Automation, drag-chain & robot cables

7110W 600V TC-ER / 1000V WTTC

Robotics Control Cable



UL 1277 TC-ER / UL 2277 WTTC · 600/1,000 V · −40...+90 °C · Min. bend 8 × OD

UL 1277 TC-ER / UL 2277 WTTC | 600 V TC-ER / 1,000 V WTTC

Application

UL 1277 TC-ER 600 V / UL 2277 WTTC 1,000 V (-40 to +90 °C) Class K fine-stranded continuous-flex control cable for robotic cells, drag chains and wind turbines.

Typical uses: Industrial automation & control cabinets, Inverter-fed motor drive systems, Process instrumentation & oil/gas skids, Machine tools & robotic cells, Data centers, stadiums & broadcast facilities

Construction





Cross-section, not to scale

1	Fine-Stranded Bare Copper Conductors	18 AWG (41×34) Class K High-Flex Bare Copper
2	Lubricated PVC/Nylon Core Insulation	Black Numbered Cores + 1 Green/Yellow Ground
3	Low-Friction Non-Woven Wrap Tape	Torsion & Continuous-Flex Slip Separator Tape
4	Oil-Resistant Black PVC Outer Jacket	UL 1277 TC-ER / WTTC Sunlight & Oil Resistant Sheath

Technical data

Typical values

Nominal / reference voltage	600 V TC-ER / 1,000 V WTTC	Conductor & core insulation	18 AWG (41×34) Class K High-Flex Bare Copper · Black Numbered Cores + 1 Green/Yellow Ground
Routine dielectric / continuity test	100% factory drum spark & continuity verified	Operating temperature range	−40…+90 °C
Short-circuit / peak thermal limit	+160 °C to +250 °C (5 s conductor thermal limit)	Flame & fire performance	UL 1277 TC-ER / UL 2277 WTTC
Minimum bending radius	8 × OD	Screening / armour architecture	Unshielded multi-core construction · mechanical protection via outer jacket
Outer sheath material & colour	UL 1277 TC-ER / WTTC Sunlight & Oil Resistant Sheath	Standards	UL 1277 TC-ER / UL 2277 WTTC / UL AWM 2587 / CSA C22.2 No. 210 / NFPA 79

Sizes

3 standard constructions

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

Part designation	Configuration	Conductor & shield	Insulation / wall	Outer sheath	Outer diameter mm	Min. bend radius mm	Max. conductor resistance @ 20 °C Ω/km	Copper weight kg/km	Cable weight kg/km	Key electrical / optical rating
7110W 600V TC-ER / 1000V WTTC 3 sizes										
☐ 7110W 18 AWG 5C (4C + G/Y)	5G18 AWG (5 × 0.82 mm²)	41×34 AWG Class K Bare Cu + PVC/Nylon	Black Numbered Cores + 1 Green/Yellow Ground	Industrial PVC	8.6	69	21.40	39.4	108	600 V TC-ER / 1,000 V WTTC (10 A)
☐ 7110W 18 AWG 12C (11C + G/Y)	12G18 AWG (12 × 0.82 mm²)	41×34 AWG Class K Bare Cu + PVC/Nylon	Black Numbered Cores + 1 Green/Yellow Ground	Industrial PVC	12.7	102	21.40	94.5	232	600 V TC-ER / 1,000 V WTTC (7 A)
☐ 7110W 18 AWG 25C (24C + G/Y)	25G18 AWG (25 × 0.82 mm²)	41×34 AWG Class K Bare Cu + PVC/Nylon	Black Numbered Cores + 1 Green/Yellow Ground	Industrial PVC	17.8	142	21.40	196.8	455	600 V TC-ER / 1,000 V WTTC (5 A)

– Dimensions and weights are nominal manufacturing targets subject to standard production tolerances.

Standards and approvals

- ✓ UL 1277 TC-ER / UL 2277 WTTC Compliant
- ✓ EN 10204 3.1 Factory 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/7110w-600v-tc-er-1000v-wttc-continuous-flex-robotics-control-cable**

Typical values for this cable type, based on Reference specification per UL 1277 TC-ER / UL 2277 WTTC (7110W 600V TC-ER / 1000V WTTC). Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.