WCW® WAHCHANGWEI

**DS-SGS-2026-01**
Rev. 2026-10
UL File No. E233804 / E233803

# Silicone Fiberglass Sleeving — Grade SGS

Technical datasheet · WCW (Shenzhen Wahchangwei Industrial Co., Ltd.)

> **Construction:** braided from alkali-free (E) fiberglass yarn, then coated with silicone resin through a specialized bonding process. Available in all standard sizes, colors and voltage classes; custom constructions such as an added outer PET or fiberglass braid on request.

## 1 · Ratings & UL Recognition

| MODEL / UL FILE NO. | TEST STD. | FLAME | TEMP. RATING | DIELECTRIC CLASS | AVG. WITHSTAND | MIN. INDIVIDUAL |
|---|---|---|---|---|---|---|
| **SGS-15 · E233804** | UL 1441 | UL VW-1 | −60 °C to +200 °C | D | 1500 V | 1000 V |
| **SGS-25 · E233804** | UL 1441 | UL VW-1 | −60 °C to +200 °C | C | 2500 V | 1800 V |
| **SGS-40 · E233804** | UL 1441 | UL VW-1 | −60 °C to +200 °C | B | 4000 V | 2500 V |
| **SGS-70 · E233803** | UL 1441 | UL VW-1 | −60 °C to +200 °C | A | 7000 V | 5000 V |

Dielectric values measured per UL 1441. Class letter per UL 1441 dielectric-withstand classification; “Min. Individual” is the minimum acceptable single-tube reading.

## 2 · Dimensions

| INNER DIAMETER | | WALL THICKNESS | | |
|---|---|---|---|---|
| NOMINAL | TOLERANCE | 7000 V (CLASS A) | 4000 V (CLASS B) | CLASS C & D |
| **0.5 – 2.0 mm** | +0.20 / −0.00 mm | 0.45 ± 0.05 mm | 0.40 ± 0.05 mm | 0.35 ± 0.05 mm |
| **2.5 – 3.0 mm** | +0.25 / −0.00 mm | 0.50 ± 0.05 mm | 0.40 ± 0.05 mm | 0.35 ± 0.05 mm |

| | | | | |
|---|---|---|---|---|
| **3.5 – 5.0 mm** | +0.35 / −0.00 mm | 0.55 ± 0.05 mm | 0.50 ± 0.05 mm | 0.42 ± 0.05 mm |
| **6.0 – 9.0 mm** | +0.50 / −0.00 mm | 0.60 ± 0.05 mm | 0.55 ± 0.05 mm | 0.45 ± 0.05 mm |
| **10.0 – 12.0 mm** | +0.70 / −0.00 mm | 0.65 ± 0.05 mm | 0.55 ± 0.05 mm | 0.53 ± 0.05 mm |
| **13.0 – 20.0 mm** | +0.80 / −0.00 mm | 0.70 ± 0.05 mm | 0.60 ± 0.05 mm | 0.56 ± 0.05 mm |
| **22.0 – 35.0 mm** | +0.90 / −0.00 mm | 1.05 ± 0.05 mm | 1.00 ± 0.05 mm | 0.70 ± 0.05 mm |

Standard color: white; other colors available on request. Custom cut lengths and custom constructions quoted on request.

## 3 · Typical Applications

Motors and generators (lead insulation), transformers and coils, automotive harness and EV battery packs, home appliances, specialty lighting, electronic instruments — wherever a flexible, flame-rated, Class-200 dielectric sleeve is required.

## 4 · Compliance & Documents

| | |
|---|---|
| **UL recognition** | UL 1441 — File No. E233804 (SGS-15/25/40), E233803 (SGS-70) |
| **Flame rating** | UL VW-1 |
| **Quality system** | ISO 9001:2015 · IATF 16949:2016 · ISO 14001:2015 · ISO 45001:2018 |
| **On request** | RoHS, REACH SVHC, halogen-free statements; certificate copies for supplier qualification and PPAP |

WCW · Shenzhen Wahchangwei Industrial Co., Ltd. — source manufacturer since 2002. UL / CUL certified since 2003, IATF 16949:2016, exporting to 60+ countries.
Your contact: **Liming Wu (Andy)**, Sales Manager · Email wcw-sz@szwcw.com · Tel / WhatsApp +86 150 1354 6673 · HQ: No.25 Langbei Village, 6th Industry Area, Tongde Community, Baolong Street, Longgang, Shenzhen 518116, China.
Data believed accurate as of the revision date; confirm critical values against the current UL file and your own qualification testing.