3 x 4	56 x 0.30	5.09	0.25	3.1	8.4	187
4 x 4	56 x 0.30	5.09	0.25	3.1	9.3	238
5 x 4	56 x 0.30	5.09	0.25	3.1	10.1	282
7 x 4	56 x 0.30	5.09	0.25	3.1	11.5	394
2 x 6	84 x 0.30	3.39	0.35	3.9	9.5	205
3 x 6	84 x 0.30	3.39	0.35	3.9	10.1	275
4 x 6	84 x 0.30	3.39	0.35	3.9	11.5	363
5 x 6	84 x 0.30	3.39	0.35	3.9	13.1	466
7 x 6	84 x 0.30	3.39	0.35	3.9	14.3	608

For this product, please contact:

OMERIN division principale   
 Zone Industrielle - F 63600 Ambert  
 Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
 omerin@omerin.com

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

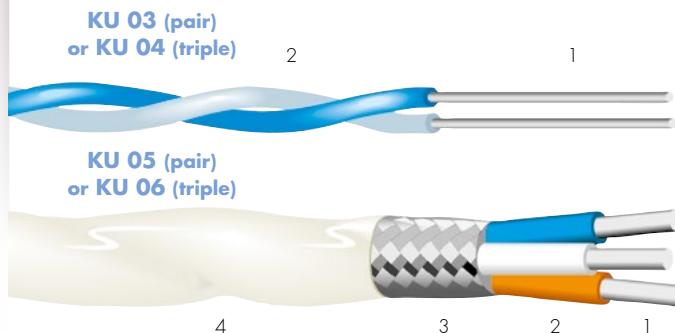
**omerin**  
 LES CABLES DE L'EXTREME

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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

# SILIFLON®

## KU 03, KU 04 KU 05 and KU 06

**-55 °C to +150 °C**



### Approvals - standards

- Inspired from NF C 93-524 standard.

### Applications

- Wires used in aeronautical, electronic and all instrumentation applications requiring high resistance to high temperatures and to chemical influences.

### Options

- Other colours: contact us.

- Concentric tin-plated copper core.
- Insulation: Fluorinated polymer ETFE.
- Electrical shielding: Tin-plated copper braid.
- Outer sheath: Fluorinated polymer ETFE.

### Characteristics

#### General

- Continuous operating temperatures: -55 °C to +150 °C.
- Excellent resistance to aggressive chemical environments.
- Excellent resistance to humidity and UV.
- Excellent mechanical strength.

#### Electrical (as per UTE C 93-524)

- Rated voltage: 600 Vac – 850 Vdc.
- Test voltage: KU 03 and KU 04: 3400 Vac.  
KU 05 and KU 06: 1500 Vac.

### Standard products

- Standard conductor colours of the pair: white and blue.
- Standard conductor colours of the triple: white, blue and orange.
- Standard outer sheath colour: white.

#### CONDUCTORS (TYPE KU 01)

Nominal cross-section AWG (mm²)	Nominal stranding	Maximum linear resistance at 20 °C (Ω/km)	Nominal diameter (mm)	KU 03		KU 04		KU 05		KU 06	
				Nominal diameter (mm)	Approximate linear weight (kg/km)	Nominal diameter (mm)	Approximate linear weight (kg/km)	Nominal diameter (mm)	Approximate linear weight (kg/km)	Nominal diameter (mm)	Approximate linear weight (kg/km)
30	0.05	7 x 0.10	0.63	1.26	1.8	1.36	2.7	2.10	8.7	2.31	10.2
28	0.09	7 x 0.13	0.69	1.38	2.6	1.48	3.9	2.22	9.8	2.43	11.6
26	0.15	19 x 0.10	0.81	1.62	3.8	1.74	5.8	2.47	11.8	2.68	13.9
24	0.25	19 x 0.13	0.91	1.82	5.7	1.96	8.5	2.76	15.0	2.89	18.5
22	0.38	19 x 0.16	1.10	2.20	8.5	2.37	12.7	3.14	21.0	3.30	25.3
20	0.60	19 x 0.20	1.52	3.04	13.9	3.27	20.9	3.97	30.4	4.22	38.4
18	0.93	19 x 0.25	2.06	3.60	21.2	3.87	31.8	4.54	42.5	4.82	51.3
16	1.34	19 x 0.30	2.00	4.00	29.1	4.30	43.6	4.94	52.4	5.24	65.9
14	1.82	37 x 0.25	2.36	4.72	39.4	5.08	59.1	5.72	67.7	6.09	90.9
12	3.00	37 x 0.32	2.89	5.78	72.9	6.22	109	6.78	114	7.24	146

For this product, please contact:

OMERIN division principale   
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@omerin.com

[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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

# SILIFLON® 150 °C

Fluoropolymer insulation  
Fluoropolymer sheathing  
UL and cUL approval



- 1 • UL and cUL approved conductors with fluoropolymer insulation.
- 2 • Outer sheath: Fluorinated polymer.

### Characteristics General

- Continuous operating temperatures: -90 °C to +150 °C.
- Excellent resistance to aggressive chemical environments.
- Excellent resistance to humidity and UV.
  - Excellent mechanical strength.

### Electrical

- Rated voltage: as per style no.
- Test voltage: 10 x Rated voltage.

### Standard products

- Single conductors: UL and cUL approved conductors with fluoropolymer insulation (≥ 150 °C).
- Standard outer sheath colours: white, black or grey.
  - Stranding of conducting cores: contact us.

### Approvals - standards

- UL and cUL approval as per standard UL 758 and C22.2 No. 210 – File no.: E101965.
- “Horizontal flame test” or “Cable flame test” as per UL approval.
- “FT1 flame rating” as per cUL approval.

### Applications

- Internal cabling for electrical heating appliances.
- External connections for electrical heating appliances.

### Options

- Electrical shielding: Tin-plated copper braid, or aluminium tape + continuity wire.
  - Other outer sheath colours: contact us.
  - Other nominal cross-sections: contact us.
- Conductors with a silicone insulation : contact us.

#### KEY

- Conducting metals
- B** Tin-plated copper
- B\*** Tin-plated copper (ø > 0.38 mm)
- C** Nickel-plated copper
- D** Silver-plated copper
- E** Nickel
- F** Bare copper
- F\*** Bare copper (ø > 0.38 mm)
- G** Nickel-plated copper 27 %

- AWM I A** Internal wiring, not subject to mechanical abuse
- AWM I A/B** Internal wiring
- AWM II A/B** External or Internal wiring
- NS** Not Specified
- VNS** Voltage Not Specified

■: UL approved nominal cross-sections

\* The diameter is provided for information only, as it may vary depending on the stranding of the core.  
Only the average thickness of insulation or the sheathing should be taken into account.

For this product, please contact:

OMERIN division principale ✓  
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@omerin.com

### Style no. Insulation Approval

No. of cond.	Nominal cross-section		20221-E150 ETFE "Thin-wall" 150 °C – 300 V		20905-E150 ETFE "Thin-wall" 150 °C – 300 V		20222-E150 ETFE "Thin-wall" 150 °C – 600 V	
	AWG	(mm <sup>2</sup> )	AWM II A/B (Wall 0.25 mm)		AWM II A/B (Wall 0.51 mm)		AWM II A/B (Wall 0.38 mm)	
			Nominal diameter of the cond.* (mm)	Nominal diameter of the cable* (mm)	Nominal diameter of the cond.* (mm)	Nominal diameter of the cable* (mm)	Nominal diameter of the cond.* (mm)	Nominal diameter of the cable* (mm)
2	26	0.13	0.75	2.0	0.75	2.5	1.05	2.9
3	26	0.13	0.75	2.1	0.75	2.6	1.05	3.0
4	26	0.13	0.75	2.3	0.75	2.8	1.05	3.3
5	26	0.13	0.75	2.6	0.75	3.0	1.05	3.6
7	26	0.13	0.75	2.9	0.75	3.3	1.05	4.0
2	24	0.22	0.9	2.3	0.9	2.8	1.15	3.1
3	24	0.22	0.9	2.4	0.9	3.0	1.15	3.2
4	24	0.22	0.9	2.8	0.9	3.2	1.15	3.5
5	24	0.22	0.9	3.0	0.9	3.5	1.15	3.9
7	24	0.22	0.9	3.3	0.9	3.7	1.15	4.3
2	22	0.34	1.05	2.7	1.05	3.1	1.3	3.4
3	22	0.34	1.05	2.9	1.05	3.3	1.3	3.6
4	22	0.34	1.05	3.1	1.05	3.6	1.3	3.9
5	22	0.34	1.05	3.4	1.05	3.9	1.3	4.3
7	22	0.34	1.05	4.0	1.05	4.2	1.3	4.7
2	-	0.5	1.25	3.1	1.25	3.5	1.4	3.6
3	-	0.5	1.25	3.3	1.25	3.7	1.4	3.8
4	-	0.5	1.25	3.8	1.25	4.0	1.4	4.2
5	-	0.5	1.25	4.2	1.25	4.4	1.4	4.6
7	-	0.5	1.25	4.6	1.25	4.8	1.4	5.0
2	20	0.6	1.3	3.2	1.3	3.6	1.5	3.8
3	20	0.6	1.3	3.4	1.3	3.8	1.5	4.0
4	20	0.6	1.3	3.9	1.3	4.2	1.5	4.4
5	20	0.6	1.3	4.3	1.3	4.5	1.5	4.9
7	20	0.6	1.3	4.7	1.3	4.9	1.5	5.3
2	-	0.75	1.4	3.4	1.4	3.8	1.55	3.9
3	-	0.75	1.4	3.8	1.4	4.0	1.55	4.1
4	-	0.75	1.4	4.2	1.4	4.4	1.55	4.5
5	-	0.75	1.4	4.6	1.4	4.8	1.55	5.0
7	-	0.75	1.4	5.0	1.4	5.2	1.55	5.5
2	18	0.93	1.55	3.9	1.55	4.1	1.8	4.4
3	18	0.93	1.55	4.1	1.55	4.4	1.8	4.7
4	18	0.93	1.55	4.5	1.55	4.8	1.8	5.1
5	18	0.93	1.55	5.0	1.55	5.2	1.8	5.7
7	18	0.93	1.55	5.5	1.55	5.7	1.8	6.4
2	-	1	1.65	4.1	1.65	4.3	1.8	4.4
3	-	1	1.65	4.4	1.65	4.6	1.8	4.7
4	-	1	1.65	4.8	1.65	5.0	1.8	5.1
5	-	1	1.65	5.3	1.65	5.5	1.8	5.7
7	-	1	1.65	5.8	1.65	6.0	1.8	6.4
2	16	1.34	1.9	4.6	1.9	4.8	2.0	4.8
3	16	1.34	1.9	4.9	1.9	5.1	2.0	5.1
4	16	1.34	1.9	5.4	1.9	5.6	2.0	5.6
5	16	1.34	1.9	6.1	1.9	6.2	2.0	6.4
7	16	1.34	1.9	6.7	1.9	6.7	2.0	7.0
2	-	1.5	1.9	4.6	1.9	4.8	2.0	4.8
3	-	1.5	1.9	4.9	1.9	5.1	2.0	5.1
4	-	1.5	1.9	5.4	1.9	5.6	2.0	5.6
5	-	1.5	1.9	6.1	1.9	6.2	2.0	6.4
7	-	1.5	1.9	6.7	1.9	6.7	2.0	7.0
2	14	-	2.25	5.3	2.25	5.5	2.4	5.6
3	14	-	2.25	5.7	2.25	5.9	2.4	6.2
4	14	-	2.25	6.4	2.25	6.4	2.4	6.8
5	14	-	2.25	7.1	2.25	7.1	2.4	7.5
7	14	-	2.25	7.8	2.25	7.8	2.4	8.4

Conducting metal

BCDEFG

BCDEFG

BCDEFG

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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

# SILIFLON® 200 °C

Fluoropolymer insulation  
Fluoropolymer sheathing  
UL and cUL approval



- 1 • UL and cUL approved conductors with fluoropolymer insulation.
- 2 • Outer sheath: Fluorinated polymer.

### Characteristics General

- Continuous operating temperatures: -90 °C to +200 °C.
- Excellent resistance to aggressive chemical environments.
  - Excellent resistance to humidity and UV.
  - Excellent mechanical strength.

### Electrical

- Rated voltage: as per style no.
- Test voltage: 10 x Rated voltage.

### Standard products

- Single conductors: UL and cUL approved conductors with fluoropolymer insulation (≥ 200 °C).
- Outer sheath colours: white, black or grey.
- Stranding of conducting cores: contact us.

### Approvals - standards

- UL and cUL approval as per standard UL 758 and C22.2 No. 210 – File no.: E101965.
- "Horizontal flame test" or "Cable flame test" as per UL approval.
- "FT1 flame rating" as per cUL approval.

### Applications

- Internal cabling for electrical heating appliances.
- External connections for electrical heating appliances.

### Options

- Electrical shielding: Tin-plated copper braid, or aluminium tape + continuity wire.
- Other outer sheath colours: contact us.
- Other nominal cross-sections: contact us.
- Conductors with a silicone insulation : contact us.
- Other style nos. available: styles no. 2895, 20262, 20920.

#### KEY

- Conducting metals
- B Tin-plated copper
- B\* Tin-plated copper (ø > 0.38 mm)
- C Nickel-plated copper
- D Silver-plated copper
- E Nickel
- F Bare copper
- F\* Bare copper (ø > 0.38 mm)
- G Nickel-plated copper 27 %

- AWM I A Internal wiring, not subject to mechanical abuse
- AWM I A/B Internal wiring
- AWM II A/B External or Internal wiring
- NS Not Specified
- VNS Voltage Not Specified

■: UL approved nominal cross-sections only.

\* The diameter is provided for information purposes as it may vary depending on the stranding of the core.  
Only the average thickness of insulation or the sheathing should be taken into account.

