

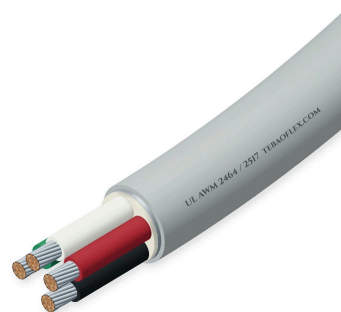


Hook-up & equipment wires

UL AWM 2464 / 2517

Shielded Multicore Cable

UL AWM 2464 (80 °C) & 2517 (105 °C oil) 300 V foil + braid shielded multicore cable



UL 2464 (80 °C) & 2517 (105 °C)

300 V · Foil + Tinned-Cu Braid

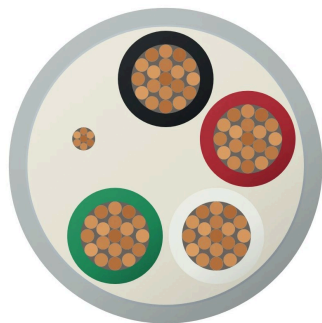
2-50 Cores · 28-16 AWG

Application

EMC-shielded 300 V multi-conductor and twisted-pair control cable certified to UL AWM Style 2464 (80 °C) and Style 2517 (105 °C oil-resistant CNC grade) plus CSA FT1/FT4, combining 28-16 AWG tinned copper cores with 100 % Al/Mylar foil + ≥85 % tinned-Cu braid.

Typical uses: CNC machine tools, servo encoders & MPG pendants, RS-232 / RS-422 / RS-485 & Modbus serial buses, Semiconductor, SMT & automated test equipment, Medical diagnostic, POS & weighing terminals, Audio/control & building automation interfaces

Construction



Cross-section, not to scale

1	Stranded tinned copper conductors	ASTM B33 · UL 758
2	SR-PVC (UL 1061) or PVC (UL 1007/1569) cores	UL 758 Style 2464 / 2517
3	100 % Al/Mylar foil + drain wire	UL 758
4	Tinned-copper braid shield (≥85 %)	UL 758 Style 2464 / 2517
5	VW-1 / FT1 PVC jacket (80 °C or 105 °C oil)	UL 758 · CSA AWM I/II A/B FT1/FT4

Technical data

Typical values

Rated voltage	300 V RMS	Dielectric withstand voltage	1500 V AC for 1 min
Mutual capacitance (typical)	≈ 95–115 pF/m (core to core) · ≈ 170–210 pF/m (core to shield)	Max. DC conductor resistance (20 °C)	28 AWG: ≤ 216 Ω/km · 26 AWG: ≤ 135 Ω/km · 24 AWG: ≤ 84.2 Ω/km · 22 AWG: ≤ 53.2 Ω/km · 20 AWG: ≤ 33.2 Ω/km · 18 AWG: ≤ 21.0 Ω/km · 16 AWG: ≤ 13.2 Ω/km
Temperature rating	–20 °C to +80 °C (UL 2464) · –20 °C to +105 °C (UL 2517)	Short-circuit / solder heat	+150 °C to +250 °C (5 s)
Min. bending radius	6 × overall diameter (fixed) · 10 × overall diameter (occasional flexing)	Nominal jacket wall	0.81 mm (32 mil) minimum average per UL Style 2464 / 2517
Flame retardance	UL 1581 VW-1, UL 1685 FT4 & CSA C22.2 FT1 / FT4	Oil & coolant resistance	UL 2517 passes UL 60 °C / 80 °C oil immersion and CNC soluble-oil coolant splash tests
Standards	UL 758 Style 2464 (80 °C, 300 V) & Style 2517 (105 °C, 300 V)	Standard packing	Heat-treated ISPM-15 timber drums or spools with sealed ends

