Instrumentation & sensor cables

1121A 600V TC-ER / 150V NPLF

1-triad 18 AWG Shielded Tray Cable

UL 1277 TC-ER / UL 1424 NPLF · 600/150 V · −30…+90 °C · Min. bend 8 × OD

UL 1277 TC-ER / UL 1424 NPLF | 600 V TC-ER / 150 V NPLF



Application

UL 1277 TC-ER 600 V / UL 1424 NPLF 150 V (-30 to +90 °C) 1-triad 18 AWG bare copper PVC/nylon insulated overall 100% foil-shielded tray instrumentation cable.

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	1 Triad (3×18 AWG Stranded Bare Copper)	7×26 AWG Stranded Bare Copper Triad
2	PVC/Nylon (THHN/THWN) Core Insulation	Black, Red, Blue Numbered 600 V PVC/Nylon
3	100% Aluminum/Polyester Foil Shield	Overall Foil Tape Screen + 20 AWG Tinned Cu Drain
4	Sunlight & Oil Resistant Black PVC Jacket	UL 1277 TC-ER & UL 1424 NPLF Outer Sheath (6.91 mm OD)

Technical data

Typical values

Nominal / reference voltage	600 V TC-ER / 150 V NPLF	Conductor & core insulation	7×26 AWG Stranded Bare Copper Triad · Black, Red, Blue Numbered 600 V PVC/Nylon
Routine dielectric / continuity test	100% factory drum spark & continuity verified	Operating temperature range	−30…+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 1424 NPLF
Minimum bending radius	8 × OD	Screening / armour architecture	Overall Foil Tape Screen + 20 AWG Tinned Cu Drain
Outer sheath material & colour	UL 1277 TC-ER & UL 1424 NPLF Outer Sheath (6.91 mm OD)	Standards	UL 1277 TC-ER / UL 1424 NPLF / UL 1685 / IEEE 1202 FT4 / NEC Articles 336 & 760

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
1121A 600V TC-ER / 150V NPLF 3 sizes										
☐ 1121A 1 Triad × 18 AWG (7×26) TC-ER	1 × 3 × 18 AWG (0.82 mm²)	7×26 AWG Bare Cu + PVC/Nylon + 100% Foil	Black, Red, Blue Numbered 600 V PVC/Nylon	Industrial PVC	6.9	55	21.00	28.5	61	600 V TC-ER / 150 V NPLF (RTD / 4–20 mA)
☐ 1122A 1 Triad × 16 AWG (7×24) TC-ER	1 × 3 × 16 AWG (1.31 mm²)	7×24 AWG Bare Cu + PVC/Nylon + 100% Foil	Black, Red, Blue Numbered 600 V PVC/Nylon	Industrial PVC	7.6	61	13.20	45.4	79	600 V TC-ER / 150 V NPLF (RTD / 4–20 mA)
☐ 1124A 4 Triads × 18 AWG (7×26) TC-ER	4 × 3 × 18 AWG (0.82 mm²)	7×26 AWG Bare Cu + PVC/Nylon + 100% Foil	Black, Red, Blue Numbered 600 V PVC/Nylon	Industrial PVC	13.4	107	21.00	106.0	210	600 V TC-ER / 150 V NPLF (RTD / 4–20 mA)

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

Standards and approvals

- ✓ UL 1277 TC-ER / UL 1424 NPLF 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/1121a-600v-tc-er-150v-nplf-1-triad-18-awg-shielded-tray-instrumentation-cable**

Typical values for this cable type, based on Reference specification per UL 1277 TC-ER / UL 1424 NPLF (1121A 600V TC-ER / 150V NPLF). Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.