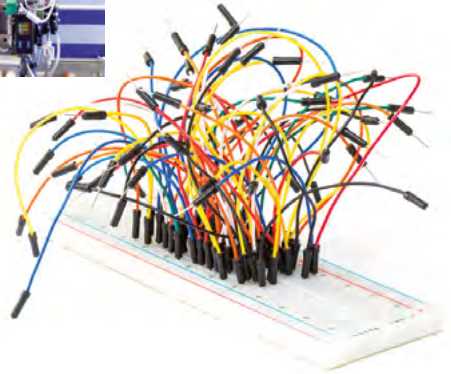
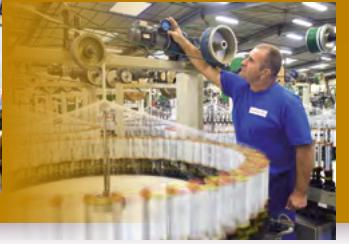
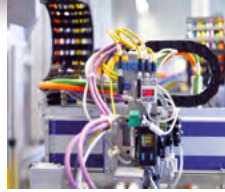
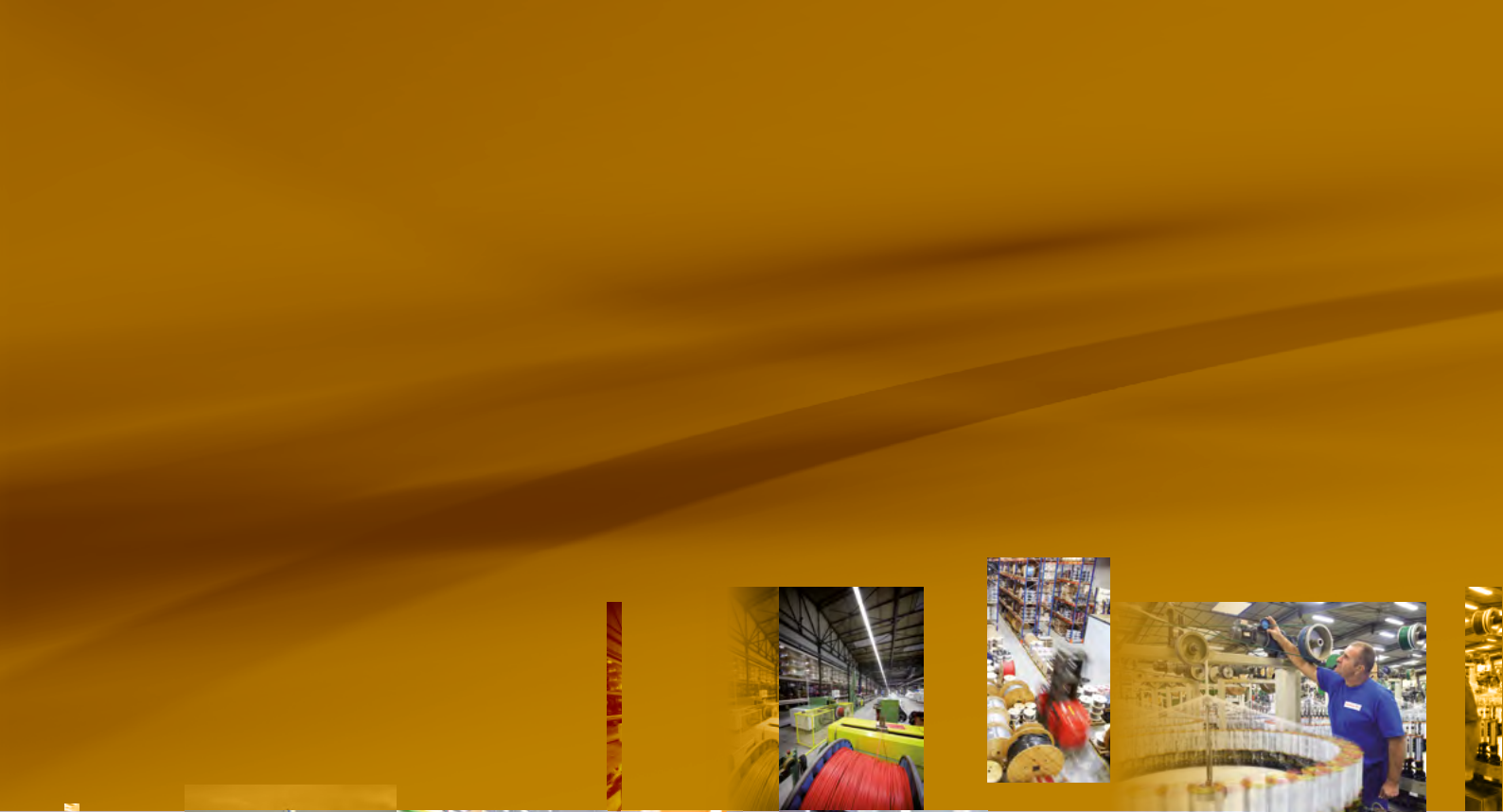




2

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

**omerin**  
LES CABLES DE L'EXTREME

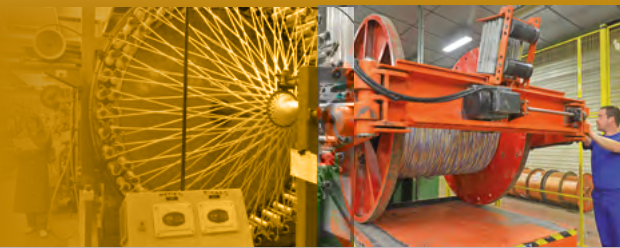


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- France's leading manufacturer of fire safety cables

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

**HIGH TEMPERATURE WIRES AND CABLES FOR THE GENERAL MARKET** 1  
**SECTION I: CROSS LINKED ELASTOMERS**

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

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

**FIRE RESISTANT SAFETY CABLES** 4

**CABLE SOLUTIONS FOR ROLLING STOCK** 5

**CABLES FOR POWER STATIONS AND HIGH-RISK SITES** 6

**MARINE CABLES** 7

**PYROMETRY CABLES** 8

**BRAIDED INSULATING SLEEVEINGS** 9

**HIGH TEMPERATURE MEDIUM VOLTAGE POWER CABLES** 10

**CABLE SOLUTIONS FOR AUTOMOTIVE AND E-MOBILITY** 11

**PACKAGING AND TECHNICAL DATA**

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**PYRITEL®** Fire resistant communication cables for safety circuits

