UL AWM Style 21223 SERVO-DDI Coax Hybrid

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Single-Cable Digital Motor Interface Servo Hybrid Cable

UL AWM Style 21223 / IEC 60204-1 · 600/1000 V · −40…+80 °C industrial SERVO-DDI Coax



UL AWM Style 21223 / IEC 60204-1 | **600/1000 V** | **−40…+80 °C**

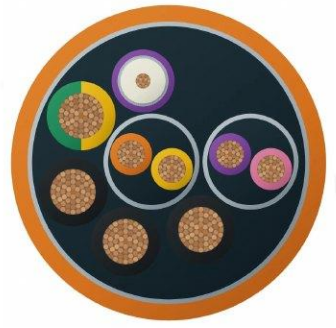
Application

Single-Cable Digital Motor Interface (Power + Coaxial Data) Servo Hybrid Cable (SERVO-DDI Coax Hybrid) engineered to UL AWM Style 21223 / IEC 60204-1 for 600/1000 V service across −40…+80 °C, featuring stranded bare & tinned copper conductor and matte

Typical uses: Automated Assembly & Packaging Lines, CNC Machine Tools & Robotics, PLC/DCS Control & Marshalling Cabinets, Industrial Drives & Motor Manufacturing, Closed-Loop Servo Drives & Linear Actuators

Construction





Cross-section, not to scale

1	Stranded bare & tinned copper conductor	UL AWM Style 21223 / IEC 60204-1
2	PP core insulation	UL AWM Style 21223 / IEC 60204-1
3	Control pair tinned copper braid	UL AWM Style 21223 / IEC 60204-1
4	Coax tinned copper braid	UL AWM Style 21223 / IEC 60204-1
5	Violet TPE coax sheath	UL AWM Style 21223 / IEC 60204-1
6	Overall tinned copper braid	UL AWM Style 21223 / IEC 60204-1
7	Matte PUR outer sheath	UL AWM Style 21223 / IEC 60204-1

Technical data

Typical values

Rated voltage / duty	600/1000 V (UL AWM Style 21223 / IEC 60204-1)	**Conductor construction**	Stranded bare & tinned copper conductor — High-conductivity bare & tinned copper conductor per UL AWM Style 21223 / IEC 60204-1
Primary insulation / dielectric	PP core insulation — Extruded PP dielectric (individual core / group layer)	**Continuous operating temperature**	−40…+80 °C per UL AWM Style 21223 / IEC 60204-1
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	Matte PUR outer sheath — Extruded Matte PUR outer sheath protective layer (continuous layer)	**Minimum bending radius**	7.5 × OD (installed / static routing)
Layer count & geometry	7 concentric/structural layers verified by cross-section inspection	**Environmental & chemical durability**	Engineered for industrial service in accordance with UL AWM Style 21223 / IEC 60204-1
RoHS & REACH compliance	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant	**Standards**	UL AWM Style 21223 / IEC 60204-1

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
SERVO-DDI Coax Hybrid Standard Production Schedule (600/1000 V · −40…+80 °C) 12 sizes				
☐ **SERVO-DDI Coax Hybrid 3G1.5**	3 × 1.5 mm²	8.4	105	68
☐ **SERVO-DDI Coax Hybrid 4G1.5**	4 × 1.5 mm²	9.2	128	74
☐ **SERVO-DDI Coax Hybrid 5G1.5**	5 × 1.5 mm²	10.1	156	81
☐ **SERVO-DDI Coax Hybrid 3G2.5**	3 × 2.5 mm²	9.8	148	78
☐ **SERVO-DDI Coax Hybrid 4G2.5**	4 × 2.5 mm²	10.8	186	86
☐ **SERVO-DDI Coax Hybrid 5G2.5**	5 × 2.5 mm²	11.9	228	95
☐ **SERVO-DDI Coax Hybrid 4G4**	4 × 4.0 mm²	12.6	268	101
☐ **SERVO-DDI Coax Hybrid 4G6**	4 × 6.0 mm²	14.2	365	114
☐ **SERVO-DDI Coax Hybrid 4G10**	4 × 10 mm²	17.5	580	140
☐ **SERVO-DDI Coax Hybrid 4G16**	4 × 16 mm²	20.4	845	163
☐ **SERVO-DDI Coax Hybrid 4G25**	4 × 25 mm²	24.8	1,290	198
☐ **SERVO-DDI Coax Hybrid 4G35**	4 × 35 mm²	27.9	1,710	223

– Single-core and multi-core sizes from 0.5 mm² up to 630 mm² (or AWG/kcmil) available per UL AWM Style 21223 / IEC 60204-1.

Conductor resistance & current-carrying capacity

8 sizes

Cross-section	Max. DC R_{20} Ω/km	Current in air A (30 °C) ≈	Voltage drop mV/A·m
1.5 mm² (AWG 16)	13.30	18	29.0
2.5 mm² (AWG 14)	7.98	26	17.5
4.0 mm² (AWG 12)	4.95	34	10.9
6.0 mm² (AWG 10)	3.30	44	7.3
10 mm² (AWG 8)	1.91	61	4.2
16 mm² (AWG 6)	1.21	82	2.7
25 mm² (AWG 4)	0.78	108	1.7
35 mm² (AWG 2)	0.55	135	1.2

– Current ratings are for 3 loaded conductors at 30 °C ambient in free air/tray per IEC 60364-5-52 / NEC.

Standards and approvals

- UL AWM Style 21223 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/servo-ddi-coax-hybrid-single-cable-digital-motor-cable

Typical values for this cable type, based on UL AWM Style 21223 / IEC 60204-1. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.