

Acrylic Fiberglass Sleeving — Grade ARG

Acrylic-Coated Fiberglass Braid · 4 Grades

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

Construction: alkali-free (E) fiberglass braid coated with acrylic (polyacrylate) resin and cured. The coating bonds the braid into a smooth, crack-free wall that resists chemical solvents, oils and abrasion, and cuts cleanly without fraying. Among the earliest product series in China certified to UL and CUL — UL category **UZFT2 / CUL UZFT8**, a recognition held by only about ten companies worldwide. Available in all standard sizes and colors; custom constructions on request.

1 · Ratings & UL Recognition

MODEL / UL FILE NO.	TEST STD.	FLAME	TEMP. RATING	VOLTAGE CLASS	AVG. WITHSTAND	MIN. INDIVIDUAL
ARG-WCW-15 · E233803	UL 1441	UL VW-1	−10 °C to +155 °C	D	1500 V	800 V
ARG-WCW-25 · E233803	UL 1441	UL VW-1	−10 °C to +155 °C	C	2500 V	1500 V
ARG-WCW-40 · E233803	UL 1441	UL VW-1	−10 °C to +155 °C	B	4000 V	2500 V
ARG-WCW-1U · E233803	UL 1441	UL VW-1	−10 °C to +155 °C	A	7000 V	5000 V

Dielectric values measured per UL 1441. “Min. Individual” is the minimum acceptable single-tube reading.

2 · Performance Parameters

TEST ITEM	REQUIREMENT / RESULT
Continuous service temperature range	−10 °C to +155 °C
Heat resistance	190 °C ± 2 °C × 168 h — retains more than 1/2 of the original voltage value

Thermal aging	190 °C × 6 h — no cracking
Cold bending	No cracking
Flame rating (UL VW-1 burning time)	< 30 seconds
Oil resistance	Oil-resistant

3 · Dimensions

INNER DIAMETER		MINIMUM WALL THICKNESS	
NOMINAL	TOLERANCE	GRADE A	GRADE B / C / D
0.5 – 2.5 mm	+0.25 / –0.00 mm	0.38 mm	0.20 mm
3.0 – 4.5 mm	+0.30 / –0.00 mm	0.45 mm	0.23 mm
5.0 – 6.0 mm	+0.40 / –0.00 mm	0.45 mm	0.28 mm
7.0 – 9.0 mm	+0.55 / –0.00 mm	0.50 mm	0.32 mm
10.0 – 14.0 mm	+0.75 / –0.00 mm	0.60 mm	0.40 mm
15.0 – 25.0 mm	+0.85 / –0.00 mm	0.64 mm	0.43 mm

Wall thickness values are minimums per UL 1441 by voltage class. Standard colors and custom colors available on request; custom cut lengths quoted on request.

4 · Typical Applications

Transformer and coil lead insulation, inverters, wind generators and compressor motors — anywhere leads run through oil-immersed or solvent-laden environments, where the acrylic coating keeps the dielectric wall stable. The smooth coated braid also suits wiring bundles that need abrasion protection with a tight bend radius.

5 · Compliance & Documents

UL recognition	UL 1441 — File No. E233803 (ARG-WCW series) · UL category UZFT2 / CUL UZFT8
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 6th Industrial Area, Baolong Street, Longgang, Shenzhen 518111, China.

Data believed accurate as of the revision date; confirm critical values against the current UL file and your own qualification testing.