**SILIBOX®** Wire and cables cardboard box packaging system

**SILICABLE®** Special high temperature wires and cables

**SILICOUL®** Low and medium voltage class H (180°C) power cables

**SILIFLAM®** Very high safety cables for extreme temperatures

**SILIFLON®** Fluoropolymer insulated high temperature wires and cables

**SILIGAINE®** Braided insulating sleeveings

**SILIRAD®** Electron beam crosslinked cables

**SILITUBE®** Braided or extruded tubes

**SOLARPLAST®** Power cables for photovoltaic solar panels

**SONDIX®** Platinum resistance temperature sensors connection cables

**SPIRFLEX®** High performance spiral cables

**TEXALARM®** Cables for safety systems and fire alarms

**TS CABLES®** Coaxial and data cables

**TS COM 900®** Telephonic cables for very speed reception

**TS LAN®** Copper LAN cables

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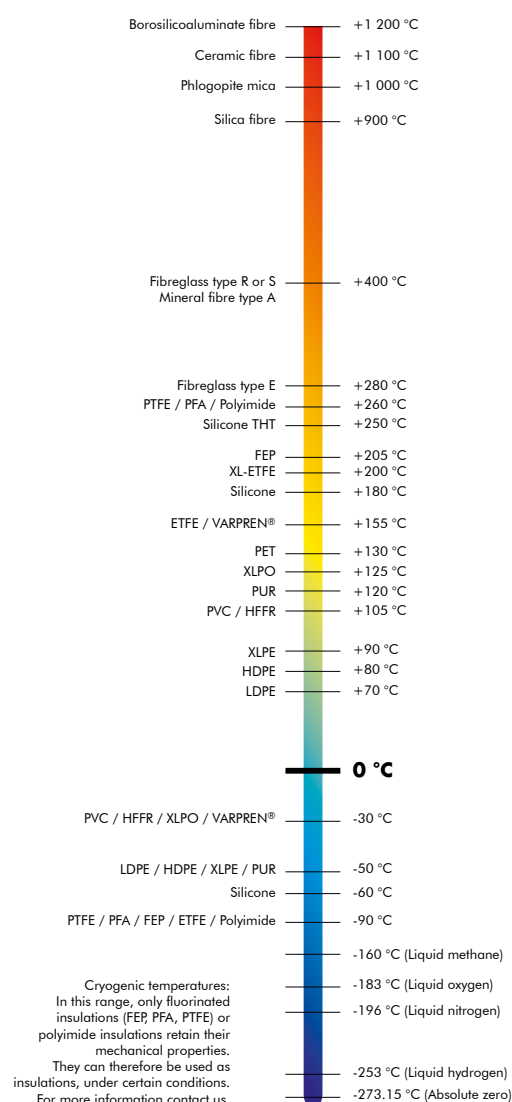
**VARPREN®** Wires and cables with special cross-linked Varpren® insulation

**VEROX®** Fiberglass braided seals

**VIDEOCOAX®** Analog and digital video cables



## Thermal classification of insulations







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# 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

Nominal cross-section (mm²)	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	0.9
0.17	0.7	1.3
0.17	0.8	1.7
0.17	0.8	1.8
0.20	0.9	2.1
0.20	1.0	2.7
0.20	1.05	3.2
0.20	1.15	4.0
0.20	1.15	4.4
0.20	1.3	5.6
0.20	1.3	5.9
0.20	1.4	6.4
0.20	1.45	8.5
0.20	1.5	9.0
0.20	1.7	10.0
0.20	1.7	11.4
0.20	1.9	13.9
0.20	1.95	15.6
0.20	2.5	25.6
0.25	3.1	38.9
0.35	3.9	55.6
0.40	5.2	101
0.40	6.5	147
0.60	8.2	242
0.60	9.2	320
0.70	11.2	465

For this product, please contact:

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

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

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# 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.

## 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.

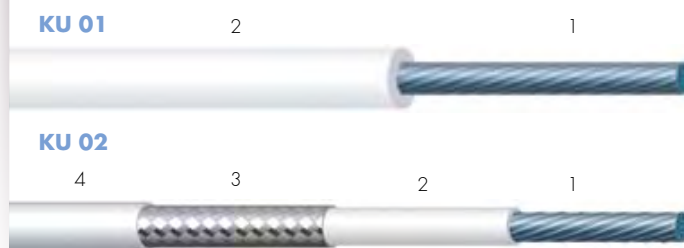
### Electrical (as per UTE C 93-524)

- 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.

## FLUOROPOLYMER INSULATED WIRES AND CABLES



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

## KU 01 and KU 02

### CONCENTRIC CORE

Nominal cross-section AWG	(mm <sup>2</sup> )	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:

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

## FLUOROPOLYMER INSULATED WIRES AND CABLES

# 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 (mm²)	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 (mm²)	Nominal diameter (mm)	Maximum linear resistance at 20 °C (Ω/km)
0.25*	1 x 0.56	73.4
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 1.36	12.1
2.5	1 x 1.77	7.41
4	1 x 2.24	4.61
6	1 x 2.74	3.08

For this product, please contact:

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

(1) Standardised name: N7YAF VDE.

(2) Standardised name: N7YA VDE.

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# 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 (mm²)	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)
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:

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# 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.

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## 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.

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

## FLUOROPOLYMER INSULATED WIRES AND CABLES

# 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 (mm²)	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

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

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

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# 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

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

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# SILIFLON®

## 6Y6YS and E6Y6YS

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



### 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.



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

### 6Y6YS and E6Y6YS

#### MULTISTRAND CORE

Nominal cross-section	Nominal stranding	Maximum linear resistance at 20 °C
AWG (mm²)		(Ω/km) (tin-plated copper core)
24 0.25	19 x 0.13	82.9
22 0.34	7 x 0.25	60.6
- 0.38	19 x 0.16	55.7
- 0.5	16 x 0.20	40.1
- 0.5	7 x 0.30	36.7
20 0.6	19 x 0.20	33.7
18 0.75	24 x 0.20	26.7
- 0.93	19 x 0.25	21.6
- 1	32 x 0.20	20.0
16 1.34	19 x 0.30	15.0
- 1.5	30 x 0.25	13.7

#### Option • R6Y6YS and RE6Y6YS

#### SOLID CORE

Nominal cross-section	Nominal stranding	Maximum linear resistance at 20 °C
AWG (mm²)		(Ω/km)
- 0.25	1 x 0.56	74.8
- 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

#### INSULATED WIRE

Nominal thickness of insulation	Nominal diameter	Approximate linear weight
(mm)	(mm)	(kg/km)
0.60	1.85	7.3
0.60	1.95	8.5
0.60	2.0	9.1
0.60	2.1	10.5
0.60	2.1	10.5
0.60	2.15	11.4
0.60	2.25	13.8
0.60	2.4	15.4
0.60	2.45	17.2
0.60	2.6	20.2
0.60	2.65	21.7
0.60	1.75	6.9
0.60	2.0	10.2
0.60	2.2	13.3
0.60	2.35	16.2
0.60	2.6	21.7

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# SILIFLON® PFA and EPFA

-90 °C to +260 °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. 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	Nominal stranding	Maximum linear resistance at 20 °C	Nominal thickness of insulation	Nominal diameter	Approximate linear weight
(mm²)		(Ω/km) (bare copper core)	(mm)	(mm)	(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:

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

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

## FLUOROPOLYMER INSULATED WIRES AND CABLES

# 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.



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

### 51YS

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

Nominal cross-section (mm²)	Nominal stranding	Maximum linear resistance at 20 °C (Ω/km)	Nominal thickness of insulation (mm)	Nominal diameter (mm)	Approximate linear weight (kg/km)
0.25*	19 x 0.13 or 7 x 0.22	79.9	0.30	1.25	4.2
0.5	16 x 0.20	39.0	0.30	1.5	6.5
0.75	24 x 0.20	26.0	0.30	1.65	8.7
1	32 x 0.20	19.5	0.30	1.8	10.9
1.5	30 x 0.25	13.3	0.30	2.0	14.9
2.5	50 x 0.25	7.98	0.35	2.6	25.0
4	56 x 0.30	4.95	0.40	3.4	41.9
6	84 x 0.30	3.30	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

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

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LES CABLES DE L'EXTREME

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# SILIFLON®

## RETFE, RFEP and RPFA

### -90 °C to +260 °C

#### 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 REPFA: contact us.
- Solid silver-plated copper core
  - ref. RAETFE, RAFEP and RAPFA: contact us.
- Solid nickel-plated copper core
  - ref. RCNETFE, RCNFEP and RCNPFA: contact us.
- Solid pure nickel core
  - ref. RNETFE, RNFEF and RNPFA: 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.



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

#### RETFE, RFEP and RPFA

##### SOLID CORE

Nominal cross-section (mm <sup>2</sup> )	Nominal stranding	Maximum linear resistance at 20 °C (Ω/km)
0.03	1 x 0.20	599
0.05	1 x 0.25	384
0.07	1 x 0.30	268
0.125	1 x 0.40	140
0.15	1 x 0.43	118
0.2	1 x 0.50	93.1
0.22	1 x 0.52	84.2
0.32*	1 x 0.64	57.5
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 1.36	12.1
2.5	1 x 1.77	7.41
4	1 x 2.24	4.61
6	1 x 2.74	3.08

##### INSULATED WIRE

Nominal thickness of insulation (mm)	Nominal diameter (mm)	Approximate linear weight (kg/km)
0.15	0.5	0.6
0.15	0.55	0.8
0.17	0.65	1.2
0.17	0.75	1.8
0.17	0.8	2.1
0.17	0.85	2.6
0.17	0.85	2.7
0.20	1.05	4.1
0.20	1.2	5.9
0.20	1.4	8.5
0.25	1.65	11.5
0.25	1.9	16.0
0.30	2.4	26.6
0.35	2.95	41.7
0.35	3.45	60.5

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

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LES CABLES DE L'EXTREME

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# SILIFLON® 105 °C

## Fluoropolymer insulation

### UL and cUL approval



## FLUOROPOLYMER INSULATED WIRES AND CABLES



- 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. Insulation		1513 ETFE "Thin-wall"		1227 FEP		1508 ETFE "Thin-wall"		10101 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	(mm²)								
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.

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# 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.



#### 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.

## FLUOROPOLYMER INSULATED WIRES AND CABLES



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

#### 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

Nominal cross-section		Average thickness of insulation (mm)	Nominal diameter*		Approximate linear weight (kg/km)
AWG	(mm²)		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

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\* 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.

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**omerin**  
 LES CABLES DE L'EXTREME

# 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.

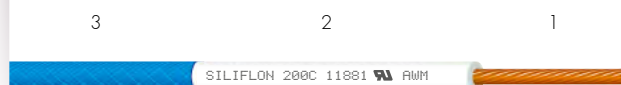
### Electrical

- 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 &gt; 0.38 mm)

C Nickel-plated copper

D Silver-plated copper

E Nickel

F Bare copper

F\* Bare copper (ø &gt; 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.**  
**Insulation**  
**Approval****1827**  
ETFE “Thin-wall”**150 °C – 125 V**

Nominal cross-section AWG	(mm <sup>2</sup> )	Average thickness of insulation (mm)	Nominal diameter*
30	0.05	0.14	0.6
28	0.09	0.14	0.7
26	0.13	0.14	0.75
24	0.22	0.14	0.9
22	0.34	0.14	1.05
-	0.5	0.14	1.2
20	0.6	0.14	1.3
-	0.75	0.20	1.5
18	0.93	0.20	1.65
-	1	0.20	1.7
16	1.34	0.20	1.9
-	1.5	0.20	1.9
14	-	0.33	2.55
-	2.5	0.33	2.7
12	-	0.33	3.1
-	4	0.33	3.25
10	-	0.33	3.7
-	6	0.33	3.9
8	-	-	-
-	10	-	-
6	-	-	-
-	16	-	-
4	-	-	-
-	25	-	-
2	35	-	-
1	-	-	-
-	50	-	-
1/0	-	-	-
2/0	70	-	-
3/0	-	-	-
-	95	-	-
4/0	-	-	-
-	120	-	-
Conducting metal		BCDEFG	

**10125**  
ETFE “Thin-wall”**150 °C – 300 V**

Average thickness of insulation (mm)	Nominal diameter*
0.15	0.6
0.15	0.7
0.15	0.75
0.15	0.9
0.15	1.05
0.15	1.25
0.15	1.3
0.15	1.4
0.15	1.55
0.15	1.65
0.20	1.9
0.20	1.9
0.20	2.5
0.20	2.45
0.25	2.9
0.25	3.1
0.25	3.6
0.25	3.7
0.64	5.4
0.64	5.7
0.64	6.6
0.64	6.7
0.64	7.8
0.64	8.3
0.89	10.0
0.89	11.0
0.89	11.4
1.14	12.5
1.14	14.0
1.14	15.2
1.14	15.4
1.14	16.8
1.14	17.1
BCDEFG	

**1828**  
ETFE**150 °C – 300 V**

Average thickness of insulation (mm)	Nominal diameter*
0.33	0.95
0.33	1.05
0.33	1.15
0.33	1.3
0.33	1.4
0.33	1.6
0.33	1.65
0.33	1.75
0.33	1.9
0.33	1.95
0.33	2.2
0.33	2.2
0.33	2.55
0.33	2.7
0.33	3.0
0.33	3.25
0.33	3.9
0.33	3.9
-	5.1
-	5.4
-	6.3
-	6.6
-	7.4
-	8.0
-	9.3
-	10.7
-	11.1
-	11.7
-	12.8
-	14.4
-	14.6
-	16.0
-	16.3
BF	