For this product, please contact:

OMERIN division principale ✓  
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@omerin.com



Style no. Insulation Approval	20711-F200	20711-F200	2749-F200
	ETFE "Thin-wall"	FEP	ETFE "Thin-wall"

200 °C - 300 V			200 °C - 300 V		200 °C - 300 V	
AWM I A/B (Wall 0.25 mm)			AWM I A/B (Wall 0.25 mm)		AWM I A/B (Wall 0.51 mm)	
No. of cond.	AWG	Nominal cross-section (mm²)	Nominal diameter of the cond.* (mm)	Nominal diameter of the cable* (mm)	Nominal diameter of the cond.* (mm)	Nominal diameter of the cable* (mm)
2	26	0.13	0.8	2.1	1.0	2.5
3	26	0.13	0.8	2.2	1.0	2.8
4	26	0.13	0.8	2.4	1.0	3.0
5	26	0.13	0.8	2.7	1.0	3.3
7	26	0.13	0.8	3.0	1.0	3.6
2	24	0.22	0.9	2.3	1.1	2.8
3	24	0.22	0.9	2.4	1.1	3.0
4	24	0.22	0.9	2.7	1.1	3.3
5	24	0.22	0.9	3.0	1.1	3.6
7	24	0.22	0.9	3.3	1.1	4.1
2	22	0.34	1.05	2.7	1.25	3.1
3	22	0.34	1.05	2.8	1.25	3.3
4	22	0.34	1.05	3.1	1.25	3.8
5	22	0.34	1.05	3.4	1.25	4.2
7	22	0.34	1.05	3.9	1.25	4.6
2	-	0.5	1.25	3.1	1.4	3.4
3	-	0.5	1.25	3.3	1.4	3.8
4	-	0.5	1.25	3.8	1.4	4.2
5	-	0.5	1.25	4.1	1.4	4.6
7	-	0.5	1.25	4.5	1.4	5.0
2	20	0.6	1.3	3.2	1.5	3.6
3	20	0.6	1.3	3.4	1.5	4.0
4	20	0.6	1.3	3.9	1.5	4.4
5	20	0.6	1.3	4.3	1.5	4.9
7	20	0.6	1.3	4.7	1.5	5.3
2	-	0.75	1.4	3.4	1.55	3.9
3	-	0.75	1.4	3.8	1.55	4.1
4	-	0.75	1.4	4.1	1.55	4.5
5	-	0.75	1.4	4.5	1.55	5.0
7	-	0.75	1.4	5.0	1.55	5.5
2	18	0.93	1.55	3.9	1.7	4.2
3	18	0.93	1.55	4.1	1.7	4.5
4	18	0.93	1.55	4.5	1.7	4.9
5	18	0.93	1.55	4.9	1.7	5.4
7	18	0.93	1.55	5.4	1.7	6.1
2	-	1	1.65	4.1	1.8	4.4
3	-	1	1.65	4.3	1.8	4.7
4	-	1	1.65	4.7	1.8	5.1
5	-	1	1.65	5.2	1.8	5.7
7	-	1	1.65	5.7	1.8	6.4
2	16	1.34	1.9	4.6	2.0	4.8
3	16	1.34	1.9	4.9	2.0	5.1
4	16	1.34	1.9	5.3	2.0	5.6
5	16	1.34	1.9	6.1	2.0	6.4
7	16	1.34	1.9	6.7	2.0	7.0
2	-	1.5	1.9	4.6	2.0	4.8
3	-	1.5	1.9	4.9	2.0	5.1
4	-	1.5	1.9	5.3	2.0	5.6
5	-	1.5	1.9	6.1	2.0	6.4
7	-	1.5	1.9	6.7	2.0	7.0
2	14	-	2.25	5.3	2.4	5.6
3	14	-	2.25	5.6	2.4	6.2
4	14	-	2.25	6.4	2.4	6.8
5	14	-	2.25	7.0	2.4	7.5
7	14	-	2.25	7.7	2.4	8.4

Conducting metal

B\*CDEF\*G

B\*CDEG

B\*CDEF\*G

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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

Style no. Insulation			2749-F200		20710-F200		20710-F200		2750-F200		2750-F200	
Approval			200 °C - 300 V		200 °C - 600 V		200 °C - 600 V		200 °C - 600 V		200 °C - 600 V	
			AWM I A/B (Wall 0.51 mm)		AWM I A/B (Wall 0.30 mm)		AWM I A/B (Wall 0.30 mm)		AWM I A/B (Wall 0.51 mm)		AWM I A/B (Wall 0.51 mm)	
No. of cond.	AWG	Nominal cross-section (mm <sup>2</sup> )	Nominal diameter of the cond.* (mm)	Nominal diameter of the cable* (mm)	Nominal diameter of the cond.* (mm)	Nominal diameter of the cable* (mm)	Nominal diameter of the cond.* (mm)	Nominal diameter of the cable* (mm)	Nominal diameter of the cond.* (mm)	Nominal diameter of the cable* (mm)	Nominal diameter of the cond.* (mm)	Nominal diameter of the cable* (mm)
2	26	0.13	1.0	3.0	1.0	2.6	1.2	3.0	1.0	3.0	1.2	3.4
3	26	0.13	1.0	3.2	1.0	2.7	1.2	3.2	1.0	3.1	1.2	3.6
4	26	0.13	1.0	3.4	1.0	3.0	1.2	3.5	1.0	3.4	1.2	3.9
5	26	0.13	1.0	3.7	1.0	3.3	1.2	4.0	1.0	3.7	1.2	4.3
7	26	0.13	1.0	4.0	1.0	3.6	1.2	4.4	1.0	4.0	1.2	4.6
2	24	0.22	1.1	3.2	1.1	2.8	1.35	3.3	1.1	3.2	1.35	3.7
3	24	0.22	1.1	3.4	1.1	2.9	1.35	3.5	1.1	3.3	1.35	3.9
4	24	0.22	1.1	3.7	1.1	3.2	1.35	4.1	1.1	3.6	1.35	4.3
5	24	0.22	1.1	4.0	1.1	3.5	1.35	4.4	1.1	3.9	1.35	4.7
7	24	0.22	1.1	4.3	1.1	4.1	1.35	4.9	1.1	4.3	1.35	5.1
2	22	0.34	1.25	3.5	1.25	3.1	1.45	3.5	1.25	3.5	1.45	3.9
3	22	0.34	1.25	3.7	1.25	3.3	1.45	3.9	1.25	3.7	1.45	4.2
4	22	0.34	1.25	4.0	1.25	3.8	1.45	4.3	1.25	4.0	1.45	4.5
5	22	0.34	1.25	4.4	1.25	4.1	1.45	4.7	1.25	4.3	1.45	4.9
7	22	0.34	1.25	4.8	1.25	4.5	1.45	5.2	1.25	4.7	1.45	5.4
2	-	0.5	1.4	3.8	1.4	3.4	1.65	4.1	1.4	3.8	1.65	4.3
3	-	0.5	1.4	4.0	1.4	3.8	1.65	4.4	1.4	4.0	1.65	4.6
4	-	0.5	1.4	4.4	1.4	4.1	1.65	4.8	1.4	4.3	1.65	5.0
5	-	0.5	1.4	4.8	1.4	4.5	1.65	5.3	1.4	4.8	1.65	5.5
7	-	0.5	1.4	5.2	1.4	5.0	1.65	5.8	1.4	5.2	1.65	6.0
2	20	0.6	1.5	4.0	1.5	3.6	1.7	4.2	1.5	4.0	1.7	4.4
3	20	0.6	1.5	4.3	1.5	4.0	1.7	4.5	1.5	4.2	1.7	4.7
4	20	0.6	1.5	4.6	1.5	4.4	1.7	4.9	1.5	4.6	1.7	5.1
5	20	0.6	1.5	5.1	1.5	4.8	1.7	5.4	1.5	5.0	1.7	5.6
7	20	0.6	1.5	5.5	1.5	5.3	1.7	6.1	1.5	5.5	1.7	6.1
2	-	0.75	1.55	4.1	1.55	3.9	1.8	4.4	1.55	4.1	1.8	4.6
3	-	0.75	1.55	4.4	1.55	4.1	1.8	4.7	1.55	4.3	1.8	4.9
4	-	0.75	1.55	4.8	1.55	4.5	1.8	5.1	1.55	4.7	1.8	5.4
5	-	0.75	1.55	5.2	1.55	4.9	1.8	5.7	1.55	5.2	1.8	5.9
7	-	0.75	1.55	5.7	1.55	5.4	1.8	6.4	1.55	5.6	1.8	6.4
2	18	0.93	1.7	4.4	1.8	4.4	2.0	4.8	1.8	4.6	2.0	5.0
3	18	0.93	1.7	4.7	1.8	4.6	2.0	5.1	1.8	4.9	2.0	5.3
4	18	0.93	1.7	5.1	1.8	5.1	2.0	5.6	1.8	5.3	2.0	5.8
5	18	0.93	1.7	5.6	1.8	5.6	2.0	6.4	1.8	5.8	2.0	6.4
7	18	0.93	1.7	6.1	1.8	6.4	2.0	7.0	1.8	6.4	2.0	7.0
2	-	1	1.8	4.6	1.8	4.4	2.0	4.8	1.8	4.6	2.0	5.0
3	-	1	1.8	4.9	1.8	4.6	2.0	5.1	1.8	4.9	2.0	5.3
4	-	1	1.8	5.4	1.8	5.1	2.0	5.6	1.8	5.3	2.0	5.8
5	-	1	1.8	5.9	1.8	5.6	2.0	6.4	1.8	5.8	2.0	6.4
7	-	1	1.8	6.4	1.8	6.4	2.0	7.0	1.8	6.4	2.0	7.0
2	16	1.34	2.0	5.0	2.0	4.8	2.2	5.2	2.0	5.0	2.2	5.4
3	16	1.34	2.0	5.3	2.0	5.1	2.2	5.6	2.0	5.3	2.2	5.8
4	16	1.34	2.0	5.8	2.0	5.6	2.2	6.3	2.0	5.8	2.2	6.3
5	16	1.34	2.0	6.4	2.0	6.4	2.2	6.9	2.0	6.4	2.2	7.0
7	16	1.34	2.0	7.0	2.0	7.0	2.2	7.6	2.0	7.0	2.2	7.6
2	-	1.5	2.0	5.0	2.0	4.8	2.3	5.4	2.0	5.0	2.3	5.6
3	-	1.5	2.0	5.3	2.0	5.1	2.3	5.8	2.0	5.3	2.3	6.0
4	-	1.5	2.0	5.8	2.0	5.6	2.3	6.5	2.0	5.8	2.3	6.6
5	-	1.5	2.0	6.4	2.0	6.4	2.3	7.2	2.0	6.4	2.3	7.2
7	-	1.5	2.0	7.0	2.0	7.0	2.3	7.9	2.0	7.0	2.3	7.9
2	14	-	2.4	5.8	2.4	5.6	2.6	6.2	2.4	5.8	2.6	6.2
3	14	-	2.4	6.2	2.4	6.1	2.6	6.6	2.4	6.2	2.6	6.6
4	14	-	2.4	6.8	2.4	6.7	2.6	7.3	2.4	6.8	2.6	7.3
5	14	-	2.4	7.5	2.4	7.4	2.6	8.2	2.4	7.5	2.6	8.2
7	14	-	2.4	8.4	2.4	8.4	2.6	9.0	2.4	8.4	2.6	9.0

Conducting metal

B\*CDEG

B\*CDEF\*G

B\*CDEF\*G

B\*CDEF\*G

B\*CDEF\*G

# SILIFLON® VG 95218 T020 A

## Fluoropolymer insulation

OMERIN - VG95218T020A

- 1 • Flexible tin-plated copper core.
- 2 • Insulation : ETFE.

### Approvals - standards

- VG 95218 Part 20 Type A Single Core Insulated Wire.

### Applications

- Internal cabling for military and defence systems and equipment.

### Characteristics General

- Continuous operating temperatures: -55 °C to +150 °C.
- Excellent resistance to aggressive chemical environments.
- Excellent resistance to humidity and UV.
- Excellent resistance to hydrocarbons.
- Excellent abrasion resistance.

### Electrical

- Rated voltage: 600V AC / 900V DC.
- Test voltage: 3 000V AC.

### Standard products

- Single core insulated wire.
- Colour code: O (White), A (Red), B (Blue), C (Yellow), D (Green), F (Black), H (Orange), G (Brown), J (Purple), K (Grey), M (Green/Yellow).

### Marking

- OMERIN - VG95218T020A {color code} {VG Dash No.} - {week/year}.

VG Dash No.	Nominal cross-section		Nominal stranding	Cable outer diameter (mm)		Max. linear resistance at 20° (Ω/km)	Max. weight (kg/km)
	(mm²)	AWG		min.	max.		
16	-	24	19 x 0.13	0.97	1.07	86.00	3.20
01	-	22	19 x 0.16	1.14	1.24	53.10	4.70
02	-	20	37 x 0.13	1.22	1.32	42.30	5.80
03	0.6	-	37 x 0.14	1.35	1.45	33.50	6.90
04	-	18	37 x 0.16	1.45	1.65	26.60	8.70
05	1.0	-	37 x 0.18	1.60	1.80	21.00	11.00
06	-	16	37 x 0.20	1.75	1.90	16.40	13.30
07	1.5	-	37 x 0.23	1.90	2.15	13.50	18.00
08	2.5	-	37 x 0.29	2.35	2.75	8.20	27.10
17	-	12	37 x 0.32	2.64	2.84	6.63	32.30
09	4.0	-	231 x 0.16	4.10	4.80	5.09	58.00
10	6.0	-	189 x 0.21	4.80	5.50	3.39	79.00
11	10.0	-	323 x 0.21	5.80	6.50	1.95	124.00
12	16.0	-	513 x 0.21	6.70	7.40	1.24	188.00

For this product, please contact:










OMERIN division principale   
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@omerin.com

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

**omerin**  
LES CABLES DE L'EXTREME

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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

## THERMOPLASTIC INSULATED WIRES AND CABLES

FT No.	PRODUCT REFERENCE	APPROVAL	PAGE
2201	PLASTHERM Y2 and EY2		48
2202	PLASTHERM 80 °C - PVC insulation		50
2203	PLASTHERM 105 °C - PVC insulation		52
2204	PLASTHERM Style 1015-HAR	 <HAR>	54
2205	PLASTHERM Style 20199, 2-conductor flat cable		55
2206	PLASTHERM MY2-Y2 and MY2-EY2		56
2207	PLASTHERM 80 °C - PVC insulation and sheathing		58
2208	PLASTHERM 90 °C - PVC insulation and sheathing		59
2209	PLASTHERM 105 °C - PVC insulation and sheathing		60
2210	PLASTHERM 90 °C - Polyolefin insulation		61
2211	PLASTHERM PHF2 - Halogen-free insulation		62
2212	PLASTHERM PHF2E IRD - Halogen-free insulation, reduced walls		63
2213	PLASTHERM PHFLEX - Cable resistant to alternate bending, halogen-free insulation		64
2214	PLASTHERM STYLE 21209 - Polyurethane sheathing		65
2215	PLASTHERM MYBE-EY-CSI - Intrinsic safety		66
2216	PLASTHERM HP-U - 2-conductor flat cable, thin insulation		67
2217	PLASTHERM HP-M - 2-conductor flat cable, thin insulation		68
2218	PLASTHERM HP-M-HT - 2-conductor flat cable, thin insulation		69
2219	PLASTHERM 41		70
2220	PLASTHERM E43		71
2221	PLASTHERM E9		72

**PLASTHERM® Y2 and EY2****-30 °C to +105 °C****Applications**

- Cabling in an environment potentially reaching +105°C (electrical appliances, light fittings, electronics, motor cars, etc.).