Sizes

20 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Order designation	Cores × mm ² / AWG	AWG ≈	Outer Ø min mm	Outer Ø max mm	Copper kg/km	Weight ≈ kg/km	Min. bend R mm
300 V Shielded Signal & RS-232/485 Multicore (UL 2464 / 2517, 26 & 24 AWG) 10 sizes							
☐ UL 2464/2517 4×26 AWG	4×26 AWG (0.13 mm ²)	26	4.0	4.4	11	28	26
☐ UL 2464/2517 8×26 AWG	8×26 AWG (0.13 mm ²)	26	5.0	5.4	18	42	32
☐ UL 2464/2517 15×26 AWG	15×26 AWG (0.13 mm ²)	26	6.3	6.8	30	68	41
☐ UL 2464/2517 25×26 AWG	25×26 AWG (0.13 mm ²)	26	7.5	8.2	46	102	49
☐ UL 2464/2517 3×24 AWG	3×24 AWG (0.20 mm ²)	24	4.0	4.4	12	29	26
☐ UL 2464/2517 4×24 AWG	4×24 AWG (0.20 mm ²)	24	4.3	4.7	15	34	28
☐ UL 2464/2517 6×24 AWG	6×24 AWG (0.20 mm ²)	24	5.0	5.4	20	46	32
☐ UL 2464/2517 9×24 AWG	9×24 AWG (0.20 mm ²)	24	5.7	6.2	28	62	37
☐ UL 2464/2517 15×24 AWG	15×24 AWG (0.20 mm ²)	24	6.9	7.5	43	92	45
☐ UL 2464/2517 25×24 AWG	25×24 AWG (0.20 mm ²)	24	8.5	9.2	68	142	55
300 V Shielded Control & Encoder Multicore (UL 2464 / 2517, 22 to 16 AWG) 10 sizes							
☐ UL 2464/2517 2×22 AWG	2×22 AWG (0.33 mm ²)	22	4.1	4.5	13	30	27
☐ UL 2464/2517 4×22 AWG	4×22 AWG (0.33 mm ²)	22	4.7	5.1	21	44	31
☐ UL 2464/2517 6×22 AWG	6×22 AWG (0.33 mm ²)	22	5.4	5.9	29	58	35
☐ UL 2464/2517 8×22 AWG	8×22 AWG (0.33 mm ²)	22	5.9	6.4	37	72	38
☐ UL 2464/2517 12×22 AWG	12×22 AWG (0.33 mm ²)	22	6.9	7.5	53	102	45
☐ UL 2464/2517 4×20 AWG	4×20 AWG (0.52 mm ²)	20	5.3	5.8	30	58	35
☐ UL 2464/2517 6×20 AWG	6×20 AWG (0.52 mm ²)	20	6.2	6.7	42	80	40
☐ UL 2464/2517 4×18 AWG	4×18 AWG (0.82 mm ²)	18	6.1	6.6	44	82	40
☐ UL 2464/2517 6×18 AWG	6×18 AWG (0.82 mm ²)	18	7.1	7.7	63	114	46
☐ UL 2464/2517 4×16 AWG	4×16 AWG (1.31 mm ²)	16	7.0	7.6	68	118	46

– Dimensions and weights are typical values per UL 758 Style 2464 (80 °C) & Style 2517 (105 °C) · CSA AWM I/II A/B. Minimum fixed bending radius shown is 6 × OD.

Electrical & current ratings

6 sizes

Cross-section mm ²	AWG ≈	Max. DC resistance 20 °C, Ω/km	Single wire in air 30 °C, A	Multi-core bundle 30 °C, A
0.13	26	155	2.5	2.0
0.2	24	95.5	3.5	2.8
0.33	22	57.8	6.0	4.5
0.52	20	34.6	10	7
0.82	18	24	14	11
1.31	16	15.1	20	15

– Current ratings at 30 °C ambient in free air. Apply temperature and bundle grouping factors per applicable equipment standard.

Standards and approvals

✓ UL 758 Style 2464 (80 °C) & Style 2517 (105 °C) · CSA AWM I/II A/B

✓ CE · RoHS 2 (2011/65/EU) · REACH

Certifications



Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone

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Email

info@tebaoflex.com

Web

tebaoflex.com/cables/ul-awm-2464-2517-shielded-multicore-cable



Typical values for this cable type, based on UL 758 Style 2464 (80 °C) & Style 2517 (105 °C) · CSA AWM I/II A/B. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.