**1643**  
ETFE**150 °C – 300 V**

Average thickness of insulation (mm)	Nominal diameter*
0.33	0.95
0.33	1.05
0.33	1.15
0.33	1.3
0.33	1.4
0.33	1.6
0.33	1.65
0.33	1.75
0.33	1.9
0.33	1.95
0.33	2.2
0.33	2.2
0.33	2.55
0.33	2.7
0.33	3.0
0.33	3.25
0.33	3.9
0.33	3.9
0.51	5.3
0.51	5.4
0.51	6.3
0.51	6.6
0.51	7.4
0.51	8.0
0.51	9.3
0.76	10.7
0.76	11.1
0.76	11.7
0.76	12.8
0.76	14.4
0.76	14.6
0.76	16.0
0.76	16.3
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:

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 omerin@omerin.com

**omerin**  
 LES CABLES DE L'EXTREME

**www.omerin.com**

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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 insula- tion	Nominal diameter*	Average thickness of insula- tion	Nominal diameter*	Average thickness of insula- tion	Nominal diameter*	Average thickness of insula- tion	Nominal diameter*	Average thickness of insula- tion	Nominal diameter*	Average thickness of insula- tion	Nominal diameter*	Average thickness of insula- tion	Nominal diameter*
AWG	(mm²)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(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	-	-	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 (e &gt; 0.38 mm)

C Nickel-plated copper

D Silver-plated copper

E Nickel

F Bare copper

F\* Bare copper (e &gt; 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:

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# 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.
- VW-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"		10969 FEP		1900 FEP		1332 FEP "Thick-wall"	
		200°C – 300 V		200°C – 300 V		200°C – 300 V		200°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*
AWG	(mm²)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(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** 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:

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\* 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.

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Style no. Insulation		10086 ETFE "Thin-wall"		10588 FEP "Thin-wall"		1901 FEP		1330 FEP "Thick-wall"		1930 PEA "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 (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	0.25	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	1.45	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	2.6	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*CDEG	

## 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.

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**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” 250°C – VNS	1882 PFA 250°C – 150 V	10486 PFA 250°C – 300 V
Nominal cross-section AWG (mm <sup>2</sup> )	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
28	0.09	0.15	0.7
26	0.13	0.15	0.8
24	0.22	0.15	0.9
22	0.34	0.15	1.05
-	0.5	0.15	1.2
20	0.6	0.15	1.3
-	0.75	-	-
18	0.93	-	-
-	1	-	-
16	1.34	-	-
-	1.5	-	-
14	-	-	-
-	2.5	-	-
12	-	-	-
-	4	-	-
10	-	-	-
-	6	-	-
8	-	-	-
-	10	-	-
6	-	-	-
-	16	-	-
4	-	-	-
-	25	-	-
2	35	-	-
1	-	-	-
-	50	-	-
1/0	-	-	-
2/0	70	-	-
3/0	-	-	-
-	95	-	-
4/0	-	-	-
-	120	-	-
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.

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\* 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.

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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*
AWG (mm²)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
30	0.05	0.33	0.25	0.8	0.51	1.3
28	0.09	0.33	0.25	0.9	0.51	1.4
26	0.13	0.33	0.25	1.0	0.51	1.5
24	0.22	0.33	0.25	1.1	0.51	1.65
22	0.34	0.33	0.25	1.25	0.51	1.8
-	0.5	0.33	0.25	1.4	0.51	1.95
20	0.6	0.33	0.25	1.5	0.51	2.0
-	0.75	0.33	0.25	1.55	0.51	2.1
18	0.93	0.33	0.25	1.8	0.51	2.2
-	1	0.33	0.25	1.8	0.51	2.3
16	1.34	0.33	0.25	2.0	0.51	2.45
-	1.5	0.33	0.25	2.0	0.51	2.65
14	-	0.33	0.25	2.4	0.51	2.85
-	2.5	0.33	0.25	2.55	0.51	3.0
12	-	0.33	0.25	2.9	0.51	3.4
-	4	0.33	0.25	3.1	0.51	3.6
10	-	0.33	0.25	3.6	0.51	4.2
-	6	0.33	0.25	3.7	0.51	4.3
8	-	0.51	0.76	5.8	0.76	5.7
-	10	0.51	0.76	5.9	0.76	5.9
6	-	0.51	0.76	6.8	0.76	6.8
-	16	0.51	0.76	7.1	0.76	7.1
4	-	0.76	0.76	8.0	0.76	8.0
-	25	0.76	0.76	8.5	0.76	8.5
2	35	0.76	0.76	9.6	0.76	9.6
1	-	1.14	1.14	11.2	1.14	11.2
-	50	1.14	1.14	12.0	1.14	12.0
1/0	-	1.14	1.14	12.5	1.14	12.5
2/0	70	1.14	1.14	14.0	1.14	14.0
3/0	-	1.14	1.14	15.2	1.14	15.2
-	95	1.14	1.14	15.4	1.14	15.4
4/0	-	1.14	1.14	16.8	1.14	16.8
-	120	1.14	1.14	17.1	1.14	17.1
Conducting metal	CEG		CEG	CEG	CEG	CEG

## KEY

Conducting metals

B Tin-plated copper

B\* Tin-plated copper (e &gt; 0.38 mm)

C Nickel-plated copper

D Silver-plated copper

E Nickel

F Bare copper

F\* Bare copper (e &gt; 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.

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# 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

Nominal cross-section AWG	(mm <sup>2</sup> )	Nominal stranding	Maximum linear resistance at 20 °C (Ω/km)
32	0.035	7 x 0.08	546
30	0.055	7 x 0.10	349
28	0.093	7 x 0.13	201
26	0.14	7 x 0.16	132
24	0.22	7 x 0.20	86
22	0.34	7 x 0.25	54.4
20	0.60	19 x 0.20	31.3

#### 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

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# 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

Nominal cross-section AWG	(mm²)	Nominal stranding	Maximum linear resistance at 20 °C (Ω/km)
32	0.035	7 x 0.08	546
30	0.055	7 x 0.10	349
28	0.093	7 x 0.13	201
26	0.14	7 x 0.16	132
24	0.22	7 x 0.20	86
22	0.34	7 x 0.25	54.4
20	0.60	19 x 0.20	31.3
18	0.93	19 x 0.25	20.5
16	1.34	19 x 0.30	13.9
14	1.91	27 x 0.30*	10
12	3.18	45 x 0.30*	6

\* Non-concentric cores.

#### INSULATED WIRE

Nominal diameter (mm)	Approximate linear weight (kg/km)
0.73	1.3
0.81	1.5
0.90	2.0
1.00	2.6
1.13	3.6
1.27	5.0
1.52	7.8
1.80	11.6
2.10	16.5
2.48	22.3
3.06	35.7

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# 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

Nominal cross-section AWG	(mm <sup>2</sup> )	Nominal stranding	Maximum linear resistance at 20 °C (Ω/km)
32	0.035	7 x 0.08	546
30	0.055	7 x 0.10	349
28	0.093	7 x 0.13	201
26	0.14	7 x 0.16	132
24	0.22	7 x 0.20	86
22	0.34	7 x 0.25	54.4
20	0.60	19 x 0.20	31.3
18	0.93	19 x 0.25	20.5
16	1.34	19 x 0.30	13.9
14	1.91	27 x 0.30*	10
12	3.18	45 x 0.30*	6

\* Non-concentric cores.