**Options**

- Solid bare (ref. RY2) or tin-plated (ref. REY2) copper core: see details of the option below.
- Extra-flexible bare (ref. Y2-ES) or tin-plated (ref. EY2-ES) copper core: see details of the option below.
- Silver-plated (ref. AY2) or nickel-plated (ref. CNY2) copper core: contact us.
  - Outer electrical shielding:
    - > Tin-plated copper braid: ref. Y2BE or EY2BE.
      - Insulation made of PVC 80°C: contact us.
      - Insulation made of PVC 125°C: contact us.
  - Other nominal metric or American cross-sections: contact us.
  - Other nominal stranding: contact us.
- Other options and/or combinations of the options outlined above: contact us.

**Characteristics****General**

- Continuous operating temperatures: -30 °C to +105 °C.
- Good resistance to thermal shock.
- Good mechanical strength.
- Good resistance to common chemical environments.

**Electrical**

- Rated voltage: CS < 0.5 mm<sup>2</sup>: 300/500 V.  
0.5 mm<sup>2</sup> ≤ CS < 1.5 mm<sup>2</sup>: 450/750 V.  
CS ≥ 1.5 mm<sup>2</sup>: 600/1000 V.
- Test voltage: CS < 0.5 mm<sup>2</sup>: 1500 V.  
0.5 mm<sup>2</sup> ≤ CS < 1.5 mm<sup>2</sup>: 2500 V.  
CS ≥ 1.5 mm<sup>2</sup>: 3000 V.

**Standard products**

- Standard insulation colours: all colours including yellow/green.



- 1 • Flexible bare (ref. Y2) or tin-plated (ref. EY2) copper core.
- 2 • Insulation: PVC 105 °C.

For this product, please contact:

OMERIN division principale   
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

## Y2 and EY2

## Flexible core

Nominal cross-section (mm <sup>2</sup> )	Nominal stranding	Maximum linear resistance at 20 °C (Ω/km) (Tin-plated copper core)
0.12	7 x 0.15*	161
0.14	7 x 0.16**	142
0.22	7 x 0.20	92.5
0.34	7 x 0.25	59.2
0.34	19 x 0.15*	58.9
0.38	19 x 0.16**	55.7
0.5	7 x 0.30	40.7
0.5	16 x 0.20	40.1
0.6	19 x 0.20	33.7
0.75	24 x 0.20	26.7
0.93	19 x 0.25	21.6
1	32 x 0.20	20.0
1.34	19 x 0.30	15.0
1.5	30 x 0.25	13.7
2.5	50 x 0.25	8.21
4	56 x 0.30	5.09
6	84 x 0.30	3.39
10	77 x 0.40	1.95
16	119 x 0.40	1.24

## INSULATED WIRE OR CABLE

Nominal thickness of insulation (mm)	Nominal diameter (mm)	Approximate linear weight (kg/km)
0.3	1.1	2.2
0.3	1.1	2.3
0.3	1.2	3.2
0.3	1.3	4.3
0.3	1.3	4.3
0.3	1.4	4.9
0.6	2.1	8.4
0.6	2.1	8.4
0.6	2.2	9.6
0.6	2.3	11.2
0.6	2.4	13.0
0.6	2.5	14.0
0.6	2.7	17.6
0.7	3.0	20.3
0.8	3.6	31.7
0.8	4.3	48.5
0.8	4.8	67.6
1.0	6.4	111
1.2	7.8	169

## Option • RY2 and REY2

## Solid core

0.22	1 x 0.52	85.9
0.34	1 x 0.64	54.1
0.5	1 x 0.80	36.7
0.75	1 x 0.98	24.8
1	1 x 1.13	18.2
1.5	1 x 1.38	12.2
2.5	1 x 1.77	7.56
4	1 x 2.24*	4.70
6	1 x 2.74*	3.11

## INSULATED WIRE

0.4	1.3	3.5
0.45	1.5	4.9
0.5	1.8	7.4
0.55	2.1	10.6
0.6	2.3	13.4
0.6	2.6	18.8
0.7	3.2	29.9
0.7	3.6	44.1
0.8	4.1	63.2

## Option • Y2-ES and EY2-ES

## Extra-flexible core

0.05	24 x 0.05	405
0.14	70 x 0.05	159
0.25	120 x 0.05 or 60 x 0.07	86.6
0.34	180 x 0.05 or 90 x 0.07 or 40 x 0.10	59.9
0.4	200 x 0.05 or 100 x 0.07 or 50 x 0.10	50.7
0.5	260 x 0.05 or 130 x 0.07 or 60 x 0.10	40.7
0.75	390 x 0.05 or 200 x 0.07 or 100 x 0.10	27.1
1	520 x 0.05 or 260 x 0.07 or 120 x 0.10	20.4
1.5	750 x 0.05 or 390 x 0.07 or 190 x 0.10	13.7

## INSULATED WIRE

0.2	0.7	0.9
0.3	1.1	2.3
0.3	1.2	3.4
0.4	1.6	5.2
0.45	1.8	6.2
0.45	1.9	7.4
0.5	2.2	10.5
0.55	2.5	13.8
0.55	2.8	18.7

\* Nominal stranding only available in bare copper version.

\*\* Nominal stranding only available in tin-plated copper version.

For this product, please contact:

OMERIN division principale 

Zone Industrielle - F 63600 Ambert

Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10

omerin@omerin.com

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


**OMERIN**  
LES CABLES DE L'EXTREME

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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

# PLASTHERM® 80 °C

## PVC insulation

### UL and cUL approval



### Characteristics General

- Continuous operating temperatures -30°C to +80°C.
- Good resistance to chemical influences.
- Good alternate bending strength.

### Electrical

- Rated voltage: as per style no.
- Test voltage: 10 x Rated voltage.

### Standard products

- All colours including two-coloured.
- Stranding of conducting cores: contact us.

### Approvals - standards

- UL and cUL approval (CSA) as per standard UL 758 and C22.2 No. 210 – File no.: E101965.
- "Horizontal flame test" as per UL approval.
- "FT1 flame rating" as per cUL approval.

### Applications

- Internal cabling for electrical or electronic appliances, computers, etc..

### Options

- Other nominal cross-sections: contact us.
- Other style nos. available: styles no. 1017, 1019, 1020, 1021, 1022, 1023, 1158, 1159, 10024, 10076, 10127, 10437, 10438, 1498, 1662, 1908, 1909.



- 1 • Bare or tin-plated copper core.
- 2 • Insulation: PVC.

Style no.	1007		1497		1581		
	Approval		80 °C – 300 V		80 °C – 300 V		
	Nominal cross-section	Average thickness of insulation (mm)	Nominal diameter* (mm)	Average thickness of insulation (mm)	Nominal diameter* (mm)	Average thickness of insulation (mm)	
	AWG	(mm²)					
	30	0.05	0.38	1.1	-	-	
	28	0.09	0.38	1.15	-	-	
	26	0.13	0.38	1.25	0.41	1.3	
	24	0.22	0.38	1.4	0.41	1.45	
	22	0.34	0.38	1.5	0.41	1.6	
	-	0.5	0.38	1.75	0.41	1.75	
	20	0.6	0.38	1.75	0.41	1.8	
	-	0.75	0.38	1.9	0.41	1.95	
	18	0.93	0.38	2.0	0.41	2.05	
	-	1	0.38	2.1	0.41	2.15	
	16	1.34	0.38	2.3	0.41	2.3	
	-	1.5	0.38	2.4	0.41	2.4	
	14	-	-	-	-	0.41	2.7
	-	2.5	-	-	-	0.41	2.9
	12	-	-	-	-	0.41	3.2
	-	4	-	-	-	0.41	3.4
	10	-	-	-	-	0.41	3.8
	-	6	-	-	-	0.41	4.0
	8	-	-	-	-	-	-
	-	10	-	-	-	-	-
	6	-	-	-	-	-	-
	-	16	-	-	-	-	-
	4	-	-	-	-	-	-
	-	25	-	-	-	-	-
	2	35	-	-	-	-	-
	1	-	-	-	-	-	-
	-	50	-	-	-	-	-
	1/0	-	-	-	-	-	-
	2/0	70	-	-	-	-	-
	3/0	-	-	-	-	-	-
	-	95	-	-	-	-	-
	4/0	-	-	-	-	-	-
	-	120	-	-	-	-	-
	Conducting metal		BCDEFG	BCDEFG	BCDEFG	BCDEFG	

### KEY

- Conducting metals
- B Tin-plated copper
- B\* Tin-plated copper (ø > 0.38 mm)
- C Nickel-plated copper
- D Silver-plated copper
- E Nickel
- F Bare copper
- F\* Bare copper (ø > 0.38 mm)
- G Nickel-plated copper 27 %

- AWM I A Internal wiring, not subject to mechanical abuse
- AWM I A/B Internal wiring
- AWM II A/B External or Internal wiring

- NS Not Specified
- VNS Voltage Not Specified

■: UL approved nominal cross-sections only.

\* The diameter is provided for information purposes as it may vary depending on the stranding of the core. Only the average thickness of insulation should be taken into account.

For this product, please contact:

OMERIN division principale ✓  
 Zone Industrielle - F 63600 Ambert  
 Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
 omerin@omerin.com

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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.



Style no. <b>10053</b>		<b>1011</b>		<b>10381</b>		<b>1030</b>			
Approval		80 °C – 300 V		80 °C – 600 V		80 °C – 600 V		80 °C – 1000 V	
Nominal cross-section		Average thickness of insulation	Nominal diameter*	Average thickness of insulation	Nominal diameter*	Average thickness of insulation	Nominal diameter*	Average thickness of insulation	Nominal diameter*
AWG	(mm <sup>2</sup> )	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
30	0.05	0.56	1.45	0.76	1.85	0.51	1.3	0.76	1.85
28	0.09	0.56	1.5	0.76	1.9	0.51	1.4	0.76	1.9
26	0.13	0.56	1.6	0.76	2.1	0.51	1.5	0.76	2.1
24	0.22	0.56	1.75	0.76	2.2	0.51	1.65	0.76	2.2
22	0.34	0.56	1.9	0.76	2.3	0.51	1.8	0.76	2.3
-	0.5	0.56	2.05	0.76	2.45	0.64	2.2	0.76	2.45
20	0.6	0.56	2.1	0.76	2.6	0.64	2.25	0.76	2.6
-	0.75	0.56	2.25	0.76	2.65	0.64	2.4	0.76	2.65
18	0.93	0.56	2.35	0.76	2.8	0.64	2.55	0.76	2.8
-	1	0.56	2.45	0.76	2.8	0.64	2.6	0.76	2.8
16	1.34	0.56	2.6	0.76	3.0	0.69	2.9	0.76	3.0
-	1.5	0.56	2.7	0.76	3.1	0.69	3.0	0.76	3.1
14	-	0.56	3.0	0.76	3.45	0.69	3.3	0.76	3.45
-	2.5	0.56	3.2	0.76	3.6	0.69	3.45	0.76	3.6
12	-	0.56	3.5	0.76	3.9	0.69	3.75	0.76	3.9
-	4	0.56	3.75	0.76	4.3	0.69	4.0	0.76	4.3
10	-	0.56	4.1	0.76	4.5	0.69	4.4	0.76	4.5
-	6	0.56	4.3	0.76	4.8	0.69	4.6	0.76	4.8
8	-	-	-	1.14	6.2	0.76	5.5	-	-
-	10	-	-	1.14	6.6	0.76	6.1	-	-
6	-	-	-	1.52	8.2	0.76	6.9	-	-
-	16	-	-	1.52	8.6	0.76	7.2	-	-
4	-	-	-	1.52	9.6	1.14	8.9	-	-
-	25	-	-	1.52	10.0	1.14	9.4	-	-
2	35	-	-	1.52	11.0	1.14	10.5	-	-
1	-	-	-	2.03	13.0	1.52	12.4	-	-
-	50	-	-	2.03	14.2	1.52	12.8	-	-
1/0	-	-	-	2.03	14.6	1.52	13.5	-	-
2/0	70	-	-	2.03	16.2	1.52	14.6	-	-
3/0	-	-	-	2.03	17.6	1.52	16.2	-	-
-	95	-	-	2.03	17.8	1.52	16.3	-	-
4/0	-	-	-	2.03	19.1	2.03	19.1	-	-
-	120	-	-	2.03	20.5	2.03	20.5	-	-
Conducting metal		BCDEFG		BCDEFG		BCDEFG		BCDEFG	

**KEY**

- Conducting metals
- B Tin-plated copper
- B\* Tin-plated copper (ø > 0.38 mm)
- C Nickel-plated copper
- D Silver-plated copper
- E Nickel
- F Bare copper
- F\* Bare copper (ø > 0.38 mm)
- G Nickel-plated copper 27 %

- AWM I A Internal wiring, not subject to mechanical abuse
- AWM I A/B Internal wiring
- AWM II A/B External or Internal wiring

- NS Not Specified
- VNS Voltage Not Specified

■: UL approved nominal cross-sections only.

For this product, please contact:

**OMERIN division principale** ✓  
 Zone Industrielle - F 63600 Ambert  
 Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
 omerin@omerin.com

\* The diameter is provided for information purposes as it may vary depending on the stranding of the core. Only the average thickness of insulation should be taken into account.

[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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

# PLASTHERM® 105°C

## PVC insulation

### UL and cUL approval



- 1 • Bare or tin-plated copper core.
- 2 • Insulation: PVC.

### Characteristics

#### General

- Continuous operating temperatures -30°C to +105°C.
- Good resistance to chemical influences.
- Good alternate bending strength.

#### Electrical

- Rated voltage: as per style no.
- Test voltage: 10 x Rated voltage.

### Standard products

- All colours including two-coloured.
- Stranding of conducting cores: contact us.

### Approvals - standards

- UL and cUL approval (CSA) as per standard UL 758 and C22.2 No. 210 – File no.: E101965.
- “Horizontal flame test” as per UL approval.
- “FT1 flame rating” as per cUL approval.

### Applications

- Internal cabling for electrical or electronic appliances, computers, etc..

### Options

- Other nominal cross-sections: contact us.
- Other style nos. available: styles no. 1028, 1484, 1500, 1504, 1647, 1650, 10070, 10236, 11122, 11287.
- Available PVC 90 °C insulated style nos.: styles no. 1706, 1013, 1024, 1026, 1027, 1207, 1499, 10321, 1032, 1444: contact us.
- Nylon sleeving for certain Style number, consult us.
- Vertical flame test VW1 for style 1015: consult us.

