



CABLEX

**Durable, Heat-Resistant Wiring
for Demanding Applications**

**SILICONE
WIRES**

**Shaping
the Future
Together**

At Cablex, we design and manufacture silicone-insulated wires that keep performing where conventional PVC cannot – high temperature zones, thermal cycling and tight bend radii in appliances and industrial equipment. We combine precise extrusion with rigorous testing to deliver consistent dielectric strength, stable dimensions and long service life.

APPLICATIONS

Ovens & cooktops, heaters, motors and pumps, HVAC, lighting, sensors near hot zones, industrial machinery and wiring inside white-goods assemblies.

OUR CAPABILITIES

- **Extrusion & post-curing control** – Tight OD and wall-thickness tolerances with in-line laser gauging; smooth surfaces for easy assembly.
- **Conductor options** – Tinned copper (standard), bare copper, nickel-plated copper; high-strand flexible classes for dynamic routing.
- **Constructions** – Single core, twisted/multi-core, silicone + fiberglass braid, silicone over-braid with varnish (on request).
- **Temperature ratings** – Typically -60 °C to +180 °C (short-term peaks up to +220/+250 °C depending on construction).
- **Voltage classes** – 300/300 V, 300/500 V.
- **Finishes & ID** – Solid colors, custom RALs, striping, inkjet/laser marking, lot traceability and barcoding.
- **Value-adds** – Cut-strip-tin, crimping/termination, kitting and harness integration.

QUALITY & TESTING

100% in-line spark testing, hi-pot sampling, pull-force verification, dimensional SPC, and material traceability, embedded in VDE-certified processes.

WHY CHOOSE US?



- 35+ years of wiring expertise backed by a large, automated machine park.
- European footprint and scalable capacity – from prototypes to multi-million runs.
- Full solution under one roof: silicone wire + harnessing + plastics + EMS for faster programs and fewer suppliers.
- Engineer-to-order support for special temperatures, chemistries and terminations.
- Reliable delivery and consistent performance trusted by global appliance and industrial brands.

H05S-K

Flexible Single-Core Silicone Wires



- 1 – Twisted strands of bare (Cu) or tinned copper (CuSn) – Class 5
- 2 – Silicone rubber insulation – EI2

Standard: DIN VDE 0250 Part 1:1981-10 and Part 502:1985-03
VDE 0295/EN 60228 Class 5

Technical Data

Rated Voltage: 300/500 Volt

Test Voltage: 2000 Volt

Temperature Range: - 60°C/+ 180°C

Application: Wiring in domestic electrical appliances, rotating machines (class H), lighting equipment, wiring in high ambient temperatures.



CORE	INSULATED WIRE		ELECTRICAL CHARACTERISTICS
Cross-section (mm²)	Outside Diameter (mm)	Insulation Wall Thickness: Standard Value (mm)	Max. Permissible Current at 170 °C (Amp)
0.50	2.50	0.80	3.5
0.75	2.70	0.80	5.5
1.00	2.90	0.80	7
1.50	3.40	0.90	10
2.50	4.00	1.00	14

Measurement tolerances: ±%5

TSIF

Flexible Single-Core Silicone Wires



- 1 – Twisted strands of bare (Cu) or tinned copper (CuSn) – Class 5
- 2 – Silicone rubber insulation – EI2

Standard: DIN VDE 0250 Part 1:1981-10 and Part 502:1985-03
VDE 0295/ EN 60228 Class 5

Certificate: VDE – 103892 ÜG (0.34mm², 0.50mm², 1.00mm², 1.50mm², 2.50mm²)
VDE – 103892 (N2GFAF)
VDE – Reg. No: 6585

Technical Data

Rated Voltage: 300/300 Volt

Test Voltage: 2000 Volt

Temperature Range: - 60°C/+ 180°C

Application: Wiring in domestic electrical appliances, rotating machines (class H), lighting equipment, wiring in high ambient temperatures.