#### INSULATED WIRE

Nominal diameter (mm)	Approximate linear weight (kg/km)
0.99	2.3
1.05	2.5
1.14	3.0
1.24	3.7
1.37	4.7
1.53	6.2
1.76	9.1
2.05	12.6
2.25	17.1
2.70	25.3
3.35	38.7

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# 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	(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:

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**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**

Nominal cross-section AWG	(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
18	0.93	19 x 0.25	23
16	1.34	19 x 0.30	15.6
14	1.91	27 x 0.30*	11.2
12	3.18	45 x 0.30*	6.7

\* Non-concentric cores.

**INSULATED WIRE**

Nominal diameter (mm)	Approximate linear weight (kg/km)
0.73	1.3
0.81	1.5
0.90	2.0
1.00	2.6
1.13	3.6
1.27	5.0
1.52	7.8
1.80	11.6
2.10	16.5
2.48	22.3
3.06	35.7

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**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**

Nominal cross-section AWG	(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
18	0.93	19 x 0.25	23
16	1.34	19 x 0.30	15.6
14	1.91	27 x 0.30*	11.2
12	3.18	45 x 0.30*	6.7

\* Non-concentric cores.

**INSULATED WIRE**

Nominal diameter (mm)	Approximate linear weight (kg/km)
0.99	2.3
1.05	2.5
1.14	3.0
1.24	3.7
1.37	4.7
1.53	6.2
1.76	9.1
2.05	12.6
2.25	17.1
2.70	25.3
3.35	38.7

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# 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. RA5YS) 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 (mm²)	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

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

#### 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

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# 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

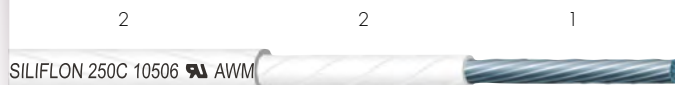
- Continuous operating temperatures: -90 °C to +250 °C.
- Excellent resistance to aggressive chemical environments.
- Excellent resistance to humidity and UV.
- Excellent mechanical strength.

##### 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	(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

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\* 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.

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# 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 (mm²)	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

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\* Pulse voltage.

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# 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.

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	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)
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.

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# 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:

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## 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:

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 omerin@omerin.com

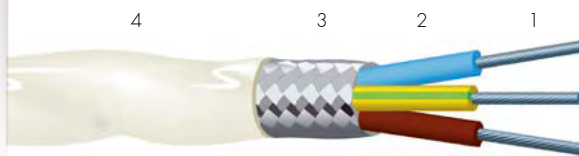
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# SILIFLON® M6BE-E6

**-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:

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## 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:

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# SILIFLON®

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

**-55 °C to +150 °C**

### Approvals - standards

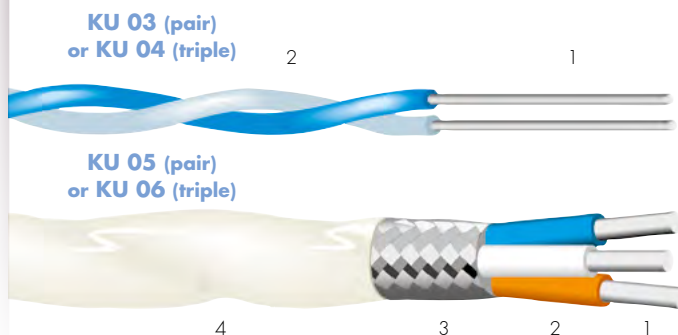
- Inspired from NF C 93-524 standard.

### 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.



- 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 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 Nominal diameter (mm)	KU 03 Approximate linear weight (kg/km)	KU 04 Nominal diameter (mm)	KU 04 Approximate linear weight (kg/km)	KU 05 Nominal diameter (mm)	KU 05 Approximate linear weight (kg/km)	KU 06 Nominal diameter (mm)	KU 06 Approximate linear weight (kg/km)
30	0.05 7 x 0.10	365.4	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	208.0	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	128.7	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	76.6	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	50.3	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	32.1	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	20.6	1.80	3.60	21.2	3.87	31.8	4.54	42.5	4.82	51.3
16	1.34 19 x 0.30	14.3	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	10.6	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	6.5	2.89	5.78	72.9	6.22	109	6.78	114	7.24	146

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# SILIFLON® 150 °C

## Fluoropolymer insulation Fluoropolymer sheathing UL and cUL approval



### 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 ( $\geq 150$  °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 ( $\phi > 0.38$  mm)  
C Nickel-plated copper  
D Silver-plated copper  
E Nickel  
F Bare copper  
F\* Bare copper ( $\phi > 0.38$  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:

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

Style no.  
Insulation  
Approval

20221-E150

ETFE "Thin-wall"

20905-E150

ETFE "Thin-wall"

20222-E150

ETFE "Thin-wall"

			150 °C – 300 V		150 °C – 300 V		150 °C – 600 V	
			AWM II A/B (Wall 0.25 mm)		AWM II A/B (Wall 0.51 mm)		AWM II A/B (Wall 0.38 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)
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	

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

## SILIFLON® 200 °C Fluoropolymer insulation Fluoropolymer sheathing UL and cUL approval



### FLUOROPOLYMER INSULATED WIRES AND CABLES



- 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.

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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