For this product, please contact:

**OMERIN division principale** ✓  
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@omerin.com



Style no.	1569-VW-1	10198	1896	10012
Approval	105°C – 300 V	105°C – 300 V	105°C – 300 V	105°C – 600 V

Nominal cross-section		Average thickness of insulation (mm)	Nominal diameter* (mm)	Average thickness of insulation (mm)	Nominal diameter* (mm)	Average thickness of insulation (mm)	Nominal diameter* (mm)	Average thickness of insulation (mm)	Nominal diameter* (mm)
30	0.05	0.38	1.1	0.38	1.1	-	-	0.51	1.3
28	0.09	0.38	1.15	0.38	1.15	-	-	0.51	1.4
26	0.13	0.38	1.2	0.38	1.25	0.89	2.3	0.51	1.5
24	0.22	0.38	1.4	0.38	1.4	0.89	2.4	0.51	1.65
22	0.34	0.38	1.6	0.38	1.5	0.89	2.55	0.51	1.8
-	0.5	0.38	1.7	0.38	1.7	0.89	2.7	0.51	1.95
20	0.6	0.38	1.8	0.38	1.75	0.89	2.75	0.51	2.0
-	0.75	0.38	1.9	0.38	1.9	0.89	2.9	0.51	2.15
18	0.93	0.38	2.05	0.38	2.0	0.89	3.1	0.51	2.25
-	1	0.38	2.1	0.38	2.1	0.89	3.1	0.51	2.35
16	1.34	0.38	2.3	0.38	2.3	0.89	3.4	0.51	2.5
-	1.5	0.38	2.4	0.38	2.4	0.89	3.4	0.51	2.7
14	-	0.38	2.7	0.51	2.9	0.89	3.7	0.51	2.9
-	2.5	0.38	2.8	0.51	3.1	0.89	3.9	0.51	3.1
12	-	0.38	3.2	0.51	3.4	0.89	4.3	0.51	3.4
-	4	0.38	3.4	0.51	3.65	0.89	4.5	0.51	3.65
10	-	0.38	3.8	0.51	4.0	0.89	4.9	0.51	4.0
-	6	0.38	4.0	0.51	4.2	0.89	5.1	0.51	4.2
8	-	0.76	5.5	0.76	5.5	0.89	5.8	0.76	5.5
-	10	0.76	6.1	0.76	6.1	0.89	6.4	0.76	6.1
6	-	0.76	6.9	0.76	6.9	0.89	7.1	1.14	7.6
-	16	0.76	7.2	0.76	7.2	0.89	7.4	1.14	7.7
4	-	0.76	8.1	0.76	8.1	0.89	8.4	1.14	8.9
-	25	0.76	8.6	0.76	8.6	0.89	9.0	1.14	9.4
2	35	0.76	9.7	0.76	9.7	0.89	10.0	1.14	10.5
1	-	-	-	1.02	11.4	0.89	11.2	1.52	12.4
-	50	-	-	1.02	11.8	0.89	11.5	1.52	12.8
1/0	-	-	-	1.02	12.5	0.89	12.2	1.52	13.5
2/0	70	-	-	1.27	14.1	0.89	13.3	1.52	14.6
3/0	-	-	-	1.27	15.7	0.89	14.9	1.52	16.2
-	95	-	-	1.27	15.8	0.89	15.1	1.52	16.3
4/0	-	-	-	1.27	17.3	0.89	16.5	-	-
-	120	-	-	1.27	17.6	0.89	16.8	-	-
Conducting metal		BCDEFG		BCDEFG		BF		BCDEFG	

#### KEY

- Conducting metals
- B Tin-plated copper
- B\* Tin-plated copper (e > 0.38 mm)
- C Nickel-plated copper
- D Silver-plated copper
- E Nickel
- F Bare copper
- F\* Bare copper (e > 0.38 mm)
- G Nickel-plated copper 27 %

- AWM I A Internal wiring, not subject to mechanical abuse
- AWM I A/B Internal wiring
- AWM II A/B External or Internal wiring

- NS Not Specified
- VNS Voltage Not Specified

■: UL approved nominal cross-sections only.

\* The diameter is provided for information purposes as it may vary depending on the stranding of the core. Only the average thickness of insulation should be taken into account.

[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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

Style no.		1015		1283		1897		10914		10271		10269	
Approval		105°C - 600 V		105°C - 600 V		105°C - 600 V		105°C - 1 000 V		105°C - 1 000 V		105°C - 1 000 V	
Nominal cross-section		Average thickness of insulation	Nominal diameter*	Average thickness of insulation	Nominal diameter*	Average thickness of insulation	Nominal diameter*	Average thickness of insulation	Nominal diameter*	Average thickness of insulation	Nominal diameter*	Average thickness of insulation	Nominal diameter*
AWG	(mm <sup>2</sup> )	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
30	0.05	0.76	1.85	-	-	-	-	-	-	0.51	1.3	0.76	1.85
28	0.09	0.76	1.9	-	-	-	-	0.38	1.15	0.51	1.4	0.76	1.9
26	0.13	0.76	2.1	-	-	0.89	2.3	0.38	1.2	0.51	1.5	0.76	2.1
24	0.22	0.76	2.2	-	-	0.89	2.4	0.38	1.4	0.51	1.65	0.76	2.2
22	0.34	0.76	2.3	-	-	0.89	2.55	0.38	1.6	0.51	1.75	0.76	2.3
-	0.5	0.76	2.45	-	-	0.89	2.7	0.38	1.7	0.51	1.95	0.76	2.45
20	0.6	0.76	2.6	-	-	0.89	2.75	0.38	1.8	0.51	2.0	0.76	2.6
-	0.75	0.76	2.65	-	-	0.89	2.9	0.38	1.9	0.51	2.15	0.76	2.65
18	0.93	0.76	2.9	-	-	0.89	3.2	0.38	2.05	0.51	2.3	0.76	2.8
-	1	0.76	2.8	-	-	0.89	3.2	0.38	2.1	0.51	2.35	0.76	2.8
16	1.34	0.76	3.0	-	-	0.89	3.4	0.38	2.3	0.51	2.5	0.76	3.1
-	1.5	0.76	3.1	-	-	0.89	3.4	0.38	2.4	0.51	2.7	0.76	3.1
14	-	0.76	3.45	-	-	0.89	3.7	0.38	2.7	0.51	2.9	0.76	3.5
-	2.5	0.76	3.6	-	-	0.89	3.9	0.38	2.8	0.51	3.1	0.76	3.6
12	-	0.76	3.9	-	-	0.89	4.4	0.38	3.2	0.51	3.4	0.76	3.9
-	4	0.76	4.3	-	-	0.89	4.5	0.51	3.65	0.51	3.65	0.76	4.3
10	-	0.76	4.5	-	-	0.89	4.9	0.51	4.0	0.51	4.0	0.76	4.5
-	6	0.76	4.8	-	-	0.89	5.1	0.76	4.8	0.51	4.2	0.76	4.8
8	-	1.14	6.2	1.52	7.0	0.89	5.8	0.76	5.5	0.76	5.5	1.14	6.2
-	10	1.14	6.6	1.52	7.6	0.89	6.4	0.76	6.1	0.76	6.1	1.14	6.6
6	-	1.52	8.2	1.52	8.2	0.89	7.1	0.76	6.9	1.14	7.6	1.52	8.2
-	16	1.52	8.6	1.52	8.6	0.89	7.4	0.76	7.2	1.14	7.7	1.52	8.6
4	-	1.52	9.6	1.52	9.6	0.89	8.4	1.0	8.6	1.14	8.9	1.52	9.6
-	25	1.52	10.0	1.52	10.0	0.89	9.0	1.0	9.1	1.14	9.4	1.52	10.0
2	35	1.52	11.4	1.52	11.0	0.89	10.0	1.0	10.2	1.14	10.5	1.52	11.1
1	-	2.03	13.6	-	-	0.89	11.2	1.27	11.9	1.52	12.4	2.03	13.0
-	50	2.03	14.2	-	-	0.89	11.5	1.27	12.3	1.52	12.8	2.03	14.2
1/0	-	2.03	14.6	-	-	0.89	12.2	1.27	13.0	1.52	13.5	2.03	14.6
2/0	70	2.03	16.2	-	-	0.89	13.3	1.27	14.1	1.52	14.6	2.03	16.2
3/0	-	2.03	17.6	-	-	0.89	14.9	1.27	15.7	1.52	16.2	2.03	17.6
-	95	2.03	17.8	-	-	0.89	15.1	1.27	15.8	1.52	16.3	2.03	17.8
4/0	-	2.03	19.1	-	-	0.89	16.5	1.27	17.3	-	-	2.03	19.1
-	120	2.03	20.5	-	-	0.89	16.8	1.52	19.5	-	-	2.03	20.5
Conducting metal		BCDEFG		BCDEFG		BCDEFG		BCDEFG		BCDEFG		BCDEFG	

**KEY**

- Conducting metals
- B Tin-plated copper
- B\* Tin-plated copper (ø > 0.38 mm)
- C Nickel-plated copper
- D Silver-plated copper
- E Nickel
- F Bare copper
- F\* Bare copper (ø > 0.38 mm)
- G Nickel-plated copper 27 %

- AWM I A Internal wiring, not subject to mechanical abuse
- AWM I A/B Internal wiring
- AWM II A/B External or Internal wiring

- NS Not Specified
- VNS Voltage Not Specified

■: UL approved nominal cross-sections only.

For this product, please contact:

**OMERIN division principale** ✓  
 Zone Industrielle - F 63600 Ambert  
 Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
 omerin@omerin.com

\* The diameter is provided for information purposes as it may vary depending on the stranding of the core. Only the average thickness of insulation should be taken into account.

[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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.



# PLASTHERM® Style 1015-HAR

UL, cUL and USE <HAR> approval  
-30 °C to +105 °C



- 1 • Flexible bare copper core – class 5 as per IEC 60228.
- 2 • Insulation: PVC - type T13 - NF C 32-525-1 / NF EN 50525-1 / EN 50363-3.

## Approvals - standards

- UL approval as per standard UL 758  
File no.: E101965.
- cUL approval (up to 4 mm<sup>2</sup> included)  
as per standard CSA C22.2 N° 210 -  
File no.: E101965.
  - USE <HAR> approval  
as per NF EN 50525-2-31.
- "Horizontal flame test" as per UL approval.
  - "FT1 flame rating" as per cUL approval.
  - Resistance to vertical flame propagation  
for a single insulated wire: IEC 60332-1-2 /  
EN 50265-2-1 / NF C 32-070 test C2.

## Applications

- Internal cabling for electrical and  
electronic appliances.

## Options

- Tin-plated copper core.

### Style 1015-HAR

#### Flexible core • class 5 as per IEC 60228

Nominal cross-section (mm <sup>2</sup> )	Nominal stranding	Maximum linear resistance at 20 °C (Ω/km)
<b>Type H05V2-K</b>		
0.5	16 x 0.20	39.0
0.75	24 x 0.20	26.0
1	32 x 0.20	19.5
<b>Type H07V2-K</b>		
1.5	30 x 0.25	13.3
2.5	50 x 0.25	7.98
4	56 x 0.30	4.95
6	84 x 0.30	3.30
10	80 x 0.40	1.91
16*	126 x 0.40	1.21
25	192 x 0.40	0.78
35	259 x 0.40	0.554

#### INSULATED WIRE OR CABLE

Nominal thickness of insulation (mm)	Nominal diameter (mm)	Approximate linear weight (kg/km)
<b>Type H05V2-K</b>		
0.76	2.45	9.9
0.76	2.65	12.6
0.76	2.8	15.1
<b>Type H07V2-K</b>		
0.76	3.1	20.1
0.80	3.6	30.1
0.80	4.3	46.8
0.80	4.8	65.2
1.15	6.6	117
1.15	7.7	168
1.52	10.0	274
1.52	11.4	359

For this product, please contact:

OMERIN division principale   
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@omerin.com

\* Nominal cross-section only available in Style 10271 <HAR>.

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

**omerin**  
LES CABLES DE L'EXTREME

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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

# PLASTHERM® style 20199

## 2-conductor flat cable

### 105°C PVC insulation

### UL approval

### -30 °C to +105 °C



#### Approvals - standards

- UL approval as per standard UL 758 - File no.: E101965.

#### Applications

- Internal cabling for electric, electronic, audio and video appliances.

#### Options

- Identification using a coloured longitudinal stripe on one of the two conductors: contact us.

#### Characteristics

##### General

- Continuous operating temperatures: -30 °C to +105 °C.
- Very good flexibility.
- Good alternate bending strength.
- Easy stripping and separating of conductors.

##### Electrical

- Rated voltage: 300 V.
- Test voltage: as per standard UL 758.

#### Standard products

- Standard insulation colour: white.
- Identification by marking on one of the two conductors.



- 1 • Flexible bare or tin-plated copper core.
- 2 • Insulation: PVC 105 °C.

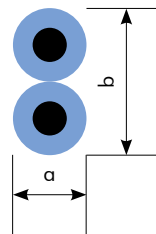
#### Style 20199

##### FLEXIBLE CORE

Nominal cross-section AWG	Nominal cross-section (mm <sup>2</sup> )	Nominal stranding	Maximum linear resistance at 20 °C (Ω/km) (bare copper core)
2 x 24	2 x 0.22	7 x 0.20	87.6
2 x 22	2 x 0.34	7 x 0.25	55.4
-	2 x 0.5	16 x 0.20	39.0
2 x 20	2 x 0.6	19 x 0.20	34.6

##### INSULATED CABLE

Nominal outer dimensions (mm)		Approximate linear weight (kg/km)
a	b	
1.4	3.0	7.5
1.5	3.2	9.8
1.7	3.6	13.0
1.7	3.6	15.7



For this product, please contact:

OMERIN division principale   
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@omerin.com

[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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

# PLASTHERM® MY2-Y2 and MY2-EY2

**-30 °C to +105 °C**



- 1 • Flexible bare (ref. MY2-Y2) or tin-plated (ref. MY2-EY2) copper core.
- 2 • Insulation: PVC 105 °C.
- 3 • Outer sheath: PVC 105 °C.

### Applications

• Cabling in an environment potentially reaching +105°C (electrical appliances, light fittings, electronics, motor cars, etc.).

### Options

- Silver-plated (ref. MY2-AY2) or nickel-plated (ref. MY2-CNY2) copper core: contact us.
  - Electrical shielding:
    - > Tin-plated copper braid: ref. MY2BE-Y2 or MY2BE-EY2.
    - > Aluminium tape + continuity wire: ref. MY2BAL-Y2 or MY2BAL-EY2.
      - Insulation and/or outer sheath made of PVC 80°C: contact us.
      - Insulation and/or outer sheath made of PVC 125 °C: contact us.
  - Insulation made of silicone rubber: contact us.
- Insulation made of fluorinated polymer ETFE, FEP or PFA: contact us.
  - Other nominal metric or American cross-sections: contact us.
  - Other nominal stranding: contact us.
  - Other outer sheath colours: contact us.
  - Other options and/or combinations of the options outlined above: contact us.
- Other numbers of conductors: contact us.

### Characteristics

#### General

- Continuous operating temperatures: -30 °C to +105 °C.
- Good resistance to thermal shock.
- Good mechanical strength.
- Good resistance to common chemical environments.

#### Electrical

- Rated voltage: up to 600/1000 V.
- Test voltage: up to 3000 V.

### Standard products

- Standard conductor colours: see table below.
- Standard outer sheath colours: grey or black.

