UL AWM Style 20624 FFC FWR

FFC FWR

FFC 0.5/1.0 mm Pitch Laminated Flat Copper Ribbon Cable

UL AWM Style 20624 / 2896 · 60 V · −40…+105 °C industrial FFC FWR construction

UL AWM Style 20624 / 2896 | **60 V** | **−40…+105 °C**



Application

FFC 0.5/1.0 mm Pitch Laminated Flat Copper Ribbon Cable engineered to UL AWM Style 20624 / 2896 for 60 V service across −40…+105 °C, featuring stranded tinned copper conductor and polyester film insulation with minimum bending radius 3 × OD.

Typical uses: Automated Assembly & Packaging Lines, CNC Machine Tools & Robotics, PLC/DCS Control & Marshalling Cabinets, Industrial Drives & Motor Manufacturing, Passenger & Commercial Vehicle Harnesses

Construction



Cross-section, not to scale

1	Stranded tinned copper conductor	UL AWM Style 20624 / 2896 (+80/+105 °C)
2	White polyester adhesive laminate core insulation	UL AWM Style 20624 / 2896 (+80/+105 °C)
3	Polyester film insulation	UL AWM Style 20624 / 2896 (+80/+105 °C)

Technical data

Typical values

Rated voltage / duty	60 V (UL AWM Style 20624 / 2896 (+80/+105 °C))	**Conductor construction**	Stranded tinned copper conductor — High-conductivity tinned copper conductor per UL AWM Style 20624 / 2896 (+80/+105 °C)
Primary insulation / dielectric	White polyester adhesive laminate core insulation — Extruded White polyester adhesive laminate dielectric (continuous layer)	**Continuous operating temperature**	−40…+105 °C per UL AWM Style 20624 / 2896 (+80/+105 °C)
Short-circuit / peak thermal limit	+160 °C to +250 °C (5 s adiabatic limit depending on dielectric class)	**Minimum installation temperature**	−5 °C (thermoplastic) / −25 °C (cross-linked or elastomer) / −40 °C (metallic)
Outer protection / covering	Polyester film insulation — Extruded Polyester film insulation protective layer (continuous layer)	**Minimum bending radius**	3 × OD (installed / static routing)
Layer count & geometry	3 concentric/structural layers verified by cross-section inspection	**Environmental & chemical durability**	Engineered for industrial service in accordance with UL AWM Style 20624 / 2896 (+80/+105 °C)
RoHS & REACH compliance	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant	**Standards**	UL AWM Style 20624 / 2896 (+80/+105 °C)

Sizes

12 standard constructions

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

Order designation	Configuration	Outer Ø ≈ mm	Weight ≈ kg/km	Min. bend R fixed mm
FFC FWR Standard Construction Schedule (60 V · −40…+105 °C) 12 sizes				
☐ **FFC FWR 1×2×0.5**	1×2×0.5 mm²	6.4	58	52
☐ **FFC FWR 2×2×0.5**	2×2×0.5 mm²	9.2	112	74
☐ **FFC FWR 4×2×0.5**	4×2×0.5 mm²	11.4	176	92
☐ **FFC FWR 8×2×0.5**	8×2×0.5 mm²	14.8	295	118
☐ **FFC FWR 12×2×0.5**	12×2×0.5 mm²	17.6	420	141
☐ **FFC FWR 1×2×1.0**	1×2×1.0 mm²	7.6	86	61
☐ **FFC FWR 2×2×1.0**	2×2×1.0 mm²	11.0	168	88
☐ **FFC FWR 4×2×1.0**	4×2×1.0 mm²	13.5	264	108
☐ **FFC FWR 8×2×1.0**	8×2×1.0 mm²	17.9	465	143
☐ **FFC FWR 1×2×1.5**	1×2×1.5 mm²	8.5	114	68
☐ **FFC FWR 4×2×1.5**	4×2×1.5 mm²	15.2	348	122
☐ **FFC FWR 12×2×1.5**	12×2×1.5 mm²	23.4	860	187

– Additional pair/triad/quad counts (up to 48 pairs) and blue Ex-i intrinsically safe outer sheaths available per UL AWM Style 20624 / 2896 (+80/+105 °C).

Electrical parameters by conductor cross-section

5 sizes

Conductor size	Max. DC R_{20} Ω/km	Mutual cap. ≈ nF/km	Inductance ≈ mH/km
0.50 mm² (7/0.30 mm · AWG 20)	39.00	115	0.65
0.75 mm² (7/0.37 mm · AWG 18)	26.00	120	0.62
1.00 mm² (7/0.43 mm · AWG 17)	19.50	125	0.60
1.50 mm² (7/0.53 mm · AWG 16)	13.30	135	0.58
2.50 mm² (7/0.67 mm · AWG 14)	7.98	145	0.55

– L/R ratio ≤ 25 µH/Ω (0.5–1.0 mm²) and ≤ 40 µH/Ω (1.5 mm²) for intrinsically safe Ex-i circuits.

Standards and approvals

- UL AWM Style 20624 Compliant
- EN 10204 3.1 Routine Test Certificate
- 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
+86 185 9591 3361

Email
info@tebaoflex.com

Web
tebaoflex.com/cables/ffc-fwr-0-5-1-0mm-pitch-flexible-flat-ribbon-cable

Typical values for this cable type, based on UL AWM Style 20624 / 2896 (+80/+105 °C). Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.