CORE	INSULATED WIRE		ELECTRICAL CHARACTERISTICS
Cross-section (mm ²)	Outside Diameter (mm)	Insulation Wall Thickness: Standard Value (mm)	Max. Permissible Current at 170 °C (Amp)
0.25	1.80	0.60	2
0.34	1.90	0.60	2.5
0.50	2.02	0.60	3.5
0.75	2.24	0.60	5.5
1.00	2.40	0.60	7
1.50	2.86	0.70	10
2.50	3.50	0.80	14
4.00	4.10	0.80	18
6.00	4.70	0.80	22
10.00	7.00	1.10	30
16.00	8.40	1.20	40
25.00	10.30	1.40	52
35.00	11.60	1.40	64

Measurement tolerances: ±%5

TSIF FR

Flexible Single-Core Silicone Wires



- 1 – Twisted strands of bare (Cu) or tinned copper (CuSn) – Class
- 2 – Silicone rubber insulation – EI2
- 3 – Silicone rubber additives – flame retardant

Standard: DIN VDE 0250 Part 1:1981-10 and Part 502:1985-03
VDE 0295/ EN 60228 Class 5

Certificate: VDE – 103892 ÜG (0.34mm², 0.50mm², 1.00mm², 1.50mm², 2.50mm²)
VDE – 103892 (N2GFAF)
VDE – Reg. No: 6585

Technical Data

Rated Voltage: 300/300 Volt

Test Voltage: 2000 Volt

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1.00	2.40	0.60	7
1.50	2.86	0.70	10
2.50	3.50	0.80	14
4.00	4.10	0.80	18
6.00	4.70	0.80	22
10.00	7.00	1.10	30
16.00	8.40	1.20	40
25.00	10.30	1.40	52
35.00	11.60	1.40	64

Measurement tolerances: ±%5

TSIF GL

Flexible Single-Core Fiberglass – Braided Silicone Wires



- 1 – Twisted strands of bare (Cu) or tinned copper (CuSn) – Class 5
- 2 – Silicone rubber insulation – E12
- 3 – Fiberglass braid (+ thin silicone layer)

Technical Data

Rated Voltage: 300/500 Volt

Test Voltage: 2000 Volt

Temperature Range: - 60°C/+ 180°C

Application: Wiring in domestic electrical appliances, rotating machines (class H), lighting equipment, wiring in high ambient temperatures.

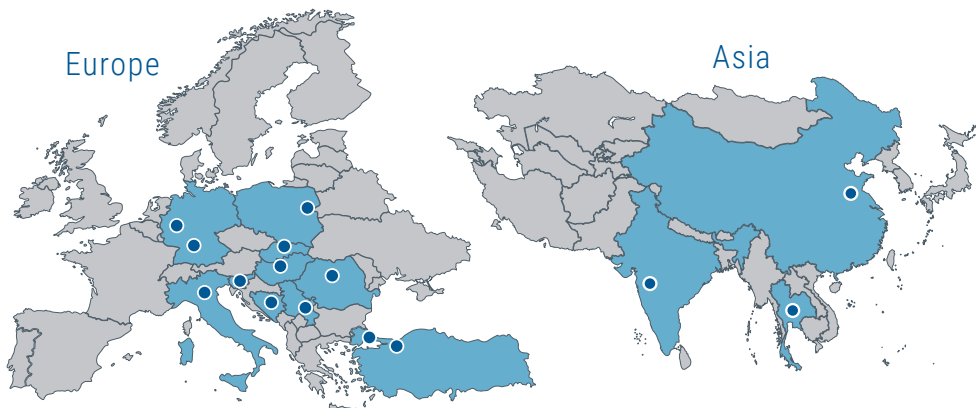


CORE	INSULATED WIRE		ELECTRICAL CHARACTERISTICS
Cross-section (mm ²)	Outside Diameter (mm)	Insulation Wall Thickness: Standard Value (mm)	Max. Permissible Current at 170 °C (Amp)
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0.34	2.40	0.60	2.5
0.50	2.50	0.60	3.5
0.75	2.70	0.60	5.5
1.00	2.90	0.60	7
1.50	3.40	0.70	10
2.50	4.00	0.80	14
4.00	4.60	0.80	18
6.00	5.80	0.80	22
10.00	7.60	1.10	30
16.00	9.00	1.20	40
25.00	11.00	1.40	52
35.00	12.40	1.40	64

Measurement tolerances: ±%5

Let's build smarter together.

Engineered for performance – Cablex silicone wires provide heat resistance and durability you can count on. Contact us to find out more.



**WIRE HARNESSES &
CABLE ASSEMBLIES**

**COMPLEX PLASTIC
MOULDING**

**METAL STAMPED
PARTS**

**ON-GLASS
CONNECTORS**

**ELECTRONICS
EMS**

**SILICONE
WIRES**

**PROFESSIONAL
ASSEMBLY**

**MACHINE
BUILDING**

**COMPLEMENTARY
SERVICES**



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