#### Standard conductor colours:

Number of conductors	With an earth wire	Without an earth wire
2	-	blue – brown
3	yellow/green – blue – brown	brown – black – grey
4	yellow/green – brown – black – grey	blue – brown – black – grey
5	yellow/green – blue – brown – black – grey	blue – brown – black – grey – black
≥6	yellow/green – grey numbered	grey numbered

### Identification

Multi-conductor cables without an earth wire are identified as follows:

< Number of conductors > X < Cross-section > (mm<sup>2</sup>) (example: 3 X 1.5 mm<sup>2</sup>).

Multi-conductor cables with an earth wire are identified by the symbol G in the place of the X (example 3 G 1.5 mm<sup>2</sup>).

Flexible core • class 5 as per IEC 60228			INSULATED CONDUCTORS		SHEATHED CABLE	
Nominal cross-section (mm <sup>2</sup> )	Nominal stranding	Maximum linear resistance at 20 °C (Ω/km)	Nominal thickness of insulation (mm)	Nominal diameter (mm)	Nominal diameter (mm)	Approximate linear weight (kg/km)
2 x 0.22	7 x 0.20	92.5	0.3	1.2	3.4	14.8
3 x 0.22	7 x 0.20	92.5	0.3	1.2	3.6	17.7
4 x 0.22	7 x 0.20	92.5	0.3	1.2	3.9	21.2
5 x 0.22	7 x 0.20	92.5	0.3	1.2	4.4	26.9
7 x 0.22	7 x 0.20	92.5	0.3	1.2	4.8	34.2
19 x 0.22	7 x 0.20	92.5	0.3	1.2	7.6	84.4
2 x 0.34	7 x 0.25	59.2	0.4	1.6	4.4	24.3
3 x 0.34	7 x 0.25	59.2	0.4	1.6	4.7	29.0
4 x 0.34	7 x 0.25	59.2	0.4	1.6	5.1	34.8
5 x 0.34	7 x 0.25	59.2	0.4	1.6	5.5	41.1
7 x 0.34	7 x 0.25	59.2	0.4	1.6	6.0	52.9
19 x 0.34	7 x 0.25	59.2	0.4	1.6	9.6	132

For this product, please contact:

OMERIN division principale   
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@omerin.com

[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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.



Flexible core • class 5 as per IEC 60228

INSULATED CONDUCTORS

SHEATHED CABLE

Nominal cross-section (mm <sup>2</sup> )	Nominal stranding	Maximum linear resistance at 20 °C (Ω/km)	Nominal thickness of insulation (mm)	Nominal diameter (mm)	Nominal diameter (mm)	Approximate linear weight (kg/km)
2 x 0.5	16 x 0.20	40.1	0.4	1.8	4.8	30.0
3 x 0.5	16 x 0.20	40.1	0.4	1.8	5.1	36.4
4 x 0.5	16 x 0.20	40.1	0.4	1.8	5.5	44.1
5 x 0.5	16 x 0.20	40.1	0.4	1.8	6.1	52.4
7 x 0.5	16 x 0.20	40.1	0.4	1.8	6.6	68.0
19 x 0.5	16 x 0.20	40.1	0.4	1.8	11.0	180
2 x 0.6	19 x 0.20	33.7	0.6	2.2	5.6	39.5
3 x 0.6	19 x 0.20	33.7	0.6	2.2	6.0	47.8
4 x 0.6	19 x 0.20	33.7	0.6	2.2	6.5	57.8
5 x 0.6	19 x 0.20	33.7	0.6	2.2	7.5	75.2
7 x 0.6	19 x 0.20	33.7	0.6	2.2	8.2	96.7
19 x 0.6	19 x 0.20	33.7	0.6	2.2	13.2	243
2 x 0.75	24 x 0.20	26.7	0.6	2.3	5.8	43.7
3 x 0.75	24 x 0.20	26.7	0.6	2.3	6.2	53.4
4 x 0.75	24 x 0.20	26.7	0.6	2.3	6.7	65.0
5 x 0.75	24 x 0.20	26.7	0.6	2.3	7.8	84.2
7 x 0.75	24 x 0.20	26.7	0.6	2.3	8.5	109
19 x 0.75	24 x 0.20	26.7	0.6	2.3	13.7	275
2 x 0.93	19 x 0.25	21.6	0.6	2.4	6.0	48.8
3 x 0.93	19 x 0.25	21.6	0.6	2.4	6.4	60.2
4 x 0.93	19 x 0.25	21.6	0.6	2.4	7.0	73.7
5 x 0.93	19 x 0.25	21.6	0.6	2.4	8.1	95.1
7 x 0.93	19 x 0.25	21.6	0.6	2.4	8.8	124
19 x 0.93	19 x 0.25	21.6	0.6	2.4	14.2	314
2 x 1	32 x 0.20	20.0	0.6	2.5	6.2	51.9
3 x 1	32 x 0.20	20.0	0.6	2.5	6.6	64.1
4 x 1	32 x 0.20	20.0	0.6	2.5	7.6	84.9
5 x 1	32 x 0.20	20.0	0.6	2.5	8.4	101
7 x 1	32 x 0.20	20.0	0.6	2.5	9.1	132
19 x 1	32 x 0.20	20.0	0.6	2.5	14.7	334
2 x 1.34	19 x 0.30	15.0	0.6	2.7	6.6	62.0
3 x 1.34	19 x 0.30	15.0	0.6	2.7	7.0	77.5
4 x 1.34	19 x 0.30	15.0	0.6	2.7	8.1	102
5 x 1.34	19 x 0.30	15.0	0.6	2.7	8.9	122
7 x 1.34	19 x 0.30	15.0	0.6	2.7	9.7	161
2 x 1.5	30 x 0.25	13.7	0.6	2.8	6.8	66.0
3 x 1.5	30 x 0.25	13.7	0.6	2.8	7.6	89.1
4 x 1.5	30 x 0.25	13.7	0.6	2.8	8.3	109
5 x 1.5	30 x 0.25	13.7	0.6	2.8	9.2	131
7 x 1.5	30 x 0.25	13.7	0.6	2.8	10.0	172
2 x 2.5	50 x 0.25	8.21	0.7	3.4	8.4	104
3 x 2.5	50 x 0.25	8.21	0.7	3.4	8.9	131
4 x 2.5	50 x 0.25	8.21	0.7	3.4	9.8	162
5 x 2.5	50 x 0.25	8.21	0.7	3.4	11.2	204
7 x 2.5	50 x 0.25	8.21	0.7	3.4	12.2	269
2 x 4	56 x 0.30	5.09	0.8	4.2	10.0	153
3 x 4	56 x 0.30	5.09	0.8	4.2	11.1	205
4 x 4	56 x 0.30	5.09	0.8	4.2	12.1	253
5 x 4	56 x 0.30	5.09	0.8	4.2	13.5	311
7 x 4	56 x 0.30	5.09	0.8	4.2	14.8	412
2 x 6	84 x 0.30	3.39	0.8	4.8	11.6	216
3 x 6	84 x 0.30	3.39	0.8	4.8	12.4	276
4 x 6	84 x 0.30	3.39	0.8	4.8	13.8	350
5 x 6	84 x 0.30	3.39	0.8	4.8	15.8	444
7 x 6	84 x 0.30	3.39	0.8	4.8	17.2	588
2 x 10	77 x 0.40	1.95	1.0	6.4	15.0	350
3 x 10	77 x 0.40	1.95	1.0	6.4	16.6	468
4 x 10	77 x 0.40	1.95	1.0	6.4	18.2	581
5 x 10	77 x 0.40	1.95	1.0	6.4	19.9	693
7 x 10	77 x 0.40	1.95	1.0	6.4	21.8	926
2 x 16	119 x 0.40	1.24	1.2	7.8	18.4	532
3 x 16	119 x 0.40	1.24	1.2	7.8	19.6	681
4 x 16	119 x 0.40	1.24	1.2	7.8	21.4	840
5 x 16	119 x 0.40	1.24	1.2	7.8	23.7	1019
7 x 16	119 x 0.40	1.24	1.2	7.8	26.2	1382

# PLASTHERM® 80 °C

**PVC insulation  
PVC sheathing  
UL and cUL approval**



- 1 • UL and cUL approved conductors with PVC insulation.
- 2 • Outer sheath: PVC.

### Characteristics General

- Continuous operating temperatures: -30 °C to +80 °C.
- Good resistance to common chemical environments.

### Electrical

- Rated voltage: as per style no.
- Test voltage: 10 x Rated voltage.

### Standard products

- Single conductors: UL and cUL approved PVC insulated conductors (≥ 80 °C).
- Standard outer sheath colours: black or grey.
- Stranding of conducting cores: contact us.

### Approvals - standards

- UL approval as per standard UL 758 - File no.: E101965.
- cUL approval (CSA) as per standard C22.2 No. 210 - File no.: E101965.
- "Cable flame test" as per UL approval.
- "FT1 flame rating" as per cUL approval.

### Applications

- External or internal cabling for electrical appliances.

### Options

- Electrical shielding: Tin-plated copper braid, or aluminium tape + continuity wire.
- Other outer sheath colours: contact us.
- Other nominal cross-sections: contact us.
- Other style nos. available: styles no. 20871, 21061, 21047, 2610, 2655, 2656, 20212, 20295, 2463, 20207, 21058.

#### KEY

- Conducting metals
- B** Tin-plated copper
- B\*** Tin-plated copper (ø > 0.38 mm)
- C** Nickel-plated copper
- D** Silver-plated copper
- E** Nickel
- F** Bare copper
- F\*** Bare copper (ø > 0.38 mm)
- G** Nickel-plated copper 27 %

- AWM I A** Internal wiring, not subject to mechanical abuse
- AWM I A/B** Internal wiring
- AWM II A/B** External or Internal wiring

- NS** Not Specified
- VNS** Voltage Not Specified

■: UL approved nominal cross-sections only.

\* The diameter is provided for information purposes as it may vary depending on the stranding of the core.  
Only the average thickness of insulation or the sheathing should be taken into account.

For this product, please contact:

**OMERIN division principale** ✓  
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@omerin.com



### Style no. 2464-Y80 Approval 80 °C - 300 V AWM II A/B

No. of cond.	AWG	Nominal cross-section (mm²)	Nominal diameter* of the cond. (mm)	Nominal diameter* of the cable (mm)
2	26	0.13	1.25	4.0
3	26	0.13	1.25	4.2
4	26	0.13	1.25	4.5
5	26	0.13	1.25	4.9
7	26	0.13	1.25	5.3
2	24	0.22	1.4	4.3
3	24	0.22	1.4	4.5
4	24	0.22	1.4	4.9
5	24	0.22	1.4	5.3
7	24	0.22	1.4	5.7
2	22	0.34	1.5	4.5
3	22	0.34	1.5	4.8
4	22	0.34	1.5	5.1
5	22	0.34	1.5	5.6
7	22	0.34	1.5	6.0
2	-	0.5	1.75	5.0
3	-	0.5	1.75	5.3
4	-	0.5	1.75	5.7
5	-	0.5	1.75	6.2
7	-	0.5	1.75	6.8
2	20	0.6	1.75	5.0
3	20	0.6	1.75	5.3
4	20	0.6	1.75	5.7
5	20	0.6	1.75	6.2
7	20	0.6	1.75	6.8
2	-	0.75	1.9	5.3
3	-	0.75	1.9	5.6
4	-	0.75	1.9	6.1
5	-	0.75	1.9	6.7
7	-	0.75	1.9	7.2
2	18	0.93	2.0	5.5
3	18	0.93	2.0	5.8
4	18	0.93	2.0	6.3
5	18	0.93	2.0	6.9
7	18	0.93	2.0	7.5
2	-	1	2.1	5.7
3	-	1	2.1	6.1
4	-	1	2.1	6.6
5	-	1	2.1	7.2
7	-	1	2.1	7.8
2	16	1.34	2.3	6.1
3	16	1.34	2.3	6.5
4	16	1.34	2.3	7.1
5	16	1.34	2.3	7.7
7	16	1.34	2.3	8.4
2	-	1.5	2.4	6.3
3	-	1.5	2.4	6.7
4	-	1.5	2.4	7.3
5	-	1.5	2.4	8.0
7	-	1.5	2.4	8.7
2	14	-	2.7	6.9
3	14	-	2.7	7.4
4	14	-	2.7	8.0
5	14	-	2.7	8.8
7	14	-	2.7	9.6

Conducting metal

BCDEFG

### 2570-Y80 Approval 80 °C - 600 or 1000 V AWM II A/B

No. of cond.	AWG	Nominal diameter* of the cond. (mm)	Nominal diameter* of the cable (mm)
2.1	-	5.7	6.1
2.1	-	6.6	7.2
2.1	-	7.8	8.1
2.2	-	5.9	6.3
2.2	-	6.8	7.5
2.2	-	8.1	8.1
2.3	-	6.1	6.5
2.3	-	7.1	7.7
2.3	-	8.4	8.4
2.45	-	6.4	6.8
2.45	-	7.4	8.1
2.45	-	8.9	8.9
2.6	-	6.7	7.1
2.6	-	7.8	8.5
2.6	-	9.3	9.3
2.65	-	6.8	7.2
2.65	-	7.9	8.7
2.65	-	9.5	9.5
2.8	-	7.1	7.6
2.8	-	8.3	9.1
2.8	-	9.9	9.9
2.8	-	7.1	7.6
2.8	-	8.3	9.1
2.8	-	9.1	9.9
2.8	-	9.9	9.9
3.0	-	7.5	8.0
3.0	-	8.8	9.6
3.0	-	10.5	10.5
3.1	-	7.7	8.2
3.1	-	9.0	9.9
3.1	-	10.8	10.8
3.45	-	8.4	9.0
3.45	-	9.8	10.8
3.45	-	11.9	11.9

BCDEFG

[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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

# PLASTHERM® 90 °C

**PVC insulation  
PVC sheathing  
UL and cUL approval**



- 1 • UL and cUL approved conductors with PVC insulation.
- 2 • Outer sheath: PVC.

## Characteristics General

- Continuous operating temperatures: -30 °C to +90 °C.
- Good resistance to common chemical environments.

## Electrical

- Rated voltage: as per style no.
- Test voltage: 10 x Rated voltage.

## Standard products

- Single conductors: UL and cUL approved PVC insulated conductors (≥ 90 °C).
- Standard outer sheath colours: black or grey.
- Stranding of conducting cores: contact us.

## Approvals - standards

- UL approval as per standard UL 758 - File no.: E101965.
- cUL approval (CSA) as per standard C22.2 No. 210 - File no.: E101965.
- "Cable flame test" as per UL approval.
- "FT1 flame rating" as per cUL approval.

## Applications

- External or internal cabling for electrical appliances.

## Options

- Electrical shielding: Tin-plated copper braid, or aluminium tape + continuity wire.
- Other outer sheath colours: contact us.
- Other nominal cross-sections: contact us.
- Other style nos. available: styles no. 2549, 20132, 2550, 2653.