### 20711-F200 ETFE "Thin-wall"

### 20711-F200 FEP

### 2749-F200 ETFE "Thin-wall"

			200 °C – 300 V AWM I A/B (Wall 0.25 mm)		200 °C – 300 V AWM I A/B (Wall 0.25 mm)		200 °C – 300 V AWM I A/B (Wall 0.51 mm)	
No. of cond.	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)	Nominal diameter of the cond.* (mm)	Nominal diameter of the cable* (mm)
2	26	0.13	0.8	2.1	1.0	2.5	0.8	2.6
3	26	0.13	0.8	2.2	1.0	2.8	0.8	2.7
4	26	0.13	0.8	2.4	1.0	3.0	0.8	2.9
5	26	0.13	0.8	2.7	1.0	3.3	0.8	3.1
7	26	0.13	0.8	3.0	1.0	3.6	0.8	3.4
2	24	0.22	0.9	2.3	1.1	2.8	0.9	2.8
3	24	0.22	0.9	2.4	1.1	3.0	0.9	2.9
4	24	0.22	0.9	2.7	1.1	3.3	0.9	3.1
5	24	0.22	0.9	3.0	1.1	3.6	0.9	3.4
7	24	0.22	0.9	3.3	1.1	4.1	0.9	3.7
2	22	0.34	1.05	2.7	1.25	3.1	1.05	3.1
3	22	0.34	1.05	2.8	1.25	3.3	1.05	3.2
4	22	0.34	1.05	3.1	1.25	3.8	1.05	3.5
5	22	0.34	1.05	3.4	1.25	4.2	1.05	3.8
7	22	0.34	1.05	3.9	1.25	4.6	1.05	4.1
2	-	0.5	1.25	3.1	1.4	3.4	1.25	3.5
3	-	0.5	1.25	3.3	1.4	3.8	1.25	3.7
4	-	0.5	1.25	3.8	1.4	4.2	1.25	4.0
5	-	0.5	1.25	4.1	1.4	4.6	1.25	4.3
7	-	0.5	1.25	4.5	1.4	5.0	1.25	4.7
2	20	0.6	1.3	3.2	1.5	3.6	1.3	3.6
3	20	0.6	1.3	3.4	1.5	4.0	1.3	3.8
4	20	0.6	1.3	3.9	1.5	4.4	1.3	4.1
5	20	0.6	1.3	4.3	1.5	4.9	1.3	4.5
7	20	0.6	1.3	4.7	1.5	5.3	1.3	4.9
2	-	0.75	1.4	3.4	1.55	3.9	1.4	3.8
3	-	0.75	1.4	3.8	1.55	4.1	1.4	4.0
4	-	0.75	1.4	4.1	1.55	4.5	1.4	4.3
5	-	0.75	1.4	4.5	1.55	5.0	1.4	4.8
7	-	0.75	1.4	5.0	1.55	5.5	1.4	5.2
2	18	0.93	1.55	3.9	1.7	4.2	1.55	4.1
3	18	0.93	1.55	4.1	1.7	4.5	1.55	4.3
4	18	0.93	1.55	4.5	1.7	4.9	1.55	4.7
5	18	0.93	1.55	4.9	1.7	5.4	1.55	5.2
7	18	0.93	1.55	5.4	1.7	6.1	1.55	5.6
2	-	1	1.65	4.1	1.8	4.4	1.65	4.3
3	-	1	1.65	4.3	1.8	4.7	1.65	4.5
4	-	1	1.65	4.7	1.8	5.1	1.65	4.9
5	-	1	1.65	5.2	1.8	5.7	1.65	5.4
7	-	1	1.65	5.7	1.8	6.4	1.65	5.9
2	16	1.34	1.9	4.6	2.0	4.8	1.9	4.8
3	16	1.34	1.9	4.9	2.0	5.1	1.9	5.1
4	16	1.34	1.9	5.3	2.0	5.6	1.9	5.5
5	16	1.34	1.9	6.1	2.0	6.4	1.9	6.1
7	16	1.34	1.9	6.7	2.0	7.0	1.9	6.7
2	-	1.5	1.9	4.6	2.0	4.8	1.9	4.8
3	-	1.5	1.9	4.9	2.0	5.1	1.9	5.1
4	-	1.5	1.9	5.3	2.0	5.6	1.9	5.5
5	-	1.5	1.9	6.1	2.0	6.4	1.9	6.1
7	-	1.5	1.9	6.7	2.0	7.0	1.9	6.7
2	14	-	2.25	5.3	2.4	5.6	2.25	5.5
3	14	-	2.25	5.6	2.4	6.2	2.25	5.8
4	14	-	2.25	6.4	2.4	6.8	2.25	6.4
5	14	-	2.25	7.0	2.4	7.5	2.25	7.0
7	14	-	2.25	7.7	2.4	8.4	2.25	7.7

Conducting metal

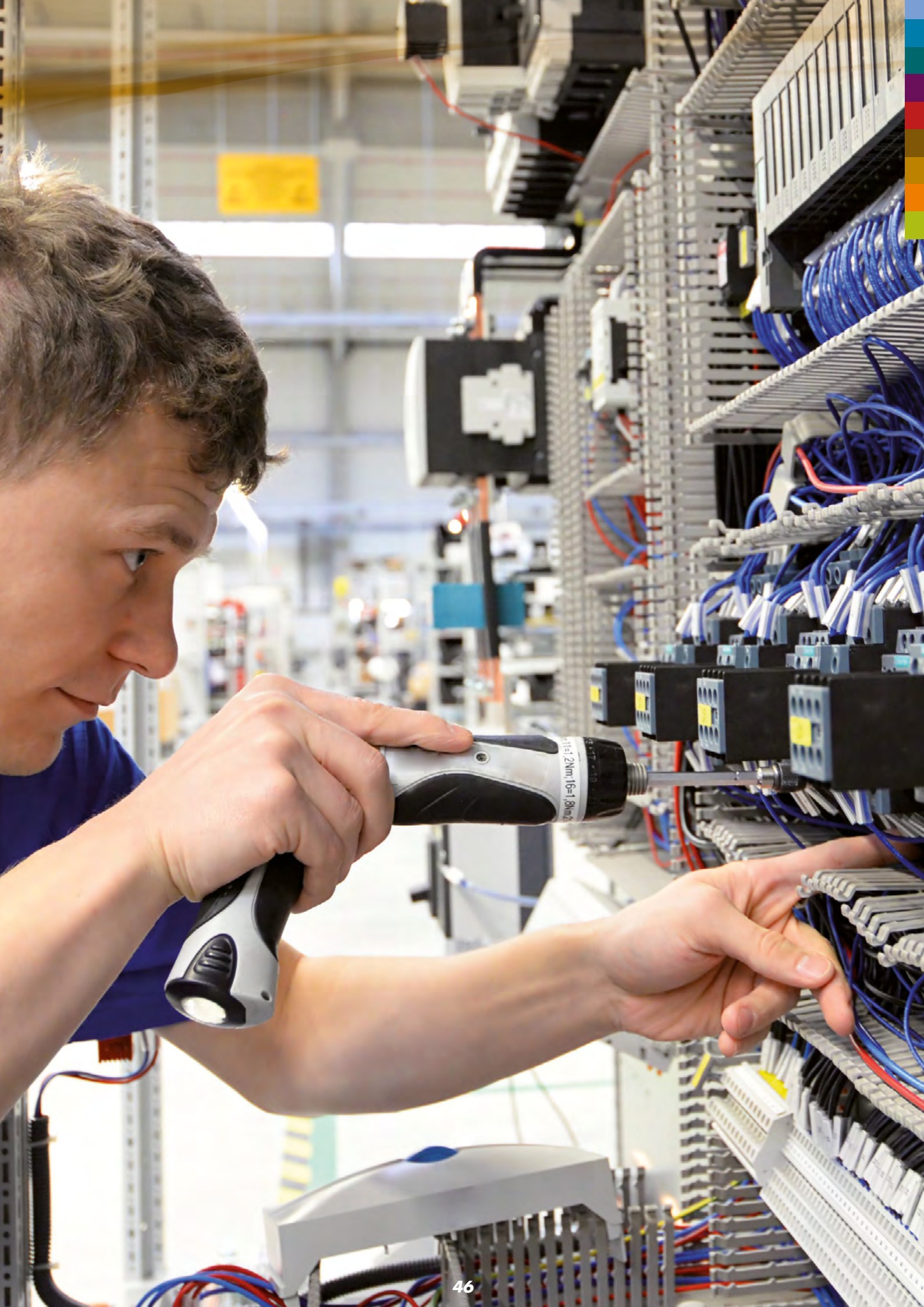
B\*CDEF\*G

B\*CDEG










B\*CDEF\*G

Style no. Insulation			2749-F200		20710-F200		20710-F200		2750-F200		2750-F200	
			FEP		ETFE "Thin-wall"		FEP		ETFE "Thin-wall"		FEP	
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 0.25 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	





