Servo, drag-chain & OCT hybrid cables

SERVO 7TCE 600/1000V TC-ER

SERVO 7TCE 600/1000 V TC-ER Tray Servo Cable

Orange UL 1277 TC-ER / WTTC exposed-run servo motor & brake cable



UL 1277 Type TC-ER | **U0/U 600/1000 V · 4 kV AC** | **EMC Screened**

Application

SERVO 7TCE 600/1000 V TC-ER bridges cable trays and moving servo axes without conduit, combining Class 5 bare copper phases, shielded brake pair, ≥ 85% tinned copper braid, and an orange oil-resistant jacket.

Typical uses: Automated assembly & handling lines, CNC machine tools & gantry axes, Packaging, robotics & intralogistics, Factory servo drive & motion bays

Construction





Cross-section, not to scale

1	**Conductor**	ASTM B8 Class B stranded bare annealed copper · ASTM B8 Class B / UL 44
2	**Core insulation**	Low-capacitance thermoset XLPE / PP · UL 1277 Type TC-ER
3	**Core assembly & separator**	Concentric cabled assembly with low-friction fleece or polyester binder tape · UL 1277 Type TC-ER
4	**EMC metallic screen**	Individually shielded brake pair + overall foil & ≥ 85% tinned Cu braid · EMC ≥ 85% / 100% foil
5	**Outer sheath**	DESINA orange oil- & UV-resistant special PVC/TPE jacket · UL Oil Res I/II

Technical data

Typical values

Rated voltage U0/U	600/1000 V	**AC test voltage**	4 kV AC / 5 min
Conductor class	ASTM B8 Class B bare Cu	**EMC screen**	Individually shielded brake pair +
Insulation resistance	≥ 1,000 MΩ·km at 20 °C	**Temp. range (fixed)**	-40 °C to +90 °C
Temp. range (flexing)	-25 °C to +80 °C	**Short-circuit temp.**	+250 °C (5 s)
Min. bending radius	8 × OD (fixed)	**Flame retardance**	UL Oil Res I/II
Oil & chemical perf.	IEEE 1202 / FT4 Flame	**Environmental / EMC**	Sunlight Resistant
Outer sheath	DESINA orange oil- & UV-resistant special		

Sizes

8 standard constructions

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

Power + Brake AWG	Outer Ø ≈ mm	Max. R20 Ω/km	Copper index kg/km	Weight ≈ kg/km	Min. bend R 8×D mm
☐ **4×14 AWG + 2×16 AWG**	**14.6**	**8.450**	**145**	**324**	**117**
☐ **4×12 AWG + 2×16 AWG**	**15.8**	**5.310**	**194**	**411**	**126**
☐ **4×10 AWG + 2×16 AWG**	**17.3**	**3.340**	**270**	**540**	**138**
☐ **4×8 AWG + 2×16 AWG**	**21.0**	**2.100**	**395**	**792**	**168**
☐ **4×6 AWG + 2×16 AWG**	**23.4**	**1.320**	**583**	**1,102**	**187**
☐ **4×4 AWG + 2×16 AWG**	**27.2**	**0.832**	**884**	**1,612**	**218**
☐ **4×2 AWG + 2×14 AWG**	**32.2**	**0.523**	**1,368**	**2,425**	**258**
☐ **4×1/0 AWG + 2×14 AWG**	**36.9**	**0.329**	**2,111**	**3,587**	**295**

- Max. conductor DC resistance R20 at 20 °C per ASTM B172 / B8 (bare copper).
- Minimum bending radius calculated at 8 × nominal outer diameter (OD). Custom core counts and lengths available on request.

Standards and approvals

- UL 1277 Type TC-ER
- UL 2277 Type WTTC
- CSA AWM I/II A/B FT4
- 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/servo-7tce-600-1000v-tc-er-wttc-servo-cable

Typical values for this cable type, based on UL 1277 Type TC-ER · UL 2277 Type WTTC · CSA AWM I/II A/B FT4. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.