### KEY

- Conducting metals
- B** Tin-plated copper
- B\*** Tin-plated copper (ø > 0.38 mm)
- C** Nickel-plated copper
- D** Silver-plated copper
- E** Nickel
- F** Bare copper
- F\*** Bare copper (ø > 0.38 mm)
- G** Nickel-plated copper 27 %

- AWM I A** Internal wiring, not subject to mechanical abuse
- AWM I A/B** Internal wiring
- AWM II A/B** External or Internal wiring

- NS** Not Specified
- VNS** Voltage Not Specified

■: UL approved nominal cross-sections only.

\* The diameter is provided for information purposes as it may vary depending on the stranding of the core. Only the average thickness of insulation or the sheathing should be taken into account.

For this product, please contact:

**OMERIN division principale** ✓  
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@omerin.com



[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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

Style no.			2654-Y90		2587-Y90	
Approval			90 °C - 300 V		90 °C - 600 V	
			AWM II A/B		AWM II A/B	
No. of cond.	Nominal cross-section AWG (mm²)	Nominal diameter* of the cond. (mm)	Nominal diameter* of the cable (mm)	Nominal diameter* of the cond. (mm)	Nominal diameter* of the cable (mm)	
2	26	0.13	1.2	3.9	2.1	5.7
3	26	0.13	1.2	4.1	2.1	6.1
4	26	0.13	1.2	4.4	2.1	6.6
5	26	0.13	1.2	4.8	2.1	7.2
7	26	0.13	1.2	5.1	2.1	7.8
2	24	0.22	1.4	4.3	2.2	5.9
3	24	0.22	1.4	4.5	2.2	6.3
4	24	0.22	1.4	4.9	2.2	6.8
5	24	0.22	1.4	5.3	2.2	7.5
7	24	0.22	1.4	5.7	2.2	8.1
2	22	0.34	1.6	4.7	2.3	6.1
3	22	0.34	1.6	5.0	2.3	6.5
4	22	0.34	1.6	5.4	2.3	7.1
5	22	0.34	1.6	5.8	2.3	7.7
7	22	0.34	1.6	6.3	2.3	8.4
2	-	0.5	1.7	4.9	2.45	6.4
3	-	0.5	1.7	5.2	2.45	6.8
4	-	0.5	1.7	5.6	2.45	7.4
5	-	0.5	1.7	6.1	2.45	8.1
7	-	0.5	1.7	6.6	2.45	8.9
2	20	0.6	1.8	5.1	2.6	6.7
3	20	0.6	1.8	5.4	2.6	7.1
4	20	0.6	1.8	5.9	2.6	7.8
5	20	0.6	1.8	6.4	2.6	8.5
7	20	0.6	1.8	6.9	2.6	9.3
2	-	0.75	1.9	5.3	2.65	6.8
3	-	0.75	1.9	5.6	2.65	7.2
4	-	0.75	1.9	6.1	2.65	7.9
5	-	0.75	1.9	6.7	2.65	8.7
7	-	0.75	1.9	7.2	2.65	9.5
2	18	0.93	2.05	5.6	2.8	7.1
3	18	0.93	2.05	5.9	2.8	7.6
4	18	0.93	2.05	6.5	2.8	8.3
5	18	0.93	2.05	7.1	2.8	9.1
7	18	0.93	2.05	7.7	2.8	9.9
2	-	1	2.1	5.7	2.8	7.1
3	-	1	2.1	6.1	2.8	7.6
4	-	1	2.1	6.6	2.8	8.3
5	-	1	2.1	7.2	2.8	9.1
7	-	1	2.1	7.8	2.8	9.9
2	16	1.34	2.3	6.1	3.0	7.5
3	16	1.34	2.3	6.5	3.0	8.0
4	16	1.34	2.3	7.1	3.0	8.8
5	16	1.34	2.3	7.7	3.0	9.6
7	16	1.34	2.3	8.4	3.0	10.5
2	-	1.5	2.4	6.3	3.1	7.7
3	-	1.5	2.4	6.7	3.1	8.2
4	-	1.5	2.4	7.3	3.1	9.0
5	-	1.5	2.4	8.0	3.1	9.9
7	-	1.5	2.4	8.7	3.1	10.8
2	14	-	2.7	6.9	3.45	8.4
3	14	-	2.7	7.4	3.45	9.0
4	14	-	2.7	8.0	3.45	9.8
5	14	-	2.7	8.8	3.45	10.8
7	14	-	2.7	9.6	3.45	11.9

Conducting metal

BCDEFG

BCDEFG

# PLASTHERM® 105 °C

PVC insulation  
PVC sheathing  
UL and cUL approval



- 1 • UL and cUL approved conductors with PVC insulation.
- 2 • Outer sheath: PVC.

### Characteristics

#### General

- Continuous operating temperatures: -30 °C to +105 °C.
- Good resistance to common chemical environments.

#### Electrical

- Rated voltage: as per style no.
- Test voltage: 10 x Rated voltage.

### Standard products

- Single conductors: UL and cUL approved PVC insulated conductors (≥ 105 °C).
- Outer sheath colours: black or grey.
- Stranding of conducting cores: contact us.

### Approvals - standards

- UL approval as per standard UL 758 - File no.: E101965.
- cUL approval (CSA) as per standard C22.2 No. 210 - File no.: E101965.
- "Cable flame test" as per UL approval.
- "FT1 flame rating" as per cUL approval.

### Applications

- External or internal cabling for electrical appliances.

### Options

- Electrical shielding: Tin-plated copper braid, or aluminium tape + continuity wire.
- Other outer sheath colours: contact us.
- Other nominal cross-sections: contact us.
- Other style nos. available: styles no. 2589, 2661, 2662, 2501, 2516, 2907, 20155, 20213, 20214, 20811, 20883, 20903.
- Vertical flame test VW-1 for styles 2517 300V, 2586 600V and 2586 1000 V: please consult us.

#### KEY

- Conducting metals
- B Tin-plated copper
- B\* Tin-plated copper (ø > 0.38 mm)
- C Nickel-plated copper
- D Silver-plated copper
- E Nickel
- F Bare copper
- F\* Bare copper (ø > 0.38 mm)
- G Nickel-plated copper 27 %

- AWM I A Internal wiring, not subject to mechanical abuse
- AWM I A/B Internal wiring
- AWM II A/B External or internal wiring

- NS Not Specified
- VNS Voltage Not Specified

■: UL approved nominal cross-sections only.

\* The diameter is provided for information purposes as it may vary depending on the stranding of the core.  
Only the average thickness of insulation or the sheathing should be taken into account.

For this product, please contact:

OMERIN division principale ✓  
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@omerin.com



Style no.	Approval	105 °C - 300 V				105 °C - 600 V		105 °C - 1000 V	
		AWM II A/B				AWM II A/B		AWM II A/B	
		Nominal cross-section	Nominal diameter* of the cond. (mm)	Nominal diameter* of the cable (mm)	Nominal diameter* of the cond. (mm)	Nominal diameter* of the cable (mm)	Nominal diameter* of the cond. (mm)	Nominal diameter* of the cable (mm)	
2	26	0.13	1.2	3.9	2.1	5.7	2.1	5.7	
3	26	0.13	1.2	4.1	2.1	6.1	2.1	6.1	
4	26	0.13	1.2	4.4	2.1	6.6	2.1	6.6	
5	26	0.13	1.2	4.8	2.1	7.2	2.1	7.2	
7	26	0.13	1.2	5.1	2.1	7.8	2.1	7.8	
2	24	0.22	1.4	4.3	2.2	5.9	2.2	5.9	
3	24	0.22	1.4	4.5	2.2	6.3	2.2	6.3	
4	24	0.22	1.4	4.9	2.2	6.8	2.2	6.8	
5	24	0.22	1.4	5.3	2.2	7.5	2.2	7.5	
7	24	0.22	1.4	5.7	2.2	8.1	2.2	8.1	
2	22	0.34	1.6	4.7	2.3	6.1	2.3	6.1	
3	22	0.34	1.6	5.0	2.3	6.5	2.3	6.5	
4	22	0.34	1.6	5.4	2.3	7.1	2.3	7.1	
5	22	0.34	1.6	5.8	2.3	7.7	2.3	7.7	
7	22	0.34	1.6	6.3	2.3	8.4	2.3	8.4	
2	-	0.5	1.7	4.9	2.45	6.4	2.45	6.4	
3	-	0.5	1.7	5.2	2.45	6.8	2.45	6.8	
4	-	0.5	1.7	5.6	2.45	7.4	2.45	7.4	
5	-	0.5	1.7	6.1	2.45	8.1	2.45	8.1	
7	-	0.5	1.7	6.6	2.45	8.9	2.45	8.9	
2	20	0.6	1.8	5.1	2.6	6.7	2.6	6.7	
3	20	0.6	1.8	5.4	2.6	7.1	2.6	7.1	
4	20	0.6	1.8	5.9	2.6	7.8	2.6	7.8	
5	20	0.6	1.8	6.4	2.6	8.5	2.6	8.5	
7	20	0.6	1.8	6.9	2.6	9.3	2.6	9.3	
2	-	0.75	1.9	5.3	2.65	6.8	2.65	6.8	
3	-	0.75	1.9	5.6	2.65	7.2	2.65	7.2	
4	-	0.75	1.9	6.1	2.65	7.9	2.65	7.9	
5	-	0.75	1.9	6.7	2.65	8.7	2.65	8.7	
7	-	0.75	1.9	7.2	2.65	9.5	2.65	9.5	
2	18	0.93	2.05	5.6	2.8	7.1	2.8	7.1	
3	18	0.93	2.05	5.9	2.8	7.6	2.8	7.6	
4	18	0.93	2.05	6.5	2.8	8.3	2.8	8.3	
5	18	0.93	2.05	7.1	2.8	9.1	2.8	9.1	
7	18	0.93	2.05	7.7	2.8	9.9	2.8	9.9	
2	-	1	2.1	5.7	2.8	7.1	2.8	7.1	
3	-	1	2.1	6.1	2.8	7.6	2.8	7.6	
4	-	1	2.1	6.6	2.8	8.3	2.8	8.3	
5	-	1	2.1	7.2	2.8	9.1	2.8	9.1	
7	-	1	2.1	7.8	2.8	9.9	2.8	9.9	
2	16	1.34	2.3	6.1	3.0	7.5	3.1	7.7	
3	16	1.34	2.3	6.5	3.0	8.0	3.1	8.2	
4	16	1.34	2.3	7.1	3.0	8.8	3.1	9.0	
5	16	1.34	2.3	7.7	3.0	9.6	3.1	9.9	
7	16	1.34	2.3	8.4	3.0	10.5	3.1	10.8	
2	-	1.5	2.4	6.3	3.1	7.7	3.1	7.7	
3	-	1.5	2.4	6.7	3.1	8.2	3.1	8.2	
4	-	1.5	2.4	7.3	3.1	9.0	3.1	9.0	
5	-	1.5	2.4	8.0	3.1	9.9	3.1	9.9	
7	-	1.5	2.4	8.7	3.1	10.8	3.1	10.8	
2	14	-	2.7	6.9	3.45	8.4	3.5	8.5	
3	14	-	2.7	7.4	3.45	9.0	3.5	9.1	
4	14	-	2.7	8.0	3.45	9.8	3.5	10.0	
5	14	-	2.7	8.8	3.45	10.8	3.5	11.0	
7	14	-	2.7	9.6	3.45	11.9	3.5	12.0	

www.omerin.com

Conducting metal

BCDEFG

BCDEFG

BCDEFG

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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

# PLASTHERM® 90 °C

## Polyolefin insulation

### UL and cUL approval



### Characteristics General

- Continuous operating temperatures: -20 °C to +90 °C.
- Good resistance to chemical influences.

### Electrical

- Rated voltage: 600 V.
- Test voltage: 6,000 V.

### Standard products

- All colours including two-coloured.
- Stranding of conducting cores: contact us.

### Approvals - standards

- UL approval as per standard UL758 and cUL approval (CSA) as per standard C22.2 No. 210, File no. E101 965.
- "Horizontal flame test" as per UL758 standard.

### Applications

- Internal cabling for electrical appliances.

### Options

- Other nominal cross-sections: contact us.

#### KEY

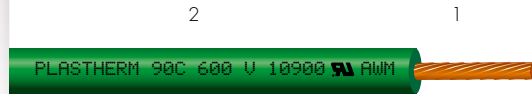
- conducting metals
- B** Tin-plated copper
- B\*** Tin-plated copper (ø > 0.38 mm)
- C** Nickel-plated copper
- D** Silver-plated copper
- E** Nickel
- F** Bare copper
- F\*** Bare copper (ø > 0.38 mm)
- G** Nickel-plated copper 27 %

- AWM I A Internal wiring, not subject to mechanical abuse
- AWM I A/B Internal wiring
- AWM II A/B External or Internal wiring

- NS Not Specified
- VNS Voltage Not Specified

■ : UL approved nominal cross-sections only.

\* The diameter is provided for information purposes as it may vary depending on the stranding of the core.  
Only the average thickness of insulation should be taken into account.



- 1 • Bare or tin-plated copper core.
- 2 • Insulation: polyolefin.

Style no. **10900**

Approval

**90 °C – 600 V**  
AWM I A/B

AWG	Nominal cross-section (mm <sup>2</sup> )	Average thickness of insulation (mm)	Nominal diameter* (mm)
30	0.05	0.38	1.1
28	0.09	0.38	1.1
26	0.13	0.38	1.2
24	0.22	0.38	1.4
22	0.34	0.38	1.5
-	0.5	0.38	1.7
20	0.6	0.38	1.75
-	0.75	0.38	1.9
18	0.93	0.38	2.0
-	1	0.76	2.9
16	1.34	0.76	3.0
-	1.5	0.76	3.1
14	-	0.76	3.4
-	2.5	0.76	3.6
12	-	0.76	3.9
-	4	0.76	4.2
10	-	0.76	4.5
-	6	0.76	4.7
8	-	0.76	5.5
-	10	0.76	6.1
6	-	0.76	6.9
-	16	0.76	7.2
4	-	0.76	8.1
-	25	0.76	8.6
2	35	0.76	9.7
1	-	1.52	12.4
-	50	1.52	12.8
1/0	-	1.52	13.5
2/0	70	1.52	14.6
3/0	-	1.52	16.2
-	95	1.52	16.3
4/0	-	1.52	18.1

Conducting metal **BF**

For this product, please contact:

OMERIN division principale   
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@omerin.com

[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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

# PLASTHERM® PHF2

## Halogen-free insulation flame retardant

### -40 °C to +105 °C

#### Approvals - standards

- Resistance to vertical flame propagation for a single insulated wire. IEC 60332-1-2 / NF C 32-070 test C2
- Tests on electric cables under fire conditions as per IEC 60332-3-22 (category A): ISSEP test reports no. 1524/2015
- Classification C1 as per NF C 32-070 test no. 1 (LCIE report no. 12/108571-616378A)
- Halogen-free, low corrosivity and acidity of gases evolved during combustion: EN 60754-1 and EN 60754-2
- Low smoke opacity: EN 61034-2

#### Applications

- Internal cabling for electrical and electronic appliances

#### Characteristics

##### General

- Continuous operating temperatures: -40 °C to +105 °C.
- Halogen-free, flame retardant, low toxicity, corrosivity and smoke opacity
- Good flexibility and mechanical strength, excellent resistance to abrasion.