## THERMOPLASTIC INSULATED WIRES AND CABLES

FT No.	PRODUCT REFERENCE	APPROVAL	PAGE
2201	PLASTHERM Y2 and EY2		48
2202	PLASTHERM 80 °C - PVC insulation	C  US	50
2203	PLASTHERM 105 °C - PVC insulation	C  US	52
2204	PLASTHERM Style 1015-HAR	C  US <HAR>	54
2205	PLASTHERM Style 20199, 2-conductor flat cable	C  US	55
2206	PLASTHERM MY2-Y2 and MY2-EY2		56
2207	PLASTHERM 80 °C - PVC insulation and sheathing	C  US	58
2208	PLASTHERM 90 °C - PVC insulation and sheathing	C  US	59
2209	PLASTHERM 105 °C - PVC insulation and sheathing	C  US	60
2210	PLASTHERM 90 °C - Polyolefin insulation	C  US	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	C  US	65
2215	PLASTHERM MYBE-EY-CSI - Intrinsic safety		66
2216	PLASTHERM HP-U - 2-conductor flat cable, thin insulation		67
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# 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:

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omerin@omerin.com

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## 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	130 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.

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LES CABLES DE L'EXTREME

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# 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.

#### THERMOPLASTIC INSULATED WIRES AND CABLES



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

Style no.		1007		1497		1581	
Approval		80 °C – 300 V		80 °C – 300 V		80 °C – 300 V	
Nominal cross-section		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)
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	

#### 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.

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 LES CABLES DE L'EXTREME

Style no.		10053		1011		10381		1030	
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	(mm²)	(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 ( $\phi > 0.38$  mm)  
**C** Nickel-plated copper  
**D** Silver-plated copper  
**E** Nickel  
**F** Bare copper  
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**NS** Not Specified

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■: UL approved nominal cross-sections only.

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# PLASTHERM® 105°C

## PVC insulation

### UL and cUL approval



#### 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.

#### THERMOPLASTIC INSULATED WIRES AND CABLES

2

1

T A/B 105C FT1 PLASTHERM 105C 1015

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

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)
AWG	(mm²)								
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 ( $\phi > 0.38$  mm)  
**C** Nickel-plated copper  
**D** Silver-plated copper  
**E** Nickel  
**F** Bare copper  
**F\*** Bare copper ( $\phi > 0.38$  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.

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\* 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.

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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 (mm)	Nominal diameter*	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*	Average thickness of insulation (mm)	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	2.5
-	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	2.8	-	-	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  
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**AWM I A** Internal wiring, not subject to mechanical abuse  
**AWM I A/B** Internal wiring  
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**NS** Not Specified  
**VNS** Voltage Not Specified

■: UL approved nominal cross-sections only.

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\* 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.

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 LES CABLES DE L'EXTREME

# 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

## Characteristics

### General

- Maximum continuous operating temperature as per USE <HAR> : +90 °C.
- Maximum continuous operating temperature as per UL and cUL: +105 °C.
- Good resistance to chemical influences.
- Good alternate bending strength.

### Electrical

- Rated voltage:
  - > UL: 600 V.
  - > cUL: 1000 V.
  - > USE <HAR>:
    - Type H05V2-K: 300/500 V.
    - Type H07V2-K: 450/750 V.
- Test voltage: 6000 V.

## Standard products

- All colours including two-coloured.

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

### INSULATED WIRE OR 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)      Approximate linear weight (kg/km)

#### Type H05V2-K

0.5	16 x 0.20	39.0
0.75	24 x 0.20	26.0
1	32 x 0.20	19.5

0.76	2.45	9.9
0.76	2.65	12.6
0.76	2.8	15.1

#### Type H07V2-K

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

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

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

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# 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.

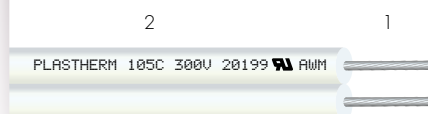
##### Electrical

- 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.

## THERMOPLASTIC INSULATED WIRES AND CABLES



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

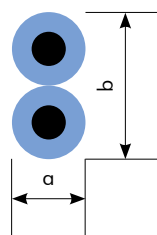
#### Style 20199

##### 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



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# 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 > (mm²) (example: 3 X 1.5 mm²).

Multi-conductor cables with an earth wire are identified by the symbol G in the place of the X (example 3 G 1.5 mm²).

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

Nominal cross-section (mm²)	Nominal stranding	Maximum linear resistance at 20 °C (Ω/km)
2 x 0.22	7 x 0.20	92.5
3 x 0.22	7 x 0.20	92.5
4 x 0.22	7 x 0.20	92.5
5 x 0.22	7 x 0.20	92.5
7 x 0.22	7 x 0.20	92.5
19 x 0.22	7 x 0.20	92.5
2 x 0.34	7 x 0.25	59.2
3 x 0.34	7 x 0.25	59.2
4 x 0.34	7 x 0.25	59.2
5 x 0.34	7 x 0.25	59.2
7 x 0.34	7 x 0.25	59.2
19 x 0.34	7 x 0.25	59.2

### INSULATED CONDUCTORS

Nominal thickness of insulation (mm)	Nominal diameter (mm)
0.3	1.2
0.3	1.2
0.3	1.2
0.3	1.2
0.3	1.2
0.3	1.2
0.4	1.6
0.4	1.6
0.4	1.6
0.4	1.6
0.4	1.6
0.4	1.6

### SHEATHED CABLE

Nominal diameter (mm)	Approximate linear weight (kg/km)
3.4	14.8
3.6	17.7
3.9	21.2
4.4	26.9
4.8	34.2
7.6	84.4
4.4	24.3
4.7	29.0
5.1	34.8
5.5	41.1
6.0	52.9
9.6	132

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## 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