##### Electrical

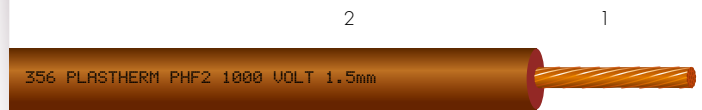
- Rated voltage: 600/1 000 V.
- Test voltage: 3 000 V.

#### Standard products

- All solid colours + two-coloured yellow/green

#### Options

- Solid bare copper core, class 1 as per IEC 60228: ref. PHF2R, see table below).
- American cross-sections AWG: Contact us



- 1 • Flexible bare copper (PHF2) or tin-plated (PHF2E) core – Class 5 as per IEC 60228.
- 2 • Halogen-free, flame-retardant thermoplastic insulation.

#### PLASTHERM PHF2 and PHF2E

##### Flexible core • class 5 as per IEC 60228

Nominal cross-section (mm <sup>2</sup> )	Nominal stranding	Maximum linear resistance at 20 °C (Ω/km)	
		PHF2	PHF2E
0.5	16 x 0.20	39.0	40.1
0.75	24 x 0.20	26.0	26.7
1	32 x 0.20	19.5	20.0
1.5	30 x 0.25	13.3	13.7
2.5	50 x 0.25	7.98	8.21
4	56 x 0.30	4.95	5.09
6	84 x 0.30	3.30	3.39
10	80 x 0.40	1.91	1.95
16	126 x 0.40	1.21	1.24
25	196 x 0.40	0.78	0.795
35	276 x 0.40	0.554	0.565
50	396 x 0.40	0.386	0.393
70	360 x 0.50	0.272	0.277
95	485 x 0.50	0.206	0.210
120	608 x 0.50	0.161	0.164
150	756 x 0.50	0.129	0.132
185	944 x 0.50	0.106	0.108
240	1221 x 0.50	0.0801	0.0817
300	1525 x 0.50	0.0641	0.0654

##### INSULATED WIRE OR CABLE

Nominal thickness of insulation (mm)	Nominal diameter (mm)	Approximate linear weight (kg/km)
0.6	2.20	9.1
0.6	2.40	11.9
0.7	2.70	15.2
0.8	3.10	22.3
0.8	3.60	33.4
0.9	4.30	50.1
0.9	5.00	72.5
0.9	6.10	113
1.0	7.10	170
1.0	8.70	256
1.1	10.3	364
1.1	12.1	510
1.1	13.9	692
1.4	16.6	972
1.4	18.2	1202
1.6	20.2	1503
1.6	22.4	1849
1.8	25.4	2376
1.8	27.6	2909

#### Option: PLASTHERM PHF2R

##### Solid core • class 1 as per IEC 60228

Nominal cross-section (mm <sup>2</sup> )	Nominal stranding	Maximum linear resistance at 20 °C (Ω/km)
0.5	1 x 0.80	36.0
0.75	1 x 0.98	24.5
1	1 x 1.13	18.1
1.5	1 x 1.38	12.1
2.5	1 x 1.77	7.41
4	1 x 2.24	4.61

##### INSULATED WIRE OR CABLE

Nominal thickness of insulation (mm)	Nominal diameter (mm)	Approximate linear weight (kg/km)
0.6	2.00	9.35
0.6	2.20	12.2
0.7	2.60	15.1
0.7	2.80	21.6
0.8	3.40	32.1
0.8	4.00	48.7

For this product, please contact:

OMERIN division principale   
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@omerin.com

[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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

**PLASTHERM®  
PHF2E IRD**

*Halogen-free,  
flame-retardant insulation  
with reduced walls*

**-40 °C to +105 °C**



- 1 • Concentric tin-plated copper core.
- 2 • Halogen-free, flame-retardant thermoplastic insulation, reduced walls

**Approvals - standards**

- Resistance to vertical flame propagation for a single insulated wire. IEC 60332-1-2 / NF C 32-070 test C2
- Halogen-free, low corrosivity and acidity of gases evolved during combustion: EN 60754-1 and EN 60754-2
- Low smoke opacity: EN 61034-2

**Applications**

- Internal cabling for electrical and electronic appliances

**Characteristics****General**

- Continuous operating temperatures: -40 °C to +105 °C.
- Halogen-free, flame retardant, low toxicity, corrosivity and smoke opacity
- Good flexibility and mechanical strength, excellent resistance to abrasion.

**Electrical**

- Rated voltage: 250 V.
- Test voltage: 1 500 V.

**Standard products**

- All solid colours
- Surface marking (except AWG24)

**PLASTHERM PHF2E IRD****Concentric tin-plated copper core**

Nominal cross-section (mm <sup>2</sup> )	Equivalent cross-section AWG	Nominal stranding	Maximum linear resistance at 20 °C (Ω/km)
0.22	24	7 x 0.20	92.5
0.34	22	7 x 0.25	59.2
0.6	20	19 x 0.20	33.7
0.93	18	19 x 0.25	21.6
1.34	16	19 x 0.30	15.0

**INSULATED WIRE OR CABLE**

Nominal thickness of insulation (mm)	Nominal diameter (mm)	Approximate linear weight (kg/km)
0.25	1.10	2.9
0.25	1.30	4.4
0.40	1.75	7.6
0.40	2.00	11.1
0.45	2.35	15.9

For this product, please contact:

OMERIN division principale   
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@omerin.com

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

**omerin**  
LES CABLES DE L'EXTREME

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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

**PLASTHERM® PHFLEX**

*Cable resistant to  
alternate bending,  
halogen-free insulation*  
**-35 °C to +90 °C**



- 1 • Flexible tin-plated copper core – Class 6 as per IEC 60228.
- 2 • Halogen-free, flame-retardant thermoplastic insulation.
- 3 • Halogen-free, flame-retardant thermoplastic insulation.

**Approvals - standards**

As per EN 45545-2

- Resistance to vertical flame propagation for a single insulated wire as per EN 60332-1-2 report LAPI n° 1477.OCI0010/21.
- Low smoke opacity as per standard EN 61034-2 LAPI n° 1477.OCI0260/21.
- Tests on electric cables under fire conditions as per EN 50305 LAPI n° 1477.1CI0120/21.

**Applications**

- Cabling for electrical systems requiring high cable flexibility and specific conditions of use (fire, smoke, mechanical fatigue) for railway rolling stock.

**Characteristics****General**

- Continuous operating temperatures: -35 °C to +90 °C.
- Halogen-free, flame retardant, low smoke toxicity and opacity
- Excellent flexibility and resistance to alternate bending, excellent resistance to abrasion.

**Electrical**

- Rated voltage: 450 / 750 V.
- Test voltage: 2 500 V.

**Standard products**

- Dual layer insulation.
- Solid inner layer, black outer layer or dual-colour yellow/green.

**PLASTHERM PHFLEX****Extra-flexible core – class 6 as per IEC 60228**

Nominal cross-section (mm <sup>2</sup> )	Nominal stranding	Maximum linear resistance at 20 °C (Ω/km)
0.5	105 x 0.08	40.1
0.75	152 x 0.08	26.7
1	210 x 0.08	20.0
1.5	192 x 0.10	13.7

**INSULATED WIRE OR CABLE**

Nominal thickness of insulation (mm)	Nominal diameter (mm)	Minimum bending radius (mm)
0.6	2.20	10
0.6	2.50	20
0.7	2.70	40
0.8	3.30	50

For this product, please contact:

OMERIN division principale ✓

Zone Industrielle - F 63600 Ambert

Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10

omerin@omerin.com

[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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

# PLASTHERM®

## Style 21209

### Polyurethane sheathing

#### UL and cUL approval



- 1 • UL approved conductors.
- 2 • Outer sheath: Polyurethane

### Characteristics

#### General

- Continuous operating temperatures: -20 °C to +90 °C.
- Excellent resistance to common chemical environments.
- Excellent mechanical strength and resistance to abrasion.

#### Electrical

- Rated voltage: 125 to 1 000 V according to style no. of single conductors used.
- Test voltage: 10 x Rated voltage.

#### Standard products

- Single conductors: UL and cUL approved PVC insulated conductors (≥ 90 °C -125 °C at 1 000 V).
- Standard outer sheath colour: black.
- Stranding of conducting cores: contact us.

#### Approvals - standards

- UL approval as per standard UL 758 - File no.: E101965.
- cUL approval (CSA) as per standard C22.2 No. 210 - File no.: E101965.
- "Cable flame test" as per UL approval.
- "FT1 flame rating" as per cUL approval.

#### Applications

- External or internal cabling for electrical appliances.

#### Options

- Other outer sheath colours: contact us.
- Other nominal cross-sections: contact us.

#### KEY

- conducting metals
- B** Tin-plated copper
- B\*** Tin-plated copper (ø > 0.38 mm)
- C** Nickel-plated copper
- D** Silver-plated copper
- E** Nickel
- F** Bare copper
- F\*** Bare copper (ø > 0.38 mm)
- G** Nickel-plated copper 27 %

AWM I A Internal wiring, not subject to mechanical abuse

AWM I A/B Internal wiring

AWM II A/B External or Internal wiring

NS Not Specified

VNS Voltage Not Specified

■ : UL approved nominal cross-sections only.

\* The diameter is provided for information purposes as it may vary depending on the stranding of the core. Only the average thickness of insulation or the sheathing should be taken into account.

For this product, please contact:

OMERIN division principale ✓  
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@omerin.com



Style no.	21209-E90	21209-W12	21209-F90					
Approval	90 °C – 300 V	90 °C – 600 V	90 °C – 1,000 V					
Single conductor style no.	Style 10125	Style 10900	Style 10203					
	AWM I/II A/B	AWM I/II A/B	AWM I/II A/B					
No. of cond.	AWG	Nominal cross-section (mm²)	Nominal diameter* of the cond. (mm)	Nominal diameter* of the cable (mm)	Nominal diameter* of the cond. (mm)	Nominal diameter* of the cable (mm)	Nominal diameter* of the cond. (mm)	Nominal diameter* of the cable (mm)
2	26	0.13	0.75	3.1	1.2	4.0	1.5	4.6
3	26	0.13	0.75	3.2	1.2	4.1	1.5	4.8
4	26	0.13	0.75	3.4	1.2	4.5	1.5	5.2
5	26	0.13	0.75	3.6	1.2	4.8	1.5	5.6
7	26	0.13	0.75	3.8	1.2	5.2	1.5	6.1
2	24	0.22	0.9	3.4	1.4	4.4	1.65	4.9
3	24	0.22	0.9	3.5	1.4	4.6	1.65	5.1
4	24	0.22	0.9	3.7	1.4	4.9	1.65	5.5
5	24	0.22	0.9	4.0	1.4	5.4	1.65	6.0
7	24	0.22	0.9	4.3	1.4	5.8	1.65	6.5
2	22	0.34	1.05	3.7	1.5	4.6	1.8	5.2
3	22	0.34	1.05	3.8	1.5	4.8	1.8	5.4
4	22	0.34	1.05	4.1	1.5	5.2	1.8	5.9
5	22	0.34	1.05	4.4	1.5	5.6	1.8	6.4
7	22	0.34	1.05	4.7	1.5	6.1	1.8	7.0
2	-	0.5	1.25	4.1	1.7	5.0	1.95	5.5
3	-	0.5	1.25	4.2	1.7	5.2	1.95	5.8
4	-	0.5	1.25	4.6	1.7	5.7	1.95	6.3
5	-	0.5	1.25	4.9	1.7	6.2	1.95	6.8
7	-	0.5	1.25	5.3	1.7	6.7	1.95	7.4
2	20	0.6	1.3	4.2	1.75	5.1	2	5.6
3	20	0.6	1.3	4.4	1.75	5.3	2	5.9
4	20	0.6	1.3	4.7	1.75	5.8	2	6.4
5	20	0.6	1.3	5.1	1.75	6.3	2	7.0
7	20	0.6	1.3	5.5	1.75	6.8	2	7.6
2	-	0.75	1.4	4.4	2.0	5.6	2.1	5.8
3	-	0.75	1.4	4.6	2.0	5.9	2.1	6.1
4	-	0.75	1.4	4.9	2.0	6.4	2.1	6.6
5	-	0.75	1.4	5.4	2.0	7.0	2.1	7.3
7	-	0.75	1.4	5.8	2.0	7.6	2.1	7.9
2	18	0.93	1.55	4.7	2.1	5.8	2.25	6.1
3	18	0.93	1.55	4.9	2.1	6.1	2.25	6.4
4	18	0.93	1.55	5.3	2.1	6.6	2.25	7.0
5	18	0.93	1.55	5.8	2.1	7.3	2.25	7.7
7	18	0.93	1.55	6.2	2.1	7.9	2.25	8.3
2	-	1	1.65	4.9	2.9	7.4	2.3	6.2
3	-	1	1.65	5.1	2.9	7.8	2.3	6.5
4	-	1	1.65	5.5	2.9	8.6	2.3	7.1
5	-	1	1.65	6.0	2.9	9.4	2.3	7.8
7	-	1	1.65	6.5	2.9	10.3	2.3	8.5
2	16	1.34	1.9	5.4	3.0	7.6	2.5	6.6
3	16	1.34	1.9	5.6	3.0	8.0	2.5	6.9
4	16	1.34	1.9	6.1	3.0	8.8	2.5	7.6
5	16	1.34	1.9	6.7	3.0	9.7	2.5	8.3
7	16	1.34	1.9	7.3	3.0	10.6	2.5	9.1
2	-	1.5	2	5.6	3.1	7.8	2.55	6.7
3	-	1.5	2	5.9	3.1	8.2	2.55	7.0
4	-	1.5	2	6.4	3.1	9.0	2.55	7.7
5	-	1.5	2	7.0	3.1	10.0	2.55	8.5
7	-	1.5	2	7.6	3.1	10.9	2.55	9.2
2	14	-	2.25	6.1	3.4	8.4	2.9	7.4
3	14	-	2.25	6.4	3.4	8.9	2.9	7.8
4	14	-	2.25	7.0	3.4	9.8	2.9	8.6
5	14	-	2.25	7.7	3.4	10.8	2.9	9.4
7	14	-	2.25	8.3	3.4	11.8	2.9	10.3

Conducting metal

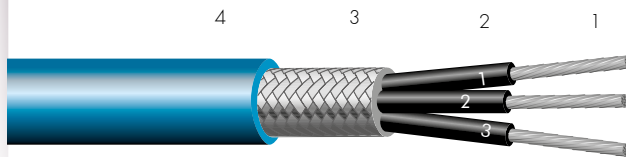
BCDF

BCDF

BCDF

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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

**PLASTHERM®  
MYBE-EY-CSI****-20 °C to +80 °C  
INTRINSIC SAFETY**

- 1 • Flexible tin-plated copper core.
- 2 • Insulation: PVC 80 °C.
- 3 • Electrical shielding: tin-plated copper braid.
- 4 • Outer sheath: Special blue colour PVC

**Applications**

- Cable intended for instrumentation and control, for fixed intrinsic safety circuit installations.

**Options**

- Insulation and/or outer sheath made of PVC 105 °C: contact us.
- Other nominal cross-sections: contact us.
  - Other nominal stranding: contact us.
- Other numbers of conductors: contact us.

**Characteristics****General**

- Continuous operating temperatures: -20 °C to +80 °C.
- Good resistance to thermal shock.
- Good mechanical strength.
- Good resistance to common chemical environments and hydrocarbons (except aromatic).

**Electrical**

- Rated voltage: 600/1 000 V.
- Test voltage: 3 000 V.

**Other characteristics**

- Flame retardant: Category C2 cables (NF C 32-070) and IEC 60 332-1
- Overlapping of electrical shield  $\geq 60\%$

**Standard products**

- Standard conductor colours: black with white numbers.
- Standard outer sheath colour: blue.

**Identification**

Multi-conductor cables without an earth wire are identified as follows:

< Number of conductors > X < Cross-section > (mm<sup>2</sup>) (example: 3 X 0.75 mm<sup>2</sup>).

Multi-conductor cables with an earth wire are identified by the symbol G in the place of the X (example 3 G 0.75 mm<sup>2</sup>).

**Flexible core • class 5 as per IEC 60228**

Nominal cross-section (mm <sup>2</sup> )	Nominal stranding	Maximum linear resistance at 20 °C (Ω/km)
2 x 0.75	24 x 0.20	26.7
3 x 0.75	24 x 0.20	26.7
4 x 0.75	24 x 0.20	26.7
5 x 0.75	24 x 0.20	26.7
7 x 0.75	24 x 0.20	26.7
12 x 0.75	24 x 0.20	26.7
19 x 0.75	24 x 0.20	26.7
27 x 0.75	24 x 0.20	26.7
37 x 0.75	24 x 0.20	26.7
48 x 0.75	24 x 0.20	26.7
61 x 0.75	24 x 0.20	26.7

**INSULATED CONDUCTORS**

Nominal thickness of insulation (mm)	Nominal diameter (mm)
0.6	2.35
0.6	2.35
0.6	2.35
0.6	2.35
0.6	2.35
0.6	2.35
0.6	2.35
0.6	2.35
0.6	2.35
0.6	2.35
0.6	2.35

**SHEATHED CABLE**

Nominal diameter (mm)	Approximate linear weight (kg/km)
7.3	75
7.7	95
8.3	105
9.0	125
9.6	160
12.9	240
15.1	350
17.9	495
15.4	655
18.5	837
20.9	1053

For this product, please contact:

OMERIN division principale ✓  
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@omerin.com

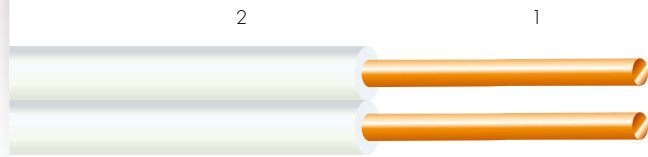
[www.omerin.com](http://www.omerin.com)

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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

# PLASTHERM® HP-U

2-conductor flat cable  
Thin insulation

-20 °C to +80 °C



- 1 • Solid bare copper core.
- 2 • Insulation: PVC.

## Applications

- Internal cabling for electric, electronic, audio and video appliances.

## Options

- Tin-plated copper core.
- Other nominal cross-sections: contact us.
- Identification using a coloured longitudinal stripe on one of the two conductors: contact us.

## Characteristics General

- Continuous operating temperatures: -20°C to +80°C.
- Compact design with thin insulation.
- Easy stripping and separating of conductors.

## Electrical

- Rated voltage: 400 V.
- Test voltage: 4000 V.

## Standard products

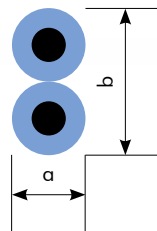
- All colours including two-coloured.

### SOLID CORE

Nominal cross-section (mm <sup>2</sup> )	Nominal stranding	Maximum linear resistance at 20°C (Ω/km) (bare copper core)
2 x 0.20	1 x 0.50	93.1
2 x 0.28	1 x 0.60	64.7
2 x 0.38	1 x 0.70	36.0
2 x 1.00	1 x 1.13	18.1

### INSULATED WIRE

Nominal outer Dimensions (mm)		Approximate linear weight (kg/km)
a	b	
1.2	2.7	0.6
1.4	3.0	0.85
1.75	4.0	1.2
2.4	5.1	2.8



For this product, please contact:

OMERIN division principale   
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@omerin.com

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

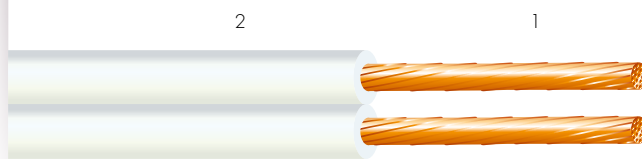
**omerin**  
LES CABLES DE L'EXTREME

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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

# PLASTHERM® HP-M

2-conductor flat cable  
Thin insulation

-20 °C to +80 °C



- 1 • Flexible bare copper core.
- 2 • Insulation: PVC.

### Applications

- Internal cabling for electric, electronic, audio and video appliances.

### Options

- Tin-plated copper core.
- Other nominal cross-sections: contact us.
- Identification using a coloured longitudinal stripe on one of the two conductors: contact us.

### Characteristics General

- Continuous operating temperatures: -20°C to +80°C.
- Compact design with thin insulation.
- Easy stripping and separating of conductors.

### Electrical

- Rated voltage: 400 V.
- Test voltage: 4000 V.

### Standard products

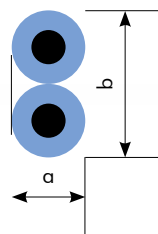
- All colours including two-coloured.

#### FLEXIBLE CORE

Nominal cross-section (mm <sup>2</sup> )	Nominal stranding	Maximum linear resistance at 20°C (Ω/km) (bare copper core)
2 x 0.38	12 x 0.20	52.0
2 x 0.50	16 x 0.20	39.0
2 x 0.75	24 x 0.20	26.0
2 x 1	32 x 0.20	19.5
2 x 1.5	30 x 0.20	13.3
2 x 2.5	49 x 0.20	7.98

#### INSULATED CABLE

Nominal outer Dimensions (mm)		Approximate linear weight (kg/km)
a	b	
1.3	3.0	0.95
1.6	3.6	1.3
2.2	4.5	2.0
2.5	5.2	2.8
3.0	6.2	4.0
3.7	7.8	6.3



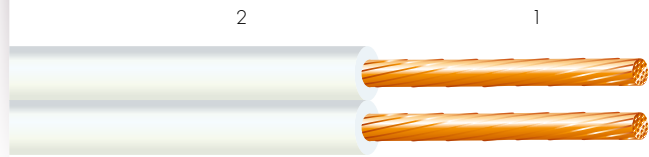
For this product, please contact:

OMERIN division Berne   
La Forie - F 63600 Ambert  
Tel. +33 (0)4 73 82 03 81 - Fax +33 (0)4 73 82 18 69  
berne@omerin.com

[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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

**PLASTHERM® HP-M-HT****2-conductor flat cable**  
**Thin insulation****-20 °C to +105 °C**

- 1 • Flexible bare copper core.
- 2 • Insulation: PVC 105°C.

**Applications**

- Internal cabling for electric, electronic, audio and video appliances.

**Options**

- Tin-plated copper core.
- Other nominal cross-sections: contact us.
- Identification using a coloured longitudinal stripe on one of the two conductors: contact us.

**Characteristics**  
**General**

- Continuous operating temperatures: -20°C to +105°C.
- Compact design with thin insulation.
- Easy stripping and separating of conductors.

**Electrical**

- Rated voltage: 400 V.
- Test voltage: 4000 V.

**Standard products**

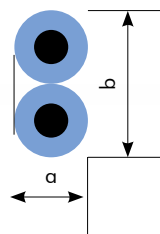
- All colours including two-coloured.

**FLEXIBLE CORE**

Nominal cross-section (mm <sup>2</sup> )	Nominal stranding	Maximum linear resistance at 20°C (Ω/km) (bare copper core)
2 x 0.38	12 x 0.20	52.0
2 x 0.50	16 x 0.20	39.0
2 x 0.75	24 x 0.20	26.0
2 x 1	32 x 0.20	19.5
2 x 1.5	30 x 0.20	13.3
2 x 2.5	49 x 0.20	7.98

**INSULATED CABLE**

Nominal outer Dimensions (mm)		Approximate linear weight (kg/km)
a	b	
1.3	3.0	0.95
1.6	3.6	1.3
2.2	4.5	2.0
2.5	5.2	2.8
3.0	6.2	4.0
3.7	7.8	6.3



For this product, please contact:

OMERIN division Berne

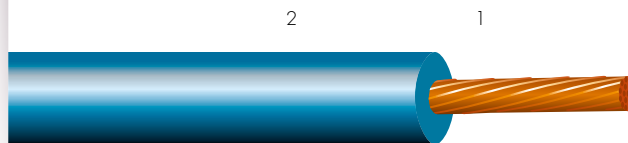
La Forie - F 63600 Ambert

Tel. +33 (0)4 73 82 03 81 - Fax +33 (0)4 73 82 18 69

berne@omerin.com

[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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

**PLASTHERM®  
41****-40°C to +125°C**

- 1 • Flexible bare copper core (other metal in option) – according to IEC 60228.
- 2 • Special thermoplastic elastomer.

**Approvals - standards**

- Flame resistance: meets UL758 VW-1 test.

**Applications**

- Industry: industrial wiring in hot atmospheres.
- Household electrical appliances: wiring of household heating appliances.
- Electronics: wiring of measuring devices and systems.

**Options**

- Tin-plated, nickel-plated or silver-plated copper core.
- Other nominal cross-sections: contact us.
  - Other nominal stranding: contact us.
  - Other colour of insulation: contact us.

**Characteristics****General**

- Continuous operating temperatures: -40°C to +125°C.

**Electrical**

- Rated voltage: 300 V.
- Test voltage: 3000 V.

Nominal cross-section (mm <sup>2</sup> )	Nominal stranding	Nominal wall thickness of insulation (mm)	Nominal external diameter (mm)	Maximum linear resistance at 20 °C (Ω/km)
0.22	7×0.20	0.25	1.15	89.9
0.34	7×0.25	0.25	1.30	57.5
0.5	16×0.20	0.30	1.50	39.0
0.75	24×0.20	0.30	1.80	26.0
1	32×0.20	0.35	2.00	19.5
1.5	30×0.25	0.40	2.40	13.3
2.5	50×0.25	0.40	2.90	7.98

For this product, please contact:

**OMERIN division principale** ✓

Zone Industrielle - F 63600 Ambert

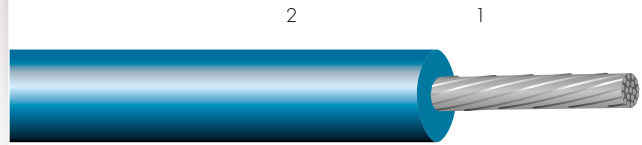
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10

omerin@omerin.com

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

**omerin**  
LES CABLES DE L'EXTREME

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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

**PLASTHERM®  
E43****-40°C to +155°C**

- 1 • Flexible tin-plated copper core (other metal in option) – according to IEC 60228.
- 2 • Special thermoplastic elastomer.

**Applications**

- Industry: industrial wiring in hot atmospheres.
- Household electrical appliances: wiring of household heating appliances.
- Electronics: wiring of measuring devices and systems.

**Options**

- Bare, nickel-plated or silver-plated copper core.
  - Other nominal cross-sections: contact us.
  - Other nominal stranding: contact us.
  - Other colour of insulation: contact us.
- Canadian cUL approval (CSA) as per standard C22.2 No. 210 - File no.: E101965 (cross section 0.22mm<sup>2</sup> and 0.34mm<sup>2</sup>)

**Characteristics****General**

- Continuous operating temperatures: -40°C to +155°C.
- Excellent resistance to abrasion.
- Good resistance to chemical aggression.
- Halogen free.

**Electrical**

- Rated voltage: 600 V.
- Test voltage: 6000 V.

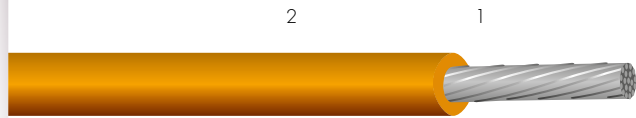
Nominal cross-section (mm <sup>2</sup> )	Nominal stranding	Nominal wall thickness of insulation (mm)	Nominal external diameter (mm)	Maximum linear resistance at 20 °C (Ω/km)
0.22	7×0.20	0.15	0.95	92.5
0.34	7×0.25	0.15	1.10	59.2
0.5	16×0.20	0.20	1.35	40.1
0.75	24×0.20	0.20	1.60	26.7
1	32×0.20	0.25	1.90	20.0
1.5	30×0.25	0.30	2.20	13.7
2.5	50×0.25	0.30	2.70	8.21

For this product, please contact:

OMERIN division principale   
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@omerin.com

[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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

**PLASTHERM®  
E9****-60°C to +260°C**

- 1 • Flexible bare or tinned copper core.
- 2 • Insulation: PEEK.

**Applications**

- High-temperature PFAs-free applications and/or exposed to radiation.

**Options**

- Other colours: contact us.

**Characteristics****General**

- Continuous operating temperatures: -60°C to +260°C.

**Electrical**

- Rated voltage: 600 V.
- Test voltage: 2500 V.

**Mechanical**

- Abrasion resistance: Excellent.

**Chemical**

- Radiation resistance:  $>10^7$  Gy.

**Standard products**

- Standard insulation colour: Amber (other colour on request).

Nominal cross-section (mm <sup>2</sup> )	Nominal stranding	Maximum linear resistance at 20 °C (bare copper core) (Ω/km)	Nominal wall thickness of insulation (mm)	Nominal external diameter (mm)
0.05	7×0.10	373.00	0.17	0.65
0.12	7×0.15	161.00	0.17	0.80
0.22	7×0.20	89.90	0.20	1.00
0.25	19×0.13	79.90	0.25	1.15
0.34	7×0.25	57.50	0.20	1.15
0.50	16×0.20	39.00	0.20	1.35
0.75	24×0.20	24.70	0.25	1.60
1.00	32×0.20	19.50	0.25	1.80
1.50	30×0.25	13.30	0.30	2.15
2.50	50×0.25	7.98	0.35	2.75

For this product, please contact:

OMERIN division principale ✓

Zone Industrielle - F 63600 Ambert

Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10

omerin@omerin.com

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

**omerin**  
LES CABLES DE L'EXTREME

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 some cases, for production purposes, a separating tape may be added between two successive layers. 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**  
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](mailto: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](mailto:silisol@omerin.com)

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