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

## PLASTHERM® 80 °C PVC insulation PVC sheathing UL and cUL approval



### 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.

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## THERMOPLASTIC INSULATED WIRES AND CABLES



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

### 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 80 °C - 600 or 1000 V AWM II A/B

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

BCDEFG

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

## PLASTHERM® 90 °C

### PVC insulation PVC sheathing

### UL and cUL approval

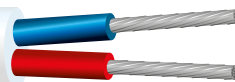


## THERMOPLASTIC INSULATED WIRES AND CABLES

2

1

ASTHERM 90C 300V 2654 AWM



- 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 ( $\geq 90$  °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 ( $\phi > 0.38$  mm)  
**C** Nickel-plated copper  
**D** Silver-plated copper  
**E** Nickel  
**F** Bare copper  
**F\*** Bare copper ( $\phi > 0.38$  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:

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### Style no. Approval

### 2654-Y90

90 °C - 300 V  
 AWM II A/B

No. of cond.	AWG	Nominal cross-section (mm <sup>2</sup> )	Nominal diameter* of the cond. (mm)	Nominal diameter* of the cable (mm)
2	26	0.13	1.2	3.9
3	26	0.13	1.2	4.1
4	26	0.13	1.2	4.4
5	26	0.13	1.2	4.8
7	26	0.13	1.2	5.1
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	1.6	4.7
3	22	0.34	1.6	5.0
4	22	0.34	1.6	5.4
5	22	0.34	1.6	5.8
7	22	0.34	1.6	6.3
2	-	0.5	1.7	4.9
3	-	0.5	1.7	5.2
4	-	0.5	1.7	5.6
5	-	0.5	1.7	6.1
7	-	0.5	1.7	6.6
2	20	0.6	1.8	5.1
3	20	0.6	1.8	5.4
4	20	0.6	1.8	5.9
5	20	0.6	1.8	6.4
7	20	0.6	1.8	6.9
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	2.05	5.6
3	18	0.93	2.05	5.9
4	18	0.93	2.05	6.5
5	18	0.93	2.05	7.1
7	18	0.93	2.05	7.7
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

### 2587-Y90

90 °C - 600 V  
 AWM II A/B

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

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

## THERMOPLASTIC INSULATED WIRES AND CABLES

# 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 ( $\geq 105$  °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 ( $\phi > 0.38$  mm)  
C Nickel-plated copper  
D Silver-plated copper  
E Nickel  
F Bare copper  
F\* Bare copper ( $\phi > 0.38$  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.

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Conducting metal

BCDEFG

BCDEFG

BCDEFG

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# 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.

## THERMOPLASTIC INSULATED WIRES AND CABLES



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

Style no. 10900

Approval

90 °C – 600 V  
AWM I A/B

Nominal cross-section		Average thickness of insulation	Nominal diameter*
AWG	(mm <sup>2</sup> )	(mm)	(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	

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

## THERMOPLASTIC INSULATED WIRES AND CABLES

# 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

2

1

356 PLASTHERM PHF2 1000 VOLT 1.5mm

- 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 (mm²)	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 (mm²)	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

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**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

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# 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.

## Aprovals - 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 (mm²)	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:

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# PLASTHERM®

## Style 21209

### Polyurethane sheathing

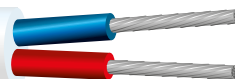
### UL and cUL approval



2

1

PLASTHERM 90°C 300V 21209 AWM



- 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:

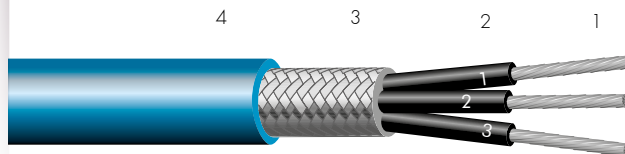
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Style no.		21209-E90		21209-W12		21209-F90		
Approval Single conductor style no.			90 °C – 300 V Style 10125 AWM I/II A/B		90 °C – 600 V Style 10900 AWM I/II A/B		90 °C – 1,000 V Style 10203 AWM I/II A/B	
Nominal cross-section			Nominal diameter* of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

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**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 ≥ 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

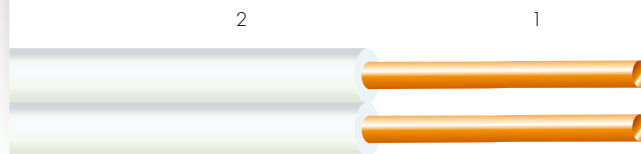
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**PLASTHERM® HP-U****2-conductor flat cable**  
**Thin insulation****-20 °C to +80 °C**

- 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**

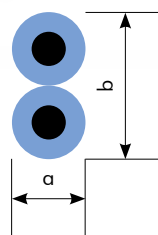
- All colours including two-coloured.

**SOLID CORE**

Nominal cross-section (mm²)	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



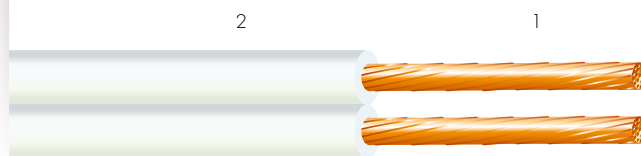
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**PLASTHERM® HP-M****2-conductor flat cable**  
**Thin insulation****-20 °C to +80 °C**

- 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**

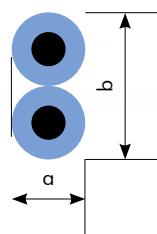
- All colours including two-coloured.

**FLEXIBLE CORE**

Nominal cross-section (mm²)	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



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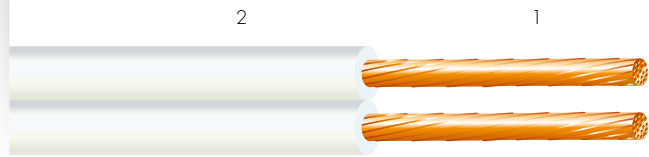
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# PLASTHERM® HP-M-HT

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

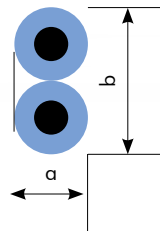
- All colours including two-coloured.

### FLEXIBLE CORE

Nominal cross-section (mm²)	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



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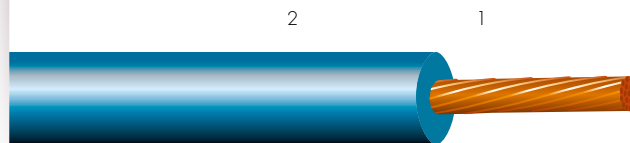
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# PLASTHERM® 41

**-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

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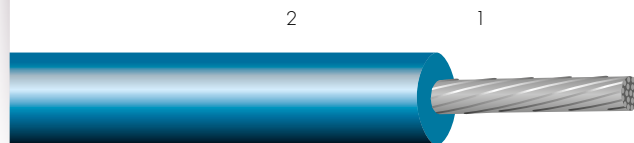
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# PLASTHERM® E43

**-40°C to +150°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.

## Characteristics

### General

- Continuous operating temperatures: -40°C to +150°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:

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**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.

## Notes

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## Notes

[